2-18-2021

February 18, 2021 Graduate Council Minutes

Graduate Council

THE UNIVERSITY OF TENNESSEE

February 18, 2021

Members present: Broemmel, A. (Chair), Alshibli, K., Bamwine, P., Boder, E., Bonom, J., Boyd, A. (Graduate Student Senate President), Dittmann, P., Dzikus, L., Edwards, L., Ekici, K., Fathy, A., Finotti, L., Fleming-May, R., Guo, H., Hesari, S. (Graduate Student Senate Vice-President), Hewett, K., Hines, M., Jaekel, J., Kaplan, G., King, L., Kotowski, M., Lang, M., Lim, J., Meschke, L., Misawa, M., Moyer, D., Ohnesorg, S (Chair-Elect), Okafor, C., Preuss, N., Sachs, A., Schmidt, H. (proxy for Diana Moyer), Thompson, P., Wall, T., Ward, M.

Ex-Officio members present: Ambroziak, K., Behn, B., Bradberry, S., Cantrell, S., Cihak, D., Cox, C., Kilic, O., Klingeman, W., Kupritz, V., Lane, I., Mercer, H., Moore, T., Patterson, D. (Past Chair), Sullivan, M., Thompson, D.

Guests: Amanda Samsel (Director, Student Conduct & Community Standards) and Rachel Powell (General Counsel)

1. Call to Order and Welcome (Amy Broemmel)

The Graduate Council Zoom meeting was called to order by Chair, Amy Broemmel on Thursday, February 18, 2021, at 3:00 p.m.

2. Minutes of the Preceding Meeting

The November 5, 2020, Graduate Council Minutes were approved electronically on November 25, 2020.

3. Committees (A. Broemmel)

We will now have our committee reports.

- **Academic Policy Committee (Eric Boder) - January 28, 2021 Report, Attachment 1**

We have two items to bring forward.

1) Student Code of Conduct – coming forward as an informational item.
2) Official Transcripts – coming forward as a voting item.

APC Report from the January 28, 2021 meeting:

1. Student Code of Conduct

We will hear from Amanda Samsel and Rachel Powell about how the current procedure for the academic misconduct involving a grade penalty is causing problems. The current process takes the grade penalty through a judicial process instead of a faculty decision. The proposal being discussed is to separate those two elements. To make the judgment on the misconduct through Student Conduct and will allow the Appeals Committee (both undergraduate and graduate) to make the decision on the grade appeal.

Amanda Samsel: Student Code of Conduct

With our current code, if a student commits academic misconduct (cheats on an exam) and the faculty member recommends a grade of F on the assignment, if the student wants to appeal the grade of F, they have to go through a formal student conduct hearing. In this formal hearing, the faculty member becomes the student conduct officer. The faculty member then has to present the case to the formal board through the formal hearing process. The student and the faculty member find this very intimidating and a lot of work to just appeal a grade. Our recommendation is to shift the grade appeal to the academic side. With our revision, if a student goes through our misconduct process and is found responsible; and then wants to appeal the grade, the grade appeal would go to either the Undergraduate or Graduate Grade Appeal process. The revision we are proposing, will also cleanup

the inconsistency language with the 5-day turnaround wording. To make changes to our current processes, we have to receive legislative approval for all of our student conduct changes.

Rachel Powell, General Counsel
Everything Amanda explained is in the Code of Conduct. The Code of Conduct is a state regulation and revisions are only passed through a formal rule-making process. The Public Hearing for the code changes is scheduled for March 8. What this means for this group and faculty is that there has to be new procedures written for how those grades are going to be appealed through the academic side of the house. This will leave the control for how that process is done within the legal guidelines of the catalog and the appeals procedures as they are written and outside the Code of Conduct process. This will be very helpful in the future with any changes you want to make, as it will not have to go through the formal rule-making process.

Dixie Thompson, Dean of the Graduate School
This is a good revision in that it makes academic penalties the responsibility of the Graduate Council Appeals Committee to hear those academic penalties. Do you have any questions for Amanda or Rachel? Thank you, Amanda and Rachel for attending Graduate Council and for your explanations.

Eric Boder, APC Chair
Thank you Amanda and Rachel for giving us these important details. As was explained, there are a lot of moving pieces to this revision. Our purview will be the revisions to the catalog language. There will also be changes with the Appeals Committee and catalog language. These revisions will be coming forward to Graduate Council in our March meeting.

2. Official Transcripts

We discussed the admissions policy concerning official transcripts and degree certificates. The current policy is that official transcripts from all institutions attended must be submitted. Students can be admitted with unofficial transcripts and are allowed to enroll that first semester without submitting all the official transcripts. If admitted, then students have one semester to submit their official transcripts. In some situations, students may have difficulty obtaining their official transcripts and/or degree certificates.

After discussion of our current processes and the views of various departments, APC determined it best to keep the current requirement but to add text to the current policy to allow for a waiver process. We believe the waivers requested will be few.

Please review the proposal coming forward today. In the Graduate Catalog, under the heading, Application Steps for Admissions, we are proposing to add a bullet (the text below in red font) to the current policy explaining how to petition for a waiver.

Application Steps for Admissions
After admission is offered, the following must be provided:

- Official transcripts and degree certificates (if separate from the transcript). See Graduate Admissions website for more information.
  - The Graduate School will reserve the right to revoke admission to a student if any unofficial or official documents are found to be fraudulent following review and comparison.
  - **Registration is prohibited after the first semester of enrollment until students have submitted the official copy of transcripts, including any degree certificates or degree confirmations, from all institutions previously attended**.
    - Under extenuating circumstances, academic units may petition the Dean of the Graduate School to waive the requirement for a student to submit official transcripts from all institutions previously attended. This petition must include a rationale for the request, along with information about attempts to secure the

official transcripts. These requests for exceptions must be submitted prior to the end of the student's first semester of enrollment.

- For those who submitted unofficial TOEFL or IELTS scores with the application, verification of official scores is required.
- For those who have the Eligibility Verification for Entitlement Act (EVEA) requirement, documentation that proves U.S. citizenship or lawful presence as required by state law. For information on EVEA, visit the One Stop Student Services website.

All documents submitted become the property of the university and will not be returned.

I open this up for discussion.
After some questions and discussion, there was a proposal to amend the wording for clarification as shown below – to remove the word "for" (strikethrough) and insert the words "that" and "has" (as shown below in yellow highlight).

Under extenuating circumstances, academic units may petition the Dean of the Graduate School to waive the requirement ~~for~~ that a student has to submit official transcripts from all institutions previously attended. This petition must include a rationale for the request, along with information about attempts to secure the official transcripts. These requests for exceptions must be submitted prior to the end of the student's first semester of enrollment.

With no further discussion. Broemmel asked for a vote to approve the proposal to add the bullet explaining the petition for a waiver, with the above friendly amendment to the wording.
I will launch a poll and council members will vote to approve to add the bullet with the revised wording.

Graduate Council voted. Results: 33 voted yes, 0 voted no/oppose, and 2 voted to abstain.

- **Appeals Committee (Stefanie Ohnesorg)**

No appeals to report. We have had one year with no appeals. The Appeals Committee did meet to discuss how to revise the appeals policy in coordinator with the policy changes coming from APC concerning the revisions with the Student Code of Conduct. The Appeals Committee and APC are working together to make the necessary revisions. The revisions will be coming to Graduate Council.

- **Curriculum Committee (Laurie Meschke) - January 21, 2021 Report, Attachment 2**

The Curriculum Committee met via Zoom on January 21, 2021. I express my appreciation to the Curriculum Committee and all the supporting faculty members who brought us through a lengthy agenda with a very productive meeting. The committee reviewed and discussed each college and departments course and program changes.

The report breaks down the 344 course changes and the various program changes.

After our meeting, the Tickle College of Engineering rescinded six proposals to add concentrations. They will resubmit these proposals in the future when they have all the program text.

Items were approved as reported and are recommended to Graduate Council for approval.

Broemmel: We will launch a poll and council members will vote to approve the January 21 Curriculum Committee Report as presented.

Graduate Council voted. Results: 29 voted yes, 0 voted no/oppose, and 3 voted to abstain.

Dixie Thompson
As we move forward with curriculum proposals and the work of the Curriculum Committee and the Graduate Council, we need to think about how we make curricular changes. As we move into a new budget model, there will be discussions about course changes and program changes. In the future, we need to think about the financial impact of our course and program changes.

- **Student/Faculty Research Awards Committee (Dixie Thompson)**

SFRA Report for the spring 2021 submissions.

- We received 53 applications.
- The committee has reviewed all the applications.
- The SFRA committee will meet on February 24 to award the recipients.

4. New Business: No new business

5. Administrative Reports and Announcements:

Deans Update: (Dixie Thompson)

- Fellowships: We are in the process of reviewing and are on track with our timeline.
- Admissions: Good news. Our applications are up slightly. This may be the result of economic pressures in our current climate.
- The Provost approved my petition to make a fellowship award to all of our graduate assistants who are on our central fee waiver pool. Available resources are being redirected to support our students who faced many COVID-related challenges this year. Our graduate assistants stepped up and performed in amazing ways even with the challenges. Whether teaching online or doing their research in ways that put extra stress on them, our graduate assistants came through for us. So, all of our graduate students that are on the central fee waiver pool will receive a $150.00 Fellowship later this month. The students have been notified.
- Holistic Admissions Training: This is a pilot year. We have nine departments involved with this pilot program. They are looking at how they make admissions decisions and the materials they review to make those decisions. We plan to open this up to a larger audience next year.
- Graduate and Professional Student Appreciation Week (GPSAW) is scheduled for April 5-9. This is a week where we focus and celebrate our graduate and professional students. I am hopeful you and your departments will find way to celebrate your students that week.
- GSS Travel Award: Remind and encourage your students to apply for the GSS Travel Award. With students not being able to travel, we opened that money for other things such as: membership fees, virtual conference fees, professional development costs. These costs may be covered for up to $400.00 in support. Please encourage your students to apply for this money. The GSS website has all this information.
- Forms: We are moving more and more of our forms to a workflow process. My appreciation to Sara Bradberry, Sean Hendricks and OIT to helping to make this happen.
- Commencement: The Chancellor's Team has been working on plans for commencement. I believe information will be shared soon concerning those plans.

Does anyone have questions for me?

A question was asked about the TFGE Fellowship and why the number was reduced to five (5). Thompson: This has been an evolving program with different partners joining us over the years. In the last few years, we have actually had problems filling all the offers in the past. Another issue was that many thought the award should be a larger monetary award. It was a $10,000.00 fellowship for 4 years. There was a suggestion that it should be higher to distinguish it from the others. So, we increased the amount to $15,000.00 for a 4-year fellowship. We increased the amount of money and decreased the recipient number. We hope this makes it a more prestigious award and that these really great students being nominated will say yes. For this year, we had 15 nominations – 5 have been offered and all the other have been moved into the regular fellowship process. So, we hope to get money to all those students even if they don't get the Tennessee Fellowship.

Graduate Student Senate (Austin Boyd)

- GSS met yesterday, February 17.
- Graduate and Professional Student Appreciation Week is April 5-9.
- The GSS and the Faculty Senate are working together concerning student fees for those graduate students on graduate assistantships. The resolution is that if there can be a way where graduate assistants are not charged fees.

Graduate Council Chair (Amy Broemmel)

Chair-Elect nominations: this is that time of year where we need nominations for our next chair-elect. Our current chair-elect, Stefanie Ohnesorg, will chair the nominating committee. Please seriously consider serving in these council roles. The experience is insightful and valuable. It is a great opportunity to become involved and serve UT.

With no further business, the meeting adjourned at 4:20 p.m.

Respectfully submitted,

Catherine Cox
Graduate Council Liaison

ATTACHMENT 1

REPORT OF THE ACADEMIC POLICY COMMITTEE MEETING
Thursday, January 28, 2021
3:30 – 5:00 p.m., Zoom Meeting

Committee members present: Eric Boder (Chair), Patricia Bamwine, Julie Bonom, Austin Boyd (GSS President), Lars Dzikus, Luis Finotti, Melissa Hines, Greg Kaplan, Mohammed Mohsin.

Other attendees: Sara Bradberry, Amy Broemmel (Graduate Council Chair), Yvonne Kilpatrick, Dixie Thompson, and Catherine Cox (Graduate Council Liaison).

Guests: Rachel Powell (General Counsel) and Amanda Samsel (Office of Student Conduct and Community Standards)

Eric Boder called the meeting to order at 3:30 p.m.

Agenda Items:

1. Student Code of Conduct

Dr. Thompson introduced our guest speakers, Rachel Powell and Amanda Samsel.

Thompson communicated the reason we need to talk about the Student Code of Conduct today is because we are in a situation where our processes, outlined in *Hilltopics*, has created some issues.

Current Process:
The Office of Student Conduct and Community Standards (SCCS) is notified when a professor believes a student has committed academic misconduct (cheating, plagiarism, etc.). Once notified, SCCS is then in charge of the investigation and any hearings that may arise. Currently, students can appeal any grade penalty or academic penalty that results from a finding of responsibility (guilt) on the part of the student. The appeal of the grade/academic penalty is heard and adjudicated through the student conduct process. The current process creates added work for the professor and also takes the academic penalty out of the hands of the academics and puts it in the student conduct process.

Hilltopics is currently being revised so that, once a finding of responsibility (guilt) is rendered in the student conduct process, any student appeal of the grade/academic penalty would be heard by the Graduate Council's Appeals Committee.

Issues with current process:

- The hearing process puts major burden on faculty member who issues the penalty, as they become the "conduct officer".
- The decision of the academic penalty is heard within the student conduct process rather than through academic channels.
- The 5-day deadline is confusing as it is not in line with current Code process.

Proposed solution:

- Move any academic appeals to the appeals processes handled by the Undergraduate and Graduate Councils.
- The 5-day deadline to appeal will only apply to the academic misconduct behavior itself and not the grade penalty. The deadline to appeal the grade/academic penalty will not begin until a finding has been made by SCCS.
- Solution requires edits to the Graduate Catalog and updates to the Graduate Council Appeals Procedure.

Amanda Samsel (Director of Student Conduct)
My role as Director is to oversee the formal hearing process of the student. By default, I hear many of issues with our current process. Both students and faculty are not happy with the current process. Faculty are concerned because even when a student is found responsible (they admit to plagiarizing, cheating, etc.) and the student accepts Conduct's charge, the student can still appeal the grade penalty. The problem here is that the grade appeal

goes through the Student Code of Conduct formal hearing process. The faculty member may have a suggestion as to what is appropriate. However, the formal Hearing Board can 1) reject that suggestion, 2) make it a lesser penalty, 3) uphold the suggestion, or 4) determine that no penalty at all will be issued. This is frustrating to the faculty. This also becomes a burden to the faculty because in those situations where the student just wants to appeal the grade penalty, the professor then becomes the conduct officer. My office still oversees the hearing and it is still a conduct hearing process, but the professor becomes the conduct officer at the formal hearing. This becomes a surprise for the faculty member because they do not see themselves as a conduct officer. To resolve this issue, I have spoken to R.J. Hinde and Dixie Thompson about a possible solution that we hope will improve the process. We believe this change will make the process more streamline, easier to understand, and benefit the student with the grade appeal. The current policy also describes a 5-day deadline appeal process. Our office stays extremely busy and we cannot get students in within that 5-day window. Moreover, the window to appeal does not start until Conduct has actually made a recommendation. The current policy was not written very clearly. With this revision, we are trying clarify and improve the process.

Rachel Powell (General Counsel)
When the Student Code of Conduct is amended, there are steps and approvals that must take place. The Student Code of Conduct is a state rule and any changes must pass through the rule-making process with the Administrators Procedures Act. This process requires: 1) we draft the changes and get campus approval, 2) the Attorney General's Office must approve, and 3) there is a public rule-making hearing. As with federal laws, the following must transpire:

- Changes have to be posted for certain amount of time
- We have to have an open hearing for public comment on it
- Then we have to have a hearing before the General Assemblies Joint Government Operations Committee
- Finally, after the above, it is effective after 90 days

The changes are a long approval process and is why we try and take all code changes together at one time. The benefit, as Amanda mentioned, will clarify and clear up the current language. These changes will also allow us to keep the grade penalty portion and the grade penalty appeals as a campus academic matter. The proposed changes are designed so that only the actual misconduct will have to go through the lengthy, cumbersome, very legalistic process.

It has taken some time to get where we are in these code changes. Where we are now is these changes are up for a public rule-making hearing on March 8. We are looking at these changes to become effective August 1, 2021.

Dixie Thompson (Dean of the Graduate School)
Thank you Amanda and Rachel for participating in our APC meeting today.

From a Graduate Council and Faculty Senate perspective, I have constructed text that would be a modification of our Graduate Catalog language and will pull together the Graduate Appeals Committee to review the appeals language procedures. We will have APC and the Appeals Committee look at the language and get a motion to Graduate Council in order to get approval at the last Faculty Senate meeting for this academic year. Are there any questions?

Eric Boder (APC Chair)
If I understand the changes and for clarification on what will happen – nothing changes except the grade appeal process.

- The faculty member will report the academic misconduct through the same channels.
- Student conduct will move forward with the alleged misconduct.
- After that finding of responsibility for the student, then the proposed changes take place – instead of going through Student Conduct, the grade appeal will go through the Graduate Council Appeals Committee.

Thompson explained the Appeals procedure is a two-step process:

- A Hearings Panel is called together of three members. They hear the appeal and determine, 1) this is a legitimate case and needs to go before the Appeals Committee or 2) no, this is not a legitimate case and they make a recommendation to the Dean of the Graduate School that the appeal be denied.
- If the recommendation goes to the Appeals Committee, then the Appeals Committee (which includes a graduate student) hears the case and makes a recommendation to the Graduate School Dean.

To clarify, the grade penalty appeal changes being proposed for Student Code of Conduct are not the same grade appeals that happen at the college or department level.

Thompson: Catherine Cox will send my proposed language for revision to the APC members for review. Please review and be ready for discussion at our March 4 APC meeting.

2. Official Transcripts

Boder: we reviewed this proposal at our September meeting and the topic was also discussed at the November Graduate Council meeting. To remind everyone, this proposal came from the Haslam College of Business, where with their Physicians Executive MBA program, sometimes it is difficult for applicants to submit official transcripts.

Dr. Thompson has proposed language that will not alter the current policy but will allow for a waiver exception request. In the current Graduate Catalog, under the Application Steps for Admission heading, revise to add the bullet shown below in red font.

Application Steps for Admissions

After admission is offered, the following must be provided:

- Official transcripts and degree certificates (if separate from the transcript). See Graduate Admissions website for more information.
    - The Graduate School will reserve the right to revoke admission to a student if any unofficial or official documents are found to be fraudulent following review and comparison.
    - **Registration is prohibited after the first semester of enrollment until students have submitted the official copy of transcripts, including any degree certificates or degree confirmations, from all institutions previously attended**.
        - Under extenuating circumstances, academic units may petition the Dean of the Graduate School to waive the requirement for a student to submit official transcripts from all institutions previously attended. This petition must include a rationale for the request, along with information about attempts to secure the official transcripts. These requests for exceptions must be submitted prior to the end of the student's first semester of enrollment.
- For those who submitted unofficial TOEFL or IELTS scores with the application, verification of official scores is required.
- For those who have the Eligibility Verification for Entitlement Act (EVEA) requirement, documentation that proves U.S. citizenship or lawful presence as required by state law. For information on EVEA, visit the One Stop Student Services website.

All documents submitted become the property of the university and will not be returned.

Discussion: APC discussed the proposal and made one slight edit.

With no further discussion, Boder asked for a vote.

Upon motion duly made and seconded, APC voted and approved the proposed catalog edit to add an additional bullet to the current language.
Voting was unanimous.

Before our next meeting on March 4, Dr. Thompson will share proposed modifications for the Grievances and Appeals wording in the Graduate Catalog.

With no other discussion items, the meeting adjourned at 4:35.

Respectfully submitted,

Catherine Cox
Graduate Council Liaison

ATTACHMENT 2

Graduate Curriculum Committee Meeting Report
Zoom Meeting
Thursday, January 21, 2021

Members present: Laurie Meschke (Chair), Khalid Alshibli, Paul Dittmann, Lisa King, Mike Kotowski, Chika Okafor, Nathan Preuss, Avigail Sachs, Martina Ward, Feng-Yuan Zhang

Also in attendance: Katherine Ambroziak (College of Architecture and Design), Suresh Babu (Bredesen Center), Misty Bailey (College of Veterinary Medicine), Bruce Behn (Haslam College of Business), Sara Bradberry, Amy Broemmel (Graduate Council Chair), David Cihak (College of Education, Health, and Human Sciences), Chuck Collins (College of Arts and Sciences), Terri Durbin (College of Nursing), Rachel Fleming-May (College of Communication and Information), Heather Hartman (SACS Accreditation), Stephen Kania (Comparative and Experimental Medicine), Ozlem Kilic (Tickle College of Engineering), Bill Klingeman (Herbert College of Agriculture), Virginia Kupritz (College of Communication and Information), Paula Schaefer (College of Law), Ragan Schriver (College of Social Work), Dixie Thompson (Dean of the Graduate School), Catherine Cox (Graduate Curriculum Coordinator)

The Chair of the Curriculum Committee, Laurie Meschke called the meeting to order at 2:00 p.m.

As this is our big January meeting, Meschke asked each one attending to introduce themselves and state if they are attending as a committee member or as a representative from their college/unit.

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

Herbert College of Agriculture

Course adds: 9
Course drops: 3
Course revisions: 5 course changes = 17

Department of Entomology and Plant Pathology
Add Minor: Bioinformatics: Agriculture and Natural Resources

Department of Plant Sciences
Add 5-Year BS-MS Program – Plant Sciences Major

College of Architecture and Design

No course changes were submitted course changes = 0

School of Architecture
Catalog revisions for the Dual MArch-MLA Program

College of Arts and Sciences

Course adds: 34
Course drops: 7
Course revisions: 23 course changes = 64

Department of English
Add Certificate: Digital Humanities

Department of Mathematics
Drop concentration: Applied Mathematics, Mathematics Major (MS)

School of Music
Drop Certificate: Artist Certificate in Music
Add Certificate: Artist Certificate in Keyboard Performance
Add Certificate: Artist Certificate in String Performance

Department of Religious Studies
Add Certificate: Religious Studies

Haslam College of Business
Course adds: 8
Course drops: 2
Course revisions: 21 course changes = 31

Normal program revisions

College of Communication and Information
Course adds: 23
Course drops: 11
Course revisions: 50 course changes = 84

School of Advertising and Public Relations
Add Concentration: Advertising and Public Relations (Communication & Information major, MS)

School of Information Sciences
Add Certificate: Research Data Management

College of Education, Health, and Human Sciences
Course adds: 26
Course drops: 4
Course revisions: 28 course changes = 58

Department of Educational Psychology and Counseling
Add Certificate: Adult Learning in Professional Settings

Department of Public Health
Drop Dual Program: Dual MPH-JD (Public Health / Law)

Department of Theory and Practice in Teacher Education
Add Certificate: Art Education (K-12)
Add Certificate: American Sign Language Education
Add Certificate: Education of the Deaf and Hard of Hearing (PreK-12)
Add Certificate: Elementary Education
Add Certificate: English as a Second Language PreK-12
Add Certificate: Educational Technology
Add Certificate: Gifted Education PreK-12
Add Certificate: Literacy Specialist

Add Certificate: STEM Leadership

Add Certificate: Secondary English Education

Add Certificate: Secondary Mathematics Education

Add Certificate: Secondary Science Education

Add Certificate: Secondary Social Science Education

Add Certificate: Special Education Comprehensive K-12

Add Certificate: Special Education Interventionist K-8 & 6-12

Add Certificate: World Languages (PreK-12)

Add Certificate: Social Justice Education

Drop Certificate: Cultural Studies in Education

Add Concentration: Applied Behavior Analysis (Teacher Education Major, EdS)

Add Concentration: Art Education (Teacher Education Major, EdS)

Tickle College of Engineering

Course adds: 24
Course drops: 4
Course revisions: 14 course changes = 42

Department of Electrical Engineering and Computer Science

Add Certificate: Artificial Intelligence and Machine Learning

Department of Industrial and Systems Engineering

Add Certificate: Data Driven Decision-Making

College of Law

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

Add Dual Degree Program: Dual JD-MSSW (Law/Social Work)

Add Dual Degree Program: Dual MLS-MSSW (Law/Social Work)

Drop Dual Degree Program: Dual JD-MPH (Law/Public Health)

Add Certificate: Law and Social Welfare

College of Nursing

Course adds: 0
Course drops: 14
Course revisions: 16 course changes = 30

Drop Major, Degree and Concentration – Nursing Major, MSN
Nurse Anesthesia concentration

College of Social Work

Course adds: 8
Course drops: 0
Course revisions: 5 course changes = 13

Add Dual Degree Program: Dual MSSW-JD (Social Work/Law)

Add Dual Degree Program: Dual MSSW-MLS (Social Work/Law)

College of Veterinary Medicine

Course adds: 0
Course drops: 0
Course revisions: 2 course changes = 2

Intercollegiate: Comparative and Experimental Medicine

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

Add Minor: One Health

Course Change Totals

Course Adds =	132
Course Drops =	45
Course Revisions =	167
Total course changes =	**344**

All items were approved as reported above and are recommended to Graduate Council for approval.

The meeting adjourned at 5:10 p.m.

Respectfully submitted,

Catherine Cox
Graduate Curriculum Coordinator

Thursday January 21, 2021 2:00 P.M.	Graduate Curriculum Committee Meeting	Zoom link https://tennessee.zoom.us/j/97671959041

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

- ► **Indicates add or drop of Majors or Minors**
- **+ Indicates add or drop of Certificates**
- ❖ **Indicates add or drop of Concentrations**

HERBERT COLLEGE OF AGRICULTURE

All Changes Effective Fall 2021

I. COURSE CHANGES

DEPARTMENT OF AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATIONS

(ALEC) Agricultural Leadership, Education and Communications

ADD

ALEC 585 Global Sustainable Development Goals (3) The United Nations' (UN) Sustainable Development Goals (SDG) were adopted in 2015 and provide a framework and direction for all countries of the world towards 17 common global goals. The SDGs are goals towards which our global society has agreed and outline high-level targets in all spheres of human interaction with each other and the planet. Will provide a transdisciplinary introduction and assessment of these global SDGs. Will present each of the SDGs, look at global progress towards each SDG, and provide opportunities for students to explore the synergies of the SDGs. While emphasis will be placed on the global nature of the SDGs, this course will provide students with the opportunities to reflect on these goals and participate in multidisciplinary teams to develop action plans for addressing multiple SDGs as individuals and for the UT 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. The faculty member was hired to teach undergraduate/graduate courses in the areas of international agriculture.

ALEC 552 Organizational Leadership and Change (3) Theories of leadership and change. Implementing changes in order to guide successful organizations. Topics include discussion of principled leadership, organizational behavior, human diversity, and leading organizational change.

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 leadership. Expected enrollment for this course is 35 students.

REVISE TITLE AND DESCRIPTION

ALEC 545 Program Planning and Learning Design in Agriscience Education (3) Overview of program planning and learning design of school-based agricultural education.

Formerly: Program Planning in Agriscience Education (3) Overview of the historical and philosophical aspect of agricultural education, the role of the teacher and learner.

Rationale: To reflect changes in course content due to state teacher licensure requirements. Impact on other units: None. Financial Impact: None.

DEPARTMENT OF ANIMAL SCIENCE

(ANSC) Animal Science

ADD

ANSC 625 Mammalian Endocrinology (3) Different endocrine glands and hormones of the body; hormone types, receptors, and methods of action; hormone signaling axes involved in growth, metabolism, reproduction, thyroid function, calcium homeostasis, inflammation and immune response, stress, and salt/mineral balance; importance of proper endocrine function for health and productivity of mammals; and key disorders associated with altered endocrine function. Primary scientific literature will be used to illustrate different topics. Students will actively participate in discussions of relevant journal articles.
Recommended Background: Physiology and or Biochemistry.
Registration Restriction(s): Minimum student level – graduate or permission of instructor.

Rationale: Because endocrinology drives physiology, inclusion of this content in the graduate program offering in Animal Sciences is a must. Previously content was lacking. A new faculty hire along with a team of other qualified individuals will teach different and important endocrinology-based systems. Use of scientific literature as primary learning base with relevant examples attests to the increased rigor of this course for offering at the 600 level. Also, adding more 600 level courses is important for the PhD program because the current offering of courses at this level is limiting. Impact on other units: none: Financial impact: none.

DEPARTMENT OF BIOSYSTEMS ENGINEERING AND SOIL SCIENCES

(BSE) Biosystems Engineering

ADD

BSE 526 Environmental Hydrology (3) A brief introduction to hydrology and an introduction to water-based design and modeling of Agricultural, Low Impact Density, and other Ecological Systems.
Credit Restriction: May not get credit for both BSE 426 and BSE 562.
Recommended Background: Course in Hydraulics or Fluid Mechanics.
Registration Restriction: Minimum student level – graduate.

Rationale: Addresses SLO(s): Competence in a particular focus area of Biosystems Engineering. The undergraduate equivalent of this course is being added as part of a fuller integration of the undergraduate program with more of a agricultural / biological / ecological / environmental slant. Graduate students without a strong background in hydrology will benefit from this as well. Impact on other units: Only taken by students in this major. Financial impact: Will be taught at the same time and place as 426 but with additional graduate-level assignments.

(ESS) Environmental and Soil Sciences

ADD

ESS 561 Nexus of Food, Energy, and Water (3) The challenges of food, energy, and water (FEW) resources for environmental sustainability in the face of increasing stresses of climate change, population growth, urbanization, and socioeconomic transitions. Concepts, framework, and impacts of FEW nexus will be taught in addition to case study analysis and literature-based discovery learning.
Registration Restriction: Minimal student level – graduate.

Rationale: Students will learn about the grand challenges and conflicts that we face in environmental and resources conservations. The study will not only promote student's abilities to think strategically, systematically and critically using a transdisciplinary approach but also help connect student's research to real-world issues at a system level. Impact on other units: None, only taken by students in this major. Response to assessment: This course was taught as Selected Topic in F20 with 8 graduate students, and will have an expected enrollment of 10. Financial impact: None, taught by faculty who recently transferred responsibility from administration to classroom teaching.

REVISE DESCRIPTION ON 400-LEVEL COURSE

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

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

Rationale: New instructor wants new wording to better reflect course needs. Impact on other units: None. Financial impact: None.

DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

(EPP) Entomology and Plant Pathology

ADD

EPP 633 Statistical Genetics and Genomics (3) Statistical concepts for analysis of genetic and genomics data using classical and state-of-the-art analytical methods. Basic UNIX scripting and R programming, as well as fundamental genetic and -omics principles will be taught. Class activities will include a combination of lectures, review of literature, and hands-on experience with real data sets. The goal is to understand basic analytical concepts to equip students for independent learning.
Contact Hour Distribution: 3 hours lecture.
Registration Restriction: Minimal student level – graduate.

Rationale: There is a high demand for additional Bioinformatics courses in EPP. This course will increase bioinformatics knowledge across UTIA and UTK, and support the proposed EPP graduate minor in Bioinformatics: Agriculture and Natural Resources. This course was taught successfully in Fall 2019 as EPP 531 Special Problems in Entomology and Plant Pathology. The course had an enrollment of 27 graduate students from several departments and colleges across UTK and UTIA. Impact on other units: None. Financial Impact: There are no financial impacts, existing faculty member will teach the course.

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

EPP 425 Medical and Veterinary Entomology (3) Identification, biology, and control of arthropods that are parasites of humans and animals. Focuses on arthropods and their biology, life histories, habitats, hosts, and options for management. Review and discussion of sampling/monitoring methods and decision-making guidelines to managing vector-borne diseases will also be addressed. Graduate students will be required to complete an in-depth research project that requires manuscript submission for publication.

Rationale: EPP 425 is approved for undergraduate credit. There were 6-7 students enrolled during each of the last two semesters that it was taught. EPP 425 was taught concurrently with EPP 525, which is approved for graduate credit and graduate students are given additional assignments. During the last two semesters when EPP 525 was taught, it had an enrollment of 4 to 5 students. To increase the enrollment of EPP 425, which will remain approved for undergraduate credit, the course is being proposed for graduate credit (MS-level). EPP 525 will be dropped (see below). Impact on other units: None. Financial Impact: No financial impact since it is an extant undergraduate course.

DROP

EPP 525 Medical and Veterinary Entomology (3)

Rationale: If EPP 425 is approved for graduate credit there will no longer be a need for EPP 525. MS-level students will be directed to take EPP 425. Most graduate students that take EPP 525 are M.S. students. PhD students will be directed to take a section of EPP 531 Special Problems in Entomology and Plant Pathology for the educational materials covered in EPP 425. Impact on other units: None. Financial Impact: No financial impact.

REVISE TO ADD REPEATABILITY

EPP 640 Seminar (1)
Repeatability: May be repeated. Maximum 4 hours.

Rationale: Revising to add repeatability. This will address students receiving both MS and PhD degrees from EPP, which would require 1 credit hour for each degree. However, if a PhD student received an MS from EPP before 2018, they were required to take 2 credit hours of EPP 640 for an MS, which has led to students who subsequently became a PhD student being blocked from taking an additional credit hour during their PhD program. Impact on other units: None. Financial impact: There are no financial impacts.

DEPARTMENT OF FOOD SCIENCE

(FDSC) Food Science

DROP

FDSC 501 Seminar (1)

Rationale: FDSC 501 Seminar and FDSC 601 Seminar are taught together and are used for MS and PhD students, respectively. It is sometimes difficult to manage and causes confusion among students and faculty. FDSC 601 will be used by both MS and PhD students to simplify the instruction and registration. Impact on other units: None, course is exclusive to students in the major. Financial impact: None; will reduce bureaucracy by having students take one course (601) instead of choosing between two (501 and 601) and increase enrollment in the remaining seminar course.

REVISE FOR VARIABLE CREDIT HOURS AND REVISE REPEATABILITY

FDSC 601 Seminar (1-2)
Repeatability: May be repeated. Maximum 4 hours.

Formerly: 1 credit hour.
Repeatability: May be repeated. Maximum 3 hours.

Rationale: In several cases, some students had to present two seminars in their final semester in order to graduate on time. Previously, they were only able to register for 1 credit hour in one semester, and changing the credit hours to 1 or 2 can address this issue. Additionally, changing the maximum hours to 4 can address students receiving both MS and PhD degrees from our department that would require 2 credit hours for each degree. Impact on other units: None. Response to assessment: none. Financial impact: none.

DEPARTMENT OF FORESTRY, WILDLIFE AND FISHERIES

(FWF) Forestry, Wildlife and Fisheries

ADD

FWF 527 Social and Economic Perspectives on Natural Resource Issues (3) Designed to introduce graduate students to important economics and other social science concepts as they relate to natural resource decision making.
Contact Hour Distribution: 3 hours lecture.
Comments: Offered Fall semester - every other year.
Registration Restriction(s): Minimum student level - Graduate.
Registration Permission: Consent of Instructor.

Rationale: This course has been taught twice as FWF 590 (Special Topics) course with enrollment of 7, indicating interest in the topic. This course will provide training critical for graduate students of natural resources to have some working knowledge of social science and economics principles to understand and analyze the issues from societal perspectives. Impact on other units: Expected be useful for other graduate disciplines especially students in Agricultural Leadership. Financial impacts: will be taught by existing faculty who have been teaching the course as a special topics course. Support from assessment activities: helps students assess appropriateness of conceptual frameworks in natural resources.

DEPARTMENT OF PLANT SCIENCES

(PLSC) Plant Sciences

ADD

PLSC 555 Advanced Sustainable Landscape Construction (3) An overview of green infrastructure history, contemporary theory and application through study of design precedents. Detailed investigation into construction of sustainable landscape assemblies and management practices as a context for a focused design/ prototype/ build project.
Contact Hour Distribution: 3 hours lecture.
Credit Restriction: Students cannot receive credit for both 455 and 555.
Comments: Offered Spring semester. Lectures will include embedded experiential learning projects.
Registration Restriction(s): Minimum student level - Graduate.
Registration Permission: Consent of Instructor.

Rationale: Revisions to title and description are to bring course description into alignment with contemporary content and direction of coursework associated with the Masters of Landscape Architecture and related programs. Impact on other units: Expected to result in increased enrollment from related undergraduate and graduate disciplines. Financial impacts: will be taught by existing faculty who are creating this offering in place of a course being dropped.

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT

PLSC 450 Specialty Landscape Construction (3)

Rationale: this course often has had low enrollment, in part due to relevance of content offered. It is being replaced with a new course that has extensive resource and content revision, and that has stimulated higher enrollment during recent Special Topics offerings. Impact on other units: none. Financial Impact: Duties of instructor of record are being shifted toward a proposed new course. Support from assessment activities: not applicable.

REVISE DESCRIPTION AND ADD COMMENT

PLSC 515 Agroecology (3) Application of ecological concepts to management of horticultural and agronomic cropping systems. Overview of plant physiological ecology, population ecology, community ecology, ecosystem ecology, and landscape ecology within the context of agroecosystems; special focus on the applied ecology of soil-plant-microbial interactions; discussion on current research in agroecology.
Comments: Offered Fall semester.

Formerly: Application of ecological concepts to management of horticultural, agronomic and biofuel cropping systems. Examination of plant physiological ecology, population ecology, community ecology, and ecosystem ecology within the context of agroecosystems; discussion of current research in agroecology; assessment of sustainability of cropping systems from environmental, economic, and social perspectives.

Rationale: this course is now being taught by one faculty member and changes reflect the preferences and expertise of the instructor of record. Impact on other units: None. Financial Impact: None. Support from assessment activities: not applicable.

II. PROGRAM CHANGES

DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS

REVISE AGRICULTURAL AND RESOURCE ECONOMICS MAJOR, MS

In the 2021-22 Graduate Catalog, Add Heading: Academic Standards and text for the academic standards.

Academic Standards

- Students are responsible for knowledge and compliance with Graduate School and department requirements in their degree program, as described in the current Graduate Catalog, and the Agricultural and Resource Economics Graduate Program Requirements booklet.
- Students may be dismissed from the program for the following reasons:
  - A graduate student on academic probation earning less than a 3.00 semester grade point average, or less than a C in any course, or NP in AREC 500, or withdrawal from courses without prior approval of the graduate advisory committee.
  - A graduate student earning less than a 3.00 cumulative grade point average in mandatory agricultural and resource economics courses.
  - Other reasons for dismissal from the program include failure to make adequate progress towards other degree requirements (e.g., research project, thesis preparation), academic dishonesty (e.g., plagiarism, falsification of data), or other forms of gross misconduct as defined by the Office of Equity and Diversity, Human Resources, Dean of Students' Office, Hilltopics or Graduate Council.
  - Dismissal will be accomplished by written notice to the student with a copy to the Graduate School.
- All "incomplete" (I) grades must be removed within one year.
- No student may graduate with an I (grade of Incomplete) on their record.
- Courses may not be repeated for the purpose of raising a grade already received.

Rationale: Provide clarity of requirements. Impact on other units: None. Financial impact: None.

1) In the 2021-22 *Graduate Catalog*, under the Agricultural Economics Concentration, Thesis Option, add the following bullets.

- The student and the major advisor must select a minimum of two additional faculty members who hold the rank of assistant professor or above, to serve on the student's thesis advisory committee. The responsibility of this committee is to assist the student in planning a program of study and carrying out research, and to assure fulfillment of the degree requirements.
- The advisory committee must be formed during the first semester of the student's program.
- If the student has a minor, one member of the committee must be a faculty member from the minor program to assist in designating courses required for the minor.
- Students must receive approval of their academic program by the student's advisory committee.
- Students must complete satisfactory preparation of a written thesis proposal and its oral defense to the student's advisory committee.
- Students must complete satisfactory preparation of a written thesis and pass a final oral examination by the student's advisory committee.
- Research ethics training is required upon entry into the program, which may be achieved through CITI RCR training, as evidenced by presenting a valid CITI RCR certificate to the Director of Graduate Studies or their designee.
- Human subjects training is required upon entry into the program, which may be achieved through IRB/Human Subjects training, as evidenced by presenting a valid CIT IRB/Human Subjects certificate to the Director of Graduate Studies or their designee.
- Students must complete any other training mandated by the department or University.

Rationale: Provide clarity of requirements. Impact on other units: None. Financial impact: None.

2) In the 2021-22 *Graduate Catalog*, under the Agricultural Economics Concentration, Thesis Option, Drop the Non-Course Requirements heading and bullet:

Formerly:
Non-Course Requirements
Each student must pass a final oral examination.

Rationale: Provide clarity of requirements. Impact on other units: None. Financial impact: None.

3) In the 2021-22 *Graduate Catalog*, under the Agricultural Economics Concentration, Project Option, add the following bullet and text.

- Students must register for 3 credit hours of AREC 593 (non-thesis research project) and complete a non-thesis research project. The research project must be approved by the student's advisory committee and supervised by the major advisor or a member of the advisory committee.

Rationale: Provide clarity of requirements. Impact on other units: None. Financial impact: None.

4) In the 2021-22 *Graduate Catalog*, under the Agricultural Economics Concentration, Project Option, Revise bullets under the Additional Course Requirements heading:

- A maximum of 3 credit hours of AREC 593 can be used to satisfy the 36 credit hour requirement.
- At least 30 credit hours of the 36 credit hours must be earned in courses numbered at or above the 500 level.

Formerly:
A maximum of 3 credit hours of AREC 593 can be used to satisfy the 31 credit hour requirement.
At least 33 credit hours of the 36 credit hours must be earned in courses numbered at or above the 500 level.

Rationale: Correct a numerical (text) error showing 31 credit hours were required and provide additional flexibility for MS students to count credit hours at the 400 level. Impact on other units: None. Financial impact: None.

In the 2021-22 *Graduate Catalog*, for Agricultural Economics Concentration, Project Option, under the Non-Course Requirements heading, add bullets and text as shown below:

- The student and the major advisor must select a minimum of two additional faculty members who hold the rank of assistant professor or above, to serve on the student's advisory committee. The responsibility of this committee is to assist the student in planning a program of study and carrying out the non-thesis Research Project, and to assure fulfillment of the degree requirements.
- The committee must be formed during the first semester of the student's program.
- If the student has a minor, one member of the committee must be a faculty member from the minor program to assist in designating courses required for the minor.
- Students must receive approval of their academic program by the student' advisory committee.
- Research Ethics training is required upon entry into the program, which may be achieved through CITI RCR training, as evidenced by presenting a valid CITI RCR certificate to the Director of Graduate Studies or their designee.
- Human subjects training is required upon entry into the program, which may be achieved through IRB/Human Subjects training, as evidenced by presenting a valid CIT IRB/Human Subjects certificate to the Director of Graduate Studies or their designee.
- Students must complete any other training mandated by the department or University.

Formerly: Each student must pass a written comprehensive examination in the form of an approved written research project report integrating relevant coursework material with an approved research project.

In the 2021-22 *Graduate Catalog*, FOR THE Agricultural Economics Concentration, Project Option, under the Non-Course Requirements heading, revise the bullet as shown below:

- Each student must pass a comprehensive examination by the student's advisory committee in the form of an approved written research project and oral defense of the project integrating relevant course work material with an approved research project.

Formerly:
Each student must pass a written comprehensive examination in the form of an approved written research project report integrating relevant coursework material with an approved research project.

Rationale: Provide clarity of requirements. Impact on other units: None. Financial impact: None.

In the 2021-22 *Graduate Catalog*, for the Natural Resource Economics Concentration, Thesis Option, under the Required Courses heading, revise the last bullet and add an additional bullet to the list.

- 12 credit hours of course work must come from a set of electives selected in consultation with the major professor and/or guidance committee that are designed to enhance student skills in natural resource economics, quantitative methods, and/or spatial analysis.
- Six of the 12 credit hours must be in Agricultural and Resource Economics.

Formerly:
12 credit hours of course work must come from a set of electives selected in consultation with the major professor and/or guidance committee that are designed to enhance student skills in natural resource economics, and/or spatial analysis.

Rationale: Ensure students take some additional graduate coursework from the department to ensure some understanding of economics related to agriculture and natural resources. Impact on other units: Negligible, a few students may take fewer courses from other departments. Financial impact: None.

In the 2021-22 *Graduate Catalog*, for the Natural Resource Economics concentration, Thesis Option, under the Non-Course Requirements heading, remove current bullet and replace with the following bullets.

- The student and the major advisor must select a minimum of two additional faculty members who hold the rank of assistant professor or above, to serve on the student's thesis advisory committee. The responsibility of this committee is to assist the student in planning a program of study and carrying out research, and to assure fulfillment of the degree requirements.
- The advisory committee must be formed during the first semester of the student's program.
- If the student has a minor, one member of the committee must be a faculty member from the minor program to assist in designating courses required for the minor.
- Students must receive approval of their academic program by the student' advisory committee.
- Students must complete satisfactory preparation of a written thesis proposal and its oral defense to the student's advisory committee.
- Students must complete satisfactory preparation of a written thesis and pass a final oral examination by the student's advisory committee.
- Research ethics training is required upon entry into the program, which may be achieved through CITI RCR training, as evidenced by presenting a valid CITI RCR certificate to the Director of Graduate Studies or their designee.
- Human subjects training is required upon entry into the program, which may be achieved through IRB/Human Subjects training, as evidenced by presenting a valid CIT IRB/Human Subjects certificate to the Director of Graduate Studies or their designee.
- Students must complete any other training mandated by the department or University.

Formerly:
Each student must pass a final oral examination.

DEPARTMENT OF ANIMAL SCIENCE

REVISE ADMISSION REQUIREMENTS - ANIMAL SCIENCE, MS

In the 2021-22 *Graduate Catalog*, under Admission Standards/Procedures Heading, revise the 2nd paragraph as follows:

Admission will be contingent upon evaluation of the applicant's undergraduate or graduate grade point average, information provided by at least three evaluators, educational and career goals, relevant experience, and scores from the TOEFL or IELTS, if applicable. Applicants to the PhD program normally should have completed a M.S. degree with thesis before beginning the doctoral program. Final admission is contingent upon the applicant contacting and obtaining a commitment from a graduate research faculty member to serve as her/his graduate mentor (major professor). Graduate research faculty may require additional information, an interview, or other while evaluating an applicant to work under their direction, thus effort to make direct contact early in the process will be important. Application, application fee, transcripts, and, if applicable, TOEFL or IELTS scores, should be submitted to the Office of Graduate Admissions.

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

REVISE ADMISSION REQUIREMENTS - ANIMAL SCIENCE, PHD

In the 2021-22 *Graduate Catalog*, under Admission Standards/Procedures Heading, revise 3rd and 4th bullets as follows:

- Final admission is contingent upon the applicant contacting and obtaining a commitment from a graduate research faculty member to serve as her/his graduate mentor (major professor). Graduate research faculty may require additional information, an interview, or other while evaluating an applicant to work under their direction, thus effort to make direct contact early in the process will be important.

Formerly: Final admission is contingent upon the applicant contacting and obtaining a commitment from a graduate research faculty member to serve as her/his graduate mentor (major professor).

- Application, application fee, transcripts, and, if applicable, TOEFL or IELTS scores, should be submitted to the Office of Graduate Admissions.

Formerly: Application, application fee, transcripts, and scores from the Graduate Record Examination (GRE) and TOEFL (if applicable) should be submitted to the Office of Graduate Admissions.

REVISE ADMISSION REQUIREMENTS – DUAL MS-DVM PROGRAM, ANIMAL SCIENCE/VETERINARY MEDICINE

In the 2021-22 *Graduate Catalog*, under Admission Standards/Procedures Heading, revise the 4th paragraph as follows:

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

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

DEPARTMENT OF ENTOMOLOGY AND PLANT PATHOLOGY

► **ADD MINOR**

BIOINFORMATICS: AGRICULTURE AND NATURAL RESOURCES MINOR

In the 2021-22 *Graduate Catalog*, add heading and text for the Bioinformatics: Agriculture and Natural Resources Minor

Bioinformatics: Agriculture and Natural Resources Minor
Bioinformatics is the retrieval and analysis of biochemical and biological data using mathematics and computer science. Graduate students who wish to increase their knowledge of bioinformatics or integrate the topic with other fields of study may choose the Bioinformatics minor.

Campus Code
Knoxville Campus

Admissions Standards/Procedures
The student must be accepted by the Office of Graduate Admissions and a department or program at the University of Tennessee, Knoxville. Graduate students in the Entomology and Plant Pathology department are not eligible.

Academic Standards
The student must be in good academic standing with the Graduate School.

Credit Hours Required
9 graduate credit hours

Required Courses
9 credit hours of bioinformatics-oriented 500-level or above courses in EPP (excluding EPP 500, EPP 502, EPP 600, EPP 603, EPP 640 and EPP 675).

Non-Course Requirements
The student's graduate committee must include a member of the faculty from the Entomology and Plant Pathology department who will advise the student on courses required for the minor.

Rationale: There is significant interest in bioinformatics as evidenced by increasing enrollments in our current bioinformatics-oriented courses. A minor will give students the opportunity for more directed study on bioinformatics. Impact on other units: None, there are no other minors offered on bioinformatics. Financial impact: Enrollment in our bioinformatics courses is expected to increase.

REVISE ADMISSION REQUIREMENTS - ENTOMOLOGY AND PLANT PATHOLOGY MAJOR, MS

In the 2021-22 *Graduate Catalog*, under the Admission Standards/Procedures, revise the 2nd bullet as follows:

- Applicants should submit an online application, a nonrefundable application fee, and official transcripts to the Office of Graduate Admissions.

Formerly: Applicants should submit an online application, a nonrefundable application fee, official transcripts, and official scores from the general portion of the Graduate Record Examination (GRE) to the Office of Graduate Admissions.

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

In the 2021-22 *Graduate Catalog*, under the Admission Standards/Procedures, revise the 2nd bullet as follows:

- Applicants should submit an online application, a nonrefundable application fee, and official transcripts to the Office of Graduate Admissions.

Formerly: Applicants should submit an online application, a nonrefundable application fee, official transcripts, and official scores from the general portion of the Graduate Record Examination (GRE) to the Office of Graduate Admissions.

Rationale: Reflect the national trend and common UT practices of not requiring GRE scores for graduate student applicants in order to enhance accessibility and diversity of graduate program enrollments. Impact on other units: None. Financial impact: None.

DEPARTMENT OF FOOD SCIENCE

REVISE REQUIREMENTS – FOOD SCIENCE MAJOR, MS

In the 2021-22 *Graduate Catalog*, under the Additional Course Requirements Heading, add the following bullet:

- All students are required to complete at least 6 hours from FDSC 511 Integrated Food Science, FDSC 514 Food Colloids, FDSC 521 Advanced Food Microbiology, FDSC 525 Molecular Parasitology, FDSC 530 Food Biochemistry, FDSC 545 Food Rheology, FDSC 541 Food Engineering, FDSC 551 Advanced Regression for Agricultural Research, FDSC 616 Physical Properties of Foods, FDSC 617 Food Proteins, FDSC 618 Structure and Functionality of Polysaccharides, or FDSC 690 Innovations in Food-related Technologies.

Rationale: In the current graduate catalog, MS students are only required to take FDSC 501 from the department, which may not equip them with sufficient knowledge in food science. By requiring graduate level food science courses, the low enrollment issue in our graduate courses may be addressed.

In the 2021-22 Graduate Catalog, under the Required Courses heading, under the bullet "All Students" revise 2nd bullet as shown below.

- FDSC 601 (2 credit hours)

Formerly:
FDSC 501 (2 credit hours)

Rationale: FDSC 501 is being replaced with FDSC 601 to allow one course to provide for both Masters and PhD students. This will reduce the extent of the low enrollment in both courses. Impact on other units: None. Financial Impact: None.

REVISE REQUIREMENTS – FOOD SCIENCE MAJOR, PHD

In the 2021-22 *Graduate Catalog*, under the Additional Course Requirements Heading, add the following bullet:

- All students are required to complete at least 6 hours from FDSC 511 Integrated Food Science, FDSC 514 Food Colloids, FDSC 521 Advanced Food Microbiology, FDSC 525 Molecular Parasitology, FDSC 530 Food Biochemistry, FDSC 545 Food Rheology, FDSC 541 Food Engineering, FDSC 551 Advanced Regression for Agricultural Research, FDSC 616 Physical Properties of Foods, FDSC 617 Food Proteins, FDSC 618 Structure and Functionality of Polysaccharides, or FDSC 690 Innovations in Food-related Technologies.

Rationale: In the current graduate catalog, PhD students are only required to take FDSC 601 from the department, which may not equip them with sufficient knowledge in food science. By requiring graduate level food science courses, the low enrollment issue in our graduate courses may be addressed.

DEPARTMENT OF PLANT SCIENCES

ADD 5-YEAR BS-MS PROGRAM – PLANT SCIENCES MAJOR

In the 2021-22 Graduate Catalog, add heading, text and requirements for the Accelerated BS-MS for the Plant Sciences major.

Five-Year BS/MS Program - Plant Sciences Major, BS in Plant Science

For qualified students, the Department of Plant Sciences offers a Five-Year BS/MS accelerated degree program with a BS major in Plant Science and a MS major in Plant Sciences. Central to this program is that a qualified student may take up to nine hours of approved graduate course work within their directed electives category in the undergraduate catalog and have them count toward both the BS degree and the MS degree. Students may be considered for conditional admission to the program after completion of 90 credit hours towards their BS degree. This program is designed for students who intend to complete their MS degree at the University of Tennessee, as other universities may not accept these courses for graduate credit, because they were used to satisfy requirements for the BS degree.

Significant components required for conditional admission to the program are:

- A student must be a declared Plant Sciences major, with a minimum GPA of 3.40, must have completed at least 15 credit hours in Plant Sciences, and must have completed at least 90 credit hours of the 120 credit hours of coursework required for the BS degree with a major in Plant Science.
- A student must complete a personal interview with their undergraduate faculty mentor, the Graduate Director in the Department of Plant Sciences, and a student must obtain a letter of mentorship support from a Plant Sciences faculty member (i.e., major professor).
- As part of the official application process, the student must submit to the graduate director the following: (1) a letter of intent from graduate mentor, (2) an updated resume, (3) a current degree audit (DARS report), and (4) a letter of intent from student documenting their research interest.
- Students must at least be conditionally admitted to the program prior to taking courses that receive credit for both the BS and MS degrees. Condition admission requires approval (Senior Requesting Graduate Credit Form) by the Plant Sciences Graduate Director and the Graduate School.

The form “Plant Sciences Conditional Admission Five-Year BS/MS” is available from the Graduate Director and must be completed and signed by the undergraduate advisor, undergraduate coordinator, and graduate advisory committee at least two months before the start of the student’s last two full semesters at UTK. After review by the Department, the form will be signed by the Graduate Director and submitted to the Graduate School for approval and processing. During the first term following conditional admission to the BS/MS program, the student will work with the faculty mentor to obtain agreement from two additional faculty members to serve on the student’s thesis advisory committee.

A student that is conditionally admitted to the BS/MS program may complete up to 9 credit hours of graduate level coursework during the student’s undergraduate study and apply those 9 credit hours to satisfy both the BS degree requirements and also the MS degree requirements, provided that these graduate credit hours are listed within the Herbert College of Agriculture as acceptable for graduate credit. To receive graduate credit for the 9 credit hours listed on the Plant Sciences Conditional Application form and approved by their graduate advisory committee, and others granting approval by signing that form, the student must complete and submit the Senior Requesting Graduate Credit Form to the Graduate School. If courses are to be taken during different semesters, the student will need to submit this form per each relevant semester.

Conditional admission into the BS/MS program does not guarantee acceptance into either the Graduate School or the MS program. Students in the BS/MS program must apply for admission to the Graduate School and to the MS program during their senior year of undergraduate study for the term immediately following the completion of their undergraduate study following the same procedures that all other student applicants follow. A GRE score must be submitted as part of the application for admission into any graduate program in the Department of Plant Sciences. Students will be fully admitted to the MS program after they have been accepted both by the Graduate School and by the Plant Sciences program. Students will not be eligible for graduate assistantships until they are enrolled as graduate-level students in the Graduate School. The five-year time frame is established to ensure sufficient time is available to complete graduate coursework as directed by the student’s graduate committee. Research needed to fulfill requirements for successful defense of a thesis may require additional time-to-degree.

COLLEGE OF ARCHITECTURE AND DESIGN

All changes effective Fall 2021

II PROGRAM CHANGES

SCHOOL OF ARCHITECTURE

REVISE DUAL MARCH-MLA PROGRAM, ARCHITECTURE – LANDSCAPE ARCHITECTURE

In the 2021-22 Graduate Catalog, under the MArch 3G – MLA Dual Degree, Thesis or Project heading, then under the Additional Information heading, revise as shown below:

MArch 3G – MLA Dual Degree, Thesis or Project
Additional Information
A typical program is completed in the following schedule:

Under the Spring Year 1 heading, remove current 4 bullets and replace as follows:

SPRING YEAR 1
- LAR 552 (6 credit hours)
- LAR 522 (3 credit hours)
- ARCH 512 (3 credit hours)
- ARCH 558 (4 credit hours)

Formerly:
LAR 552 (6 credit hours)
ARCH 512 (3 credit hours)
ARCH 558 (4 credit hours)
Approved elective (3 credit hours) chosen in consultation with the Graduate Studies Chair and/or Director of the School of Landscape Architecture

Under the Fall Year 2 heading, remove current 4 bullets and replace as follows:

FALL YEAR 2
- LAR 553 (6 credit hours)
- LAR 587 (3 credit hours)
- LAR 571 (4 credit hours)
- LAR 530 (3 credit hours)

Formerly:
LAR 554 (6 credit hours)
LAR 583 (3 credit hours)
LAR 571 (4 credit hours)
PLSC 501 (3 credit hours) or PLSC 421 (3 credit hours)

Under the Spring Year 2 heading, remove current 4 bullets and replace as follows:

SPRING YEAR 2
- LAR 554 (6 credit hours)
- LAR 584 (3 credit hours)
- GEOL 590 (3 credit hours)
- Architecture (ARCH) approved elective (3 credit hours)

Formerly:
Arch 58X (6 credit hours)
LAR 582 (3 credit hours)
LAR 572 (3 credit hours)
Architecture (ARCH) approved elective (3 credit hours)

Under the Fall Year 3 heading, remove current 4 bullets and replace as follows:

FALL YEAR 3
- LAR 571 (6 credit hours)
- ARCH 513 (3 credit hours)
- ARCH 559 (4 credit hours)
- Architecture (ARCH) or Landscape Architecture (LAR) approved elective (3 credit hours)

Formerly:
LAR 555 (6 credit hours)
ARCH 513 (3 credit hours)
ARCH 559 (4 credit hours)
Architecture (ARCH) or Landscape Architecture (LAR) approved elective (3 credit hours)

Under the Spring Year 3 heading, remove current 4 bullets and replace as follows:
SPRING YEAR 3
- ARCH 572 (6 credit hours)
- ARCH 562 (3 credit hours)
- ARCH 560 (3 credit hours)
- LAR 534 (3 credit hours)

Formerly:
ARCH 572 (6 credit hours)
LAR 584 (3 credit hours)
ARCH 560 (3 credit hours)
GEOL 590 (3 credit hours)

Under the Fall Year 4 heading, remove current 4 bullets and replace as follows:
FALL YEAR 4
- LAR 555 (6 credit hours)
- LAR 580/583 or ARCH 529 (3 credit hours)
- LAR 535 (3 credit hours)
- Architecture (ARCH) or Landscape Architecture (LAR) approved elective (3 credit hours)

Formerly:
ARCH 58X (6 credit hours)
ARCH 529 (3 credit hours)
LAR 534 (3 credit hours)
Architecture (ARCH) approved elective (3 credit hours)

Under the Spring Year 4 heading, remove current 4 bullets and replace as follows:
SPRING YEAR 4
- ARCH 500/598 or LAR 500/598 (6 credit hours)
- LAR 582 (3 credit hours)
- LAR 572 (3 credit hours)
- Landscape Architecture (LAR) approved elective (3 credit hours)

Formerly:
LAR 500 (6 credit hours)
ARCH 562 (3 credit hours)
LAR 535 (3 credit hours)
Landscape Architecture (LAR) approved elective (3 credit hours)

REVISE DUAL MARCH-MLA PROGRAM, ARCHITECTURE – LANDSCAPE ARCHITECTURE

In the 2021-22 Graduate Catalog, under the MArch 2G – MLA Dual Degree, Thesis or Project heading, then under the Additional Information heading, revise as shown below:

MArch 2G – MLA Dual Degree, Thesis or Project
Additional Information
A typical program is completed in the following schedule:

Under the Fall Year 1 heading, remove current 4 bullets and replace as follows:
FALL YEAR 1
- Architecture 58X (6 credit hours)
- LAR 521 (3 credit hours)
- LAR 587 (3 credit hours)
- LAR 530 (3 credit hours)

Formerly:
Architecture 58X (6 credit hours)
LAR 585 (3 credit hours)
LAR 571 (4 credit hours)
PLSC 501 (3 credit hours) or PLSC 421 (3 credit hours)

Under the Spring Year 1 heading, remove current 4 bullets and replace as follows:
SPRING YEAR 1
- LAR 552 (6 credit hours)
- LAR 522 (3 credit hours)
- LAR 582 (3 credit hours)
- GEOL 590 (3 credit hours)

Formerly:
LAR 554 (6 credit hours)
LAR 582 (3 credit hours)
LAR 572 (3 credit hours)
Approved elective (3 credit hours) chosen in consultation with the Graduate Studies Chair and/or Director of the School of Landscape Architecture

Under the Fall Year 2 heading, remove current 4 bullets and replace as follows:
FALL YEAR 2
- LAR 553 (6 credit hours)
- ARCH 513 (3 credit hours)
- LAR 571 (3 credit hours)
- Architecture (ARCH) approved elective (3 credit hours)

Formerly:
LAR 555 (6 credit hours)
ARCH 513 (3 credit hours)
GEOL 590 (3 credit hours)
Architecture (ARCH) approved elective (3 credit hours)

Under the Spring Year 2 heading, remove current 4 bullets and replace as follows:
SPRING YEAR 2
- ARCH 572 (6 credit hours)
- LAR 584 (3 credit hours)
- ARCH 560 (3 credit hours)
- LAR 534 (3 credit hours)

Formerly:
ARCH 572 (6 credit hours)
LAR 584 (3 credit hours)
ARCH 560 (3 credit hours)
Architecture (ARCH) approved elective (3 credit hours)

Under the Fall Year 3 heading, remove current 4 bullets and replace as follows:
FALL YEAR 3
- ARCH 583 or LAR 555 (6 credit hour)
- LAR 583 (3 credit hours)
- ARCH 529 (3 credit hours)
- LAR 535 (3 credit hours)

Formerly:
ARCH 58X (6 credit hours)
ARCH 529 (3 credit hours)
LAR 534 (3 credit hours)
Architecture (ARCH) approved elective (3 credit hours)

Under the Spring Year 3 heading, remove current 4 bullets and replace as follows:
SPRING YEAR 3
- ARCH 598 or LAR 598 (6 credit hours)
- ARCH 562 (3 credit hours)
- LAR 572 (3 credit hours)
- Architecture (ARCH) approved elective (3 credit hours)

Formerly:
ARCH 598 or LAR 500 (6 credit hours)
ARCH 562 (3 credit hours)
LAR 532 (3 credit hours)
Landscape Architecture (LAR) approved elective (3 credit hours)

COLLEGE OF ARTS AND SCIENCES

All changes effective Fall 2021

I. COURSE CHANGES

INTERDISCIPLINARY PROGRAMS

(LING) Linguistics

REVISE REPEATABILITY ON 400-LEVEL COURSE

LING 400 Topics in Linguistics
Repeatability: May be repeated: Maximum 9 hours

Formerly: Repeatability: may be repeated: Maximum 6 hours

Rationale: LING 400 has been offered with a variety of topics (more than 2) and students should get credit for and be able to take up to three different topics for credit. Impact on other units: none. Financial Impact: none.

SCHOOL OF ART

(ART) Art

ADD

ART 557 MFA Professional Practice Seminar (3) Covers the tools and skills necessary for artists to advocate for themselves in a range of professional environments. Covered in the course are a sustainable life in the arts, the professional job hunt, grant applications, writing, social media, vocations in the arts, business plans, artist residencies, support for artists, copyright, curatorial practice, commissions, working with commercial galleries and non-profit spaces.
Credit Restriction: May not be applied toward the art history requirement for MFA.

Rationale: This course is a valuable tool to equip graduate students to build a sustainable life in the arts as they enter a range of professional fields. It will make sure students have access to the widest range of resources as they build a life in the arts. While students complete their graduate degrees with a robust experience in the studio it is important for them to have a strong grasp of the day-to-day skills and tools necessary to advocate for themselves in a life-long vocation. This course will provide case-studies as models for different lives in the arts as well as the tools needed to support those lives for continued and future success. Impact on other units: none. Financial Impact: none.

(ARTC) Art Four-Dimensional Arts

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

ARTC 433 Animation III (4) Development of individual projects in animation with an emphasis on conceptual challenges, personal expression and professional practices.
Repeatability: May be repeated. Maximum 16 hours.
(RE) Prerequisite(s): ARTC 233.

Rationale: We have offered animation classes as a special topic (239/439) for the last 3 spring semesters. Enrollment and student demand has been high. Impact on other units: None. Financial impact: none.

(ARTD) Art Design/Graphic Design

DROP 400-LEVEL SECONDARY CROSS-LISTED COURSES FOR GRADUATE CREDIT

+ARTD 401 Experiments in Sequencing (4) Cross-listed: See Art Four-Dimensional Arts (ARTC) 401.

+ARTD 402 Experiments in Space (4) Cross-listed: See Art Four-Dimensional Arts (ARTC) 402.

+ARTD 403 Experiments in Systems (4) Cross-listed: See Art Four-Dimensional Arts (ARTC) 403.

Rationale: The Graphic Design program has moved to the College of Architecture and Design. ARTD classes are being progressively eliminated. Impact on other units: none. Financial impact: none. **Primary courses (ARTC) are <u>not</u> being dropped**.

(ARTH) Art History

ADD NEW 400-LEVEL COURSES FOR GRADUATE CREDIT

ARTH 443 Islamic Art in Global Context I: Medieval (3) Explores the role of art and material culture in the development of Islam beginning with its establishment on the Arabian Peninsula in the seventh century. Focusing on cultural relationships with Roman religion, Christianity, and Judaism, we consider the interconnected nature of architectural and artistic milestones across the Mediterranean world and beyond, stretching from Spain and North Africa in the West to the Arabian Peninsula, Iraq, and Iran in the East.

Rationale: Reflects the specialty of new faculty and diversifies the offering of art history courses within a global context. Impact on other units: none. Financial impact: none.

ARTH 444 Islamic Art in Global Context II: Early Modern (3) Surveys the development of Islamic art and material culture during a critical period of change in the Islamic lands, the western Mediterranean, and the wider world from 1400 to 1800. It explores artistic, economic, and intellectual interchange between the Christian and Islamic lands from the European Renaissance up to the dominance of colonial and imperial powers.

Rationale: Reflects the specialty of new faculty and diversifies the offering of art history courses within a global context. Impact on other units: none. Financial impact: none.

ARTH 455 The Global Renaissance (3) Surveys art at the crossroads of exchange encounters in the 15th and 16th centuries and introduces intellectual models for approaching art in the early modern world that pay attention to both global forces and power structures such as trade, religion, and colonialism, but also indigenous epistemologies and identities.

Rationale: Reflects the specialty of new faculty and diversifies the offering of art history courses within a global context. Impact on other units: none. Financial impact: none.

ARTH 456 Global Baroque Art and Architecture (3) Introduces students to the diverse artistic production of the seventeenth century across the globe, not only in conversation with artistic developments in 16th-century Italy, but also against a backdrop of an expanding political and geographic world, including artistic and architectural centers across the globe, such as Cusco, Goa, Macau, Mexico City, and Nagasaki.

Rationale: Reflects the specialty of new faculty and diversifies the offering of art history courses within a global context. Impact on other units: none. Financial impact: none.

ARTH 483 History of Museums and Collections (3) Introduces students to the history of collections, exhibitions, and museums through the history of systems of collecting and display from antiquity to the present. Readings will confront theoretical and methodological issues related to historiography, ethnography, and ethics. In addition to covering the history of museums, the course will relate history and theory to the major concerns of contemporary institutions and galleries.

Rationale: Reflects the specialty of new faculty and addresses the increased interest by students in the museum and curatorial studies fields. Impact on other units: none. Financial impact: none.

DROP 400 LEVEL COURSES FOR GRADUATE CREDIT

ARTH 442 Art of Northern Europe, 1600-1675 (3)

Rationale: Change reflects specialty of new faculty member. Impact on other units: none. Financial impact: none.

ARTH 454 Renaissance and Baroque Theory (3)

Rationale: Reflects the specialty and change of focus of new faculty member. Impact on other units: none. Financial impact: none.

REVISE TITLE AND DESCRIPTION ON 400-LEVEL COURSES

ARTH 433 History of Film and Modern Art (3) Study of the development and interaction between the cinematic arts and the visual arts within the context of modern art history.
Cross-listed: (Same as Cinema Studies (CNST) 433.)

Formerly: History of Film and Modern and Contemporary Art (3)
Study of the development and interaction between the cinematic arts and the visual arts within the context of 20th and 21st century art history modern art history.

Rationale: Change reflects a focus on film in the modern era. Impact on other units: none. Financial impact: none. Primary is CNST 433.

ARTH 452 Art of Italy, 1475-1600 (3) Surveys the height of the 're-birth' of the visual arts and the revival of classical antiquity now known as the Italian Renaissance. The 15th and 16th centuries witnessed landmark artistic, intellectual, and technological innovations such as humanism, the development of printmaking, the rise of the artist as genius, and the discipline of art history itself. Artists include Leonardo da Vinci, Raphael, Michelangelo, Titian, and Palladio.

Formerly: Art of Italy, 1450-1575 (3)
Concentrated study of Leonardo da Vinci, Michelangelo, Titian, Raphael, Pontormo, and Giorgione. Writing-emphasis course.

Rationale: Reflects the specialty and change of focus of new faculty member. Impact on other units: none. Financial impact: none.

REVISE DESCRIPTION ON 400-LEVEL CROSS-LISTED COURSE

ARTH 441 Northern European Painting, 1350-1600 (3) Overview of art and material culture in the regions encompassed by present day France, Germany, and the Netherlands in the 14th through 16th centuries. Content includes new artistic genres and media such as oil painting and printmaking; the location and circulation of art (markets, sacred spaces, regionalism and internationalism, exchange with Italy); uses and conflicts over religious imagery, and the impact of the Protestant Reformation.
Cross-listed: (Same as Medieval and Renaissance Studies (MRST) 442.)

Formerly: From courtly art of late Middle Ages to Northern Renaissance. Jan van Eyck, Roger van der Weyden, and Durer; early printmakers. Writing-emphasis course.

Rationale: Reflects the change in focus and specialty of new faculty member. Impact on other units: cross listed with MRST 442. Financial impact: none.

REVISE TITLES ON 400-LEVEL COURSES

ARTH 475 History of 19th-Century Art in Europe (3)

Formerly: History of 19th-Century Painting and Sculpture Art in Europe (3)

Rationale: Change in title reflects more accurately the course content, which includes media beyond painting and sculpture. Impact on other units: none. Financial impact: none.

ARTH 476 History of 20th-Century Art in Europe (3)

Formerly: History of 20th-Century Painting and Sculpture Art in Europe (3)

Rationale: Change in title reflects more accurately the course content, which includes media beyond painting and sculpture. Impact on other units: none. Financial impact: none.

DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

(EEB) Ecology and Evolutionary Biology

ADD

EEB 604 Scientific Writing (1) Provides a foundation for productive scientific writing. Will emphasize a practical understanding of scientific writing through a process of weekly writing and peer review. All students are expected to make progress on their writing goals each week and to be the main presenter at least once during the course of the semester. In addition, students are expected to peer review the work of another class member each week (their partner) as well as the work of the main presenter.
Repeatability: May be repeated with consent of department. Maximum 12 hours.
Registration Restriction(s): Minimum student level – graduate.

Rationale: This course has been taught every semester since Fall 2017 under EEB 603: Advanced Topics in Evolutionary Biology. Because of the demand for the course, we propose making it a regularly offered graduate course. Impact on other units: none. Financial impact: none.

REVISE HOURS, DESCRIPTION AND REMOVE REPEATABILITY

EEB 550 Ecological Niche Models and Species' Distribution (3) Development of GIS tools with applications in conservation biology, ecology, and phylogeography has provided new research avenues that combine cross-disciplinary knowledge. In particular, ecological niche modeling (ENM) used to investigate species' geographic distributions has generated much interest in recent years. Covers theoretical aspects of ecological niche modeling, various types of environmental data (e.g., climatic, topographic, vegetation indices) and species' records, and best practices for running ecological niche models. Students will learn how to generate niche models and will use distributional estimates to address questions related to species' ecology, conservation, and biogeography.

Formerly: (1) Species niches and spatial patterns – course will combine lectures with computer demonstrations and practice. Students are expected to develop and work on an instructor approved project during class and present project results at the end of the semester. This hands-on course will be structured in three modules: I. Species' ranges in GIS; II. Species' niches – ecological niche modeling; and III. Spatial patterns of

biodiversity - macroecology and conservation. Each module will last 5 weeks and students have the option to enroll in one, two, or three modules.
Repeatability: May be repeated. Maximum 3 hours.

Rationale: This course was offered in three modules as course sections. Students could elect to enroll in one, two, or all three modules, each 1 credit hour, for a total of 3 credit hours. However, most students enrolled in all three modules every time this course was offered (three years), thus this structure is not needed. Impact on other units: none. Financial impact: none.

DEPARTMENT OF ENGLISH

(ENGL) English

ADD 400-LEVEL COURSES FOR GRADUATE CREDIT

ENGL 424 Jane Austen (3) Close study of Austen's literary works, with special attention to their cultural and literary contexts.
(RE) Prerequisite(s): 102, 118, 132, 290, or 298.

Rationale: All English 400-level courses are approved by the department for graduate credit. ENGL 461 was mistakenly not included in the Graduate Catalogue when it was added in Fall 2019.

ENGL 461 Global Communication for Science and Technology (3) Theories, methods, issues, and practices for worldwide communication in science and technology. Topics may include nuclear security and nonproliferation, environmental studies, or health sciences and biotechnology in global contexts.
(RE) Prerequisite(s): 102, 118, 132, 290, or 298.

Rationale: All English 400-level courses are approved by the department for graduate credit. ENGL 461 was mistakenly not included in the Graduate Catalogue when it was added in Fall 2019.

ENGL 469 Advanced Creative Nonfiction Writing (3) Develops skills in reading and writing creative nonfiction.
(RE) Prerequisite(s): ENGL 369.

Rationale: Creative nonfiction has gained in popularity over the past few decades, and some of the most exciting contemporary work being published is in this genre. Our 300-level creative nonfiction course has filled consistently for the past ten years, and both our majors and non-majors (particularly from Journalism) want to continue their studies in the genre. Adding a 400-level creative nonfiction course to the curriculum would offer students a clearer path to continue with creative nonfiction content and the multiple skills it builds and eventual writing and career opportunities it affords. Impact on other units: none. Financial Impact: none.

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

ENGL 439 Race and Ethnicity in American Cinema (3) Examines the role of ethnic and racial identity in the cinema of the United States.
Cross-listed: (Same as Cinema Studies 439.)
(RE) Prerequisite(s): ENGL 102, ENGL 118, ENGL 132, ENGL 290, or ENGL 298.

Rationale: This new course will focus on representations of race and ethnicity in American film and how they can be interpreted from social, aesthetic, and ideological perspectives. It will teach students to understand the ways in which racial and ethnic difference are visualized on screen as well as the ways in which representational codes and conventions have evolved in American film culture. This course fills an important hole in both the English and Cinema Studies curricula, promising to deliver on the department's and program's commitment to address issues of race and cultural diversity with an intersectional focus. Feedback from Spring 2020 suggests that students hunger for more inclusive, anti-racist content. Impact on other units: Will be cross-listed with Cinema Studies and part of the Cinema Studies program. We have approval from CNST. Financial impact: none.

DEPARTMENT OF MATHEMATICS

(MATH) Mathematics

ADD

MATH 503 Mathematical Reasoning and Proofs for Teachers (3) Logic of compound statements and quantified statements, arguments with quantified statements. Set theory. Proof methods. Elementary number theory. Mathematical writing and design of writing projects for mathematics classes.
Credit Restriction: May not apply toward mathematics major (Master of Science).
Comment(s): For students in Master of Mathematics program and for students in graduate programs in the College of Education, Health, and Human Sciences.

Rationale: Mathematical logic and proof courses are typically a semester-long course for math students who are new to rigorous proof-writing. This content will now be split from the Discrete Math for Teachers course, so that students have sufficient treatment of all topics. Impact on other units: none. Financial impact: none.

MATH 508 Statistics for Teachers (3) Explores the mathematics behind major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include basic statistical measures, basic probability, sampling distributions, simulation of sampling distributions, the Central Limit Theorem, Statistical Inference, estimating population parameters, and hypothesis testing.
Credit Restriction: May not apply toward mathematics major (Master of Science).
Comment(s): For students in Master of Mathematics program and for students in graduate programs in the College of Education, Health, and Human Sciences.

Rationale: Currently, these topics are part of the Probability and Statistics for Teachers course, but given the vast amount of content, these should be in their own semester-long course for sufficient treatment of the topics. Impact on other units: none. Financial impact: none.

MATH 510 Mathematical Modeling for Teachers (3) Applying mathematics to solve real-world problems. Investigation of meaningful and realistic problems encompassing many academic disciplines including economics, ecology, environmental science, sociology, and management. Mathematical tools could include difference equations, differential equations, and scientific computing. Students will be familiarized with available computation and visualization packages, as appropriate for the applications included in the course.
Credit Restriction: May not apply toward mathematics major (Master of Science).
Comment(s): For students in Master of Mathematics program and for students in graduate programs in the College of Education, Health, and Human Sciences.

Rationale: For high school educators (who are the target of the MM program), math modeling often has a misconception of just being word problems in a textbook. However, math modeling is rich field that is increasingly relevant as educators utilize more real-world applications. To better prepare MM students for teaching math models in their own courses and to give them a broader interdisciplinary perspective on math, we propose a separate course in math modeling.

MATH 530 Differential Equations for Teachers (3) Elementary solution techniques for differential equations. Existence and uniqueness of solutions. Laplace transform. Series solutions. Systems of differential equations, stability and phase plane analysis.
Credit Restriction: May not apply toward mathematics major (Master of Science).
Comment(s): For students in Master of Mathematics program and for students in graduate programs in the College of Education, Health, and Human Sciences.

Rationale: Differential equations is one of the most highly-demanded courses for high school teachers of Dual Enrollment courses or of community college educators since it is one of the two courses to take after the calculus sequence. To best prepare MM students for the work force, this is an important topic to cover. Impact on other units: none. Financial impact: none.

MATH 550 Linear Algebra for Teachers (3) Teaching methodology of solving systems of linear equations with matrices, Gaussian elimination, matrix computations, determinants, vector spaces, subspaces, eigenvalues and eigenvectors, applications.
Credit Restriction: May not apply toward mathematics major (Master of Science).
Comment(s): For students in Master of Mathematics program and for students in graduate programs in the College of Education, Health, and Human Sciences.

Rationale: Linear or matrix algebra is one of the most highly-demanded courses for high school teachers of Dual Enrollment courses or of community college educators since it is one of the two courses to take after the calculus sequence. To best prepare MM students for the work force, this is an important topic to cover. Impact on other units: none. Financial impact: none.

REVISE DESCRIPTION AND REMOVE RECOMMENDED BACKGROUND

MATH 504 Discrete Mathematics for Teachers (3) Enumerative combinatorics. Functions and relations. Recurrence relations and recursively defined sets. Elementary graph theory.

Formerly: Mathematical logic and methods of argument, sets, functions and relations, combinatorics. Normally, the first graduate course for students seeking Master of Mathematics degree.
Recommended Background: 1 year of calculus or equivalent.

Rationale: Mathematical reasoning and proofs should be its own course, so that students have sufficient treatment of these foundational topics. Discrete math topics also need the time of an entire semester for sufficient depth. In addition, since the MM program has continuous enrollment, courses cannot be designated as the first course unless they are offered every term (including summer), which the program does not have the capacity to do right now. Lastly, the recommended background should be removed because just one year of calculus is insufficient (as indicated by our program admission requirements). Impact on other units: none. Financial impact: none.

REVISE TO REMOVE RECOMMENDED BACKGROUND

MATH 505 Analysis for Teachers (3)

Formerly: Recommended Background: 1 year of calculus or equivalent.

MATH 506 Algebra for Teachers (3)

Formerly: Recommended Background: 1 year of calculus or equivalent.

Rationale: For 505 and 506: The recommended background should be removed because just one year of calculus is insufficient (as indicated by our program admission requirements). Impact on other units: none. Financial impact: none.

REVISE TITLE, DESCRIPTION, AND REMOVE RECOMMENDED BACKGROUND

MATH 507 Probability for Teachers (3) Probability models. Discrete and continuous random variables. Binomial and Poisson distributions. Independence, conditional probability and Bayes' rule. Chebyshev inequality and limit theorems.

Formerly: Probability and Statistics for Teachers (3) Probability models. Discrete random variables. Binomial, hypergeometric, and Poisson distributions.
Recommended Background: 1 year of calculus or equivalent.

Rationale: Given the vast amount of content, mathematical probability and statistics should be split into two courses for sufficient treatment of each. Lastly, the recommended background should be removed because just one year of calculus is insufficient (as indicated by our program admission requirements). Impact on other units: none. Financial impact: none

REVISE TITLE AND DESCRIPTION

Math 511 Introduction to Design of Mathematical Models (3) Introduces students to concepts in the design of mathematical models. The focus will be on understanding different types of models, when each type may be most appropriate, the benefits and limitations of each approach, and some initial discussion of how such models (once built) may be analyzed.

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

Rationale: The course is being adapted to give students more practical experience in modeling on projects.

REVISE TITLE, DESCRIPTION AND ADD REPEATABILITY

Math 512 Practicum in the Application and Analysis of Mathematical Models (3) Applied design and qualitative analysis of models in physical, social, biological and engineering systems. Mentored experience in working as a collaborative mathematical modeler with case-studies.
Repeatability: May be Repeated. Maximum of 6 hours.

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

Rationale: The course is being adapted to give students more practical experience in modeling on projects. Impact on other units: none. Financial impact: none.

DEPARTMENT OF MICROBIOLOGY

(MICR) Microbiology

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

MICR 435 Quantitative analysis of biological data (3) Basics of scientific method, science philosophy and experimental design in biology; emphasis on interpretation of quantitative experimental data. Utilization of open source programming languages for the analysis and visualization of experimental data.
Grading Restriction: Credit grading only, A-F grading option.
(RE) Prerequisite(s): MATH 141 or MATH 151 or instructor permission.

Rationale: We have been witnessing rapid growth of amounts of data collected in different areas of human activities including medicine, social media, communications, etc. In biology, the data are available from multiple novel experimental techniques including DNA and RNA sequencing, proteomics, metabolomics, etc. The future generation of professionals such as engineers, scientists, physicians, policy makers and others need to be trained to be able to navigate via such massive amounts of data to make sensible inferences from the data to improve the world. This course will introduce basics of data analysis and will improve quantitative skills of the students and will help graduate students to improve their data analysis skills. The focus will on data coming from experiments in microbiology/virology/immunology. Impact on other units: none. Financial impact: none.

ADD

MICR 575 Reproducible Data Analysis (3) Introduction to the practice of analyzing and communicating data analysis clearly, efficiently, and reproducibly. Topics include an introduction to functional programming, data visualization, literate programming, and version control.

Rationale: Fills a void in current course offerings. Impact on other units: none. Financial impact: none.

DEPARTMENT OF MODERN FOREIGN LANGUAGE AND LITERATURES

(GERM) German

REVISE DESCRIPTION ON 400-LEVEL COURSE

GERM 420 Selected Topics in German Literatures and Cultures (3) Writing-emphasis course.

Formerly: Taught in English. Writing-emphasis course.

Rationale: The comment "Taught in English" was mistakenly added to the description of German 420. The course lists as a prerequisite: "Two courses from GERM 321, GERM 322, GERM 324, GERM 325, GERM 326." All of the 300-level courses listed are taught in German. If the course were taught in English the current prerequisites would not make sense. Impact on other units: none. Financial impact: none.

(MFLL) Modern Foreign Language and Literature

ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT

MFLL 400 Psycholinguistics (3) Serves as an introduction to the field of psycholinguistics, examining research on the acquisition, comprehension and production of language. Will explore relationships between theory and data from psycholinguistic research with a focus on experimental methods used to examine questions regarding language acquisition, representation and processing.
(RE) Prerequisite(s): ENGL 102, ENGL 132, ENGL 290 or ENGL 298.

Rationale: We are adding this course as an elective to our MA track in linguistics within Hispanic Studies. The course has been taught regularly as a special topics course with a SPAN prefix, but in order to make it available to a wider audience we would like to list it as a MFLL course and include additional assignments/readings in Spanish for Hispanic Studies majors. Impact on other units: none. Financial impact: none.

(SPAN) Spanish

ADD NEW 400-LEVEL COURSE FOR GRADUATE CREDIT

SPAN 432 Multilingualism (3) Offers a panoramic view of bilingualism and multilingualism from a language acquisition perspective. Topics surveyed include myths about bilingualism, early vs. late bilingualism, first vs. second language acquisition, cognitive models of bilingualism, as well as the sociolinguistics and pragmatics of bilingualism, among other topics.
(RE)Prerequisite(s): SPAN 312.

Rationale: This course has been taught various times as a special topics course. It will be added as an elective course in our MA track in Linguistics within our Hispanic Studies program. Impact on other units: none. Financial impact: none.

SCHOOL OF MUSIC

(MUEN) Music Ensemble

ADD

MUEN 513 Trumpet Ensemble (1)
Repeatability: May be repeated. Maximum 6 hours.

Rationale: This change will give the MUEN 515 course: chamber music ensemble (Leach section) a title of Trumpet Ensemble and an individual course number. Giving the ensemble its own course number will help clarify its place in the MM curriculum. Impact on other units: none. Financial Impact: none.

MUEN 514 Horn Choir (1)
Repeatability: May be repeated. Maximum 6 hours.

Rationale: This change will remove Horn Choir as a section of MUEN 515 Chamber music and give it an individual course number. Giving the ensemble its own course number will help clarify its place in the MM curriculum. Impact on other units: none. Financial impact: none.

(MUSC) Music General

ADD

MUSC 503 Solo Class (0)
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated 10 times.

Rationale: Graduate students have attended their applied studio's weekly Solo Class section once per week for years. Although there is an undergraduate course for Solo Class (MUSC 200), there is not for graduate students. This addition now gives graduate students a course that represents involvement in Solo Class. Impact on other units: none. Financial impact: none.

REVISE CREDIT HOURS

MUSC 540 Secondary Applied Music (1-2)

Formerly: (1)

Rationale: Some graduate students wish to take 2 credit hours of secondary applied lessons in a given semester. Impact on other units: none. Financial impact: none.

DEPARTMENT OF PHYSICS AND ASTRONOMY

(PHYS) Physics

REVISE TO ADD REGISTRATION RESTRICTION

PHYS 501 Graduate Research Participation (3)
Registration Restriction(s): Minimum student level – graduate.

Rationale: The change closes the course to undergraduate students, who should instead take PHYS 493 for research credit, which is capped at 6 credit hours. Students have previously used PHYS 501 as a means to bypass this cap. Impact on other units: none. Financial impact: none.

PHYS 593 Independent Study (1-15)
Registration Restriction(s): Minimum student level – graduate.

Rationale: The change closes the course to undergraduate students, who should instead take PHYS 493 for research credit, which is capped at 6 credit hours. Students have previously used PHYS 593 as a means to bypass this cap. Impact on other units: none. Financial impact: none.

DEPARTMENT OF POLITICAL SCIENCE

(POLS) Political Science

ADD

POLS 687 International Political Economy (3) Theoretical explanations for the relationship between the international economy, and, both international and domestic politics. Provide the analytical tools necessary to evaluate issues related to that relationship.
Registration Restriction(s): Minimum student level – graduate.

Rationale: Adding a course that is part of the core International Relations graduate curriculum - the field being divided between International Conflict and International Political Economy. This course has to date been taught every other year as a special topics course, but students need to see it as representing one half of the field of International Relations. Impact on other units: none. Financial impact: none.

REVISE TITLE

POLS 519 Qualitative and Multi-Method Research (3)

Formerly: Non-Statistical Approaches to Political Science Research (3)

Rationale: Change of course title is necessary to accurately reflect course content. Impact on other units: none. Financial impact: none.

DEPARTMENT OF PSYCHOLOGY

(PSYC) Psychology

ADD

PSYC 679 Social Justice Practicum I (3) This is part one of a two-course sequence designed to provide the knowledge, skills, and attitudes necessary to serve as social justice advocates in varied professional roles. Students will conduct a needs assessment, develop an intervention to address identified needs on a systemic level, and evaluate the effectiveness of the intervention.
Comment: Admission to the doctoral concentration in counseling psychology required.
Registration Restriction(s): Minimum student level - graduate.

Rationale: This course has been offered for several years as a PSYC 674 practicum course and the instructors and department wish to add the course formally to the graduate psychology curriculum. This course is essential to our accredited counseling psychology program's training model. Impact on other units: none. Financial impact: none.

PSYC 680 Social Justice Practicum II (3) The second part of a two-course sequence designed to provide the knowledge, skills, and attitudes necessary to serve as social justice advocates in varied professional roles. In this course, students will conduct a needs assessment, develop an intervention to address identified needs on a systemic level, evaluate the effectiveness of the intervention, and work to empower individuals from the agency/community as they continue in their efforts to promote social justice.
(RE)Prerequisite: PSYC 679.
Comment: Admission to the doctoral concentration in counseling psychology required.
Registration Restriction(s): Minimum student level - graduate.

Rationale: This course has been offered for several years as a PSYC 674 practicum course and the instructors and department wish to add the course formally to the graduate psychology curriculum. This course is essential to our accredited counseling psychology program's training model. Impact on other units: none. Financial impact: none.

REVISE REPEATABILITY

PSYC 676 Field Placement in Counseling Psychology (1-6)
Repeatability: May be repeated. Maximum 36 hours.

Formerly: Field Placement in Counseling Psychology (1-6)
Repeatability: May be repeated. Maximum 24 hours.

Rationale: We would like to increase the current limit on repeatability which is a maximum of 24 hours. We would like to increase this limit to 36 hours. Students enroll in this course repeatedly when they are completing clinical field placements in the community and typically register for 3 credit hours when at a placement full-time. Students must be enrolled in this course in order for their liability insurance to cover them on-site. We have had some instances where students need to enroll for more than 24 hours total if they remain in the program for 5 years. Impact on other units: none. Financial impact: none.

DEPARTMENT OF RELIGIOUS STUDIES

(REST) Religious Studies

ADD

REST 510 Method and Theory in Religious Studies (3) Sources and methods used in the study of religion and religions. Analysis of approaches to the study of religion.

Rationale: We are adding a Graduate Certificate in Religious Studies and need to add this new course for the program. This course will be stacked with the existing REST 300 course, and grad students in the class will have additional assignments. Since we do not have our own graduate program in Religious Studies, we often offer stacked 400/500 or sometimes 300/500 level courses. Impact on other units: none. Financial impact: none.

REST 599 Advanced Seminar in the Study of Religion (3) Selected topics in the study of religion.
Repeatability: May be repeated. Maximum 6 hours.

Rationale: We are adding a Graduate Certificate in Religious Studies and need to add this new course for the program. This course will be stacked with the existing REST 499 course, and grad students in the class will have additional assignments. Since we do not have our own graduate program in Religious Studies, we often offer stacked 400/500 or sometimes 300/500 level courses. Impact on other units: none. Financial impact: none.

DEPARTMENT OF SOCIOLOGY

(SOCI) Sociology

ADD NEW 400-LEVEL COURSES FOR GRADUATE CREDIT

SOCI 401 Special Topics in Criminology (3) Variable topics in criminology. Scope of subject matter determined by students and instructor with consent of department.
Repeatability: May be repeated. Maximum 6 hours.

Rationale: New course reflects expertise in the Department and adds additional options to provide topics courses for students in our criminology concentration. Impact on other units: none. Financial Impact: none.

SOCI 411 Police and Society (3) Will explore the role and function of police in society, including an emphasis on history, politics, economy, and culture. Special emphasis placed on the relation between police power and the making of race, class, and gender dynamics and inequalities.

Rationale: New course reflects expertise in the Department and adds additional options to criminology concentration requirements. Impact on other units: none. Financial Impact: none.

SOCI 415 Visual Criminology (3) Will explore 1) the power and spectacle of crime and punishment and how its representation shapes our popular knowledge of and policy in criminal justice; 2) the key dimensions of visual criminology, its key theories, tools, and methods; and 3) the usefulness of digital research and advocacy skills for careers in media and social justice.

Rationale: New course reflects expertise in the Department and adds additional options to criminology concentration requirements. Impact on other units: none. Financial Impact: None.

ADD

SOCI 628 Supplementary Readings in Major Area (3) Individual guidance and preparation for Major Area Paper.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 12 hours.
Registration Restriction(s): Minimum student level – graduate.
Registration Permission: Consent of Department.

Rationale: Course is needed to accommodate preparation for new Major Area Paper, which replaced all other PhD qualifying (comprehensive) exams in Sociology.

SOCI 641 Advanced Research Methods (3)
Repeatability: May be repeated. Maximum 9 hours.
Registration Restriction(s): Minimum student level – graduate.
Registration Permission: Consent of Department.

Rationale: Course teaches specific methods and methodologies in sociology, based on expertise of faculty. Impact on other units: none. Financial impact: none.

DROP

SOCI 629 Supplementary Readings in Sociological Theory (3)

SOCI 639 Supplementary Readings in Methodology (3)

Rationale: Course is no longer needed. Department has done away with PhD qualifying (comprehensive) examination in Sociological Theory; doctoral students registered for these courses to prepare for that examination. Impact on other units: none. Financial Impact: none.

REVISE TITLE ON 400-LEVEL COURSE

SOCI 449 Youth Justice (3)

Formerly:Juvenile Delinquency and Social Policy (3)

Rationale: Change reflects more contemporary shifts in the study of youth justice where there has been a move away from the labeling language of "juvenile delinquent" in criminology. Impact on other units: none. Financial Impact: none.

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

SOCI 455 Law and Society (3)
(RE) Prerequisites: ENGL 102, ENGL 132, ENGL 290 or ENGL 298.

Rationale: Change in prerequisites is required for course in order to meet new VolCore Written Communication (WC) designation. Impact on other units: none. Financial impact: none.

REVISE TITLE AND DESCRIPTION

SOCI 654 Theories and History of the Carceral State (3) Introduces students to the historical, theoretical and empirical literature on the rise of the carceral state and clarifies the extent to which punishment and social control logics have permeated state governing institutions beyond the formal criminal justice system.

Formerly: Criminal Justice Theories (3)
Critical overview of theories of criminal justice policy and theories of crime control behaviors by institutions and individuals (criminal justice agents).

Rationale: The course, Sociology 654, Criminal Justice Theories, has not been taught in more than a decade. In that time, it has become out of date. Today's critical analysts of "criminal justice" recognize the far reach of control logics and their imbrication with larger cultural and material structures, including neoliberalism and systemic racism. Moreover, the concept of "criminal justice" localizes control so as to obscure the broad patterns. Three (3) of our criminology faculty have substantial expertise in this, the "new" area. Impact on other units: none. Financial impact: none.

DEPARTMENT OF THEATRE

(THEA) Theatre

REVISE TO ADD REPEATABILITY

THEA 558 Design Presentation Skills for the Theatre (3)
Repeatability: May be repeated. Maximum 12 hours.

Rationale: This is a projects-based class. Based on student needs, this class could focus on a variety of topics to support graduate study. Repeating will allow students to take in more than once and focus on other areas of their work product and process. Impact on other units: none. Financial impact: none.

II PROGRAM CHANGES

INTERDISCIPLINARY PROGRAMS

REVISE LINGUISTICS GRADUATE CERTIFICATE

In the 2021-2022 Graduate Catalog, revise the Linguistics Certificate as follows:

1) Under the Required Courses heading, revise the bulleted list of courses as shown below.

- ASL 435
- EDDE 415, 416
- ENGL 508, ENGL 509, ENGL 575, ENGL 680
- FREN 421
- GERM 510, GERM 541, GERM 631, GERM 632
- LING 400, LING 426, LING 435, LING 471, LING 472, LING 474, LING 476, LING 477, LING 485, LING 490
- PSYC 400
- SPAN 430, SPAN 461, SPAN 531
- STAT 531
- WLEL 466, 489
- Other courses may, where appropriate, be substituted for the courses listed above with the permission of the Chair of the Linguistics Program.

Formerly:
ENGL 508, ENGL 509, ENGL 575, ENGL 680
FREN 421, FREN 422
GERM 510, GERM 541, GERM 631, GERM 632
LING 400, LING 426, LING 435, LING 471, LING 472, LING 474, LING 476, LING 477, LING 485, LING 490
PSYC 400
SPAN 422, SPAN 430, SPAN 461, SPAN 531
STAT 531
Other courses may, where appropriate, be substituted for the courses listed above with the permission of the Chair of the Linguistics Program.

Rationale: Removal of FREN 422 and SPAN 422: these are foreign language and not linguistics courses. Added classes are all linguistics classes that are appropriate to broaden students' study of linguistics. These additions and removals were already made to the UG catalog and should have also been made in the Graduate Catalog, but we neglected to check the required box. Impact on other units: none. Financial Impact: none.

DEPARTMENT OF CHEMISTRY

REVISE ADMISSION REQUIREMENTS – CHEMISTRY MAJOR, MS

In the 2021-2022 Graduate Catalog, under the Admissions Standards heading, revise the paragraph as follows.

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

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

REVISE ADMISSION REQUIREMENTS – CHEMISTRY MAJOR, PHD

In the 2021-2022 Graduate Catalog, under the Admissions Standards heading, revise the paragraph as follows.

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

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

Rationale: There is growing concern throughout the academic community with regard to the merit of the GRE as a metric for admission to graduate programs [please see these articles in C&EN (2019), Science (2019), and Science (2017)]. Studies involving the biomedical programs at UNC and Vanderbilt concluded that no significant correlation existed between student GRE scores and scholarly productivity (e.g. number of first-author publications, successful passing of qualifying exams, time to degree completion). A multi-university study recently found that GRE scores do not reliably predict graduate success in STEM graduate programs and requiring GRE scores could inadvertently discourage applicant diversity. While we are unaware of studies focused entirely on chemistry programs, a recent report involving physics programs (specifically, departments that award more than 10 Ph.D. degrees annually) found that GRE scores could not reliably predict success. Overall, the available of data strongly suggest that requiring GRE scores for admission serves little purpose. Moreover, there is a growing concern that requiring the GRE limits applications from underrepresented groups. Given these considerations, the faculty voted to no longer require the GRE. Impact on other units: none. Financial impact: none.

DEPARTMENT OF ENGLISH

+ ADD CERTIFICATE

Digital Humanities

In the 2021-22 Graduate Catalog, adding heading, text, and requirements for new certificate.

Digital Humanities Graduate Certificate
The Graduate Certificate in Digital Humanities (DH) offers graduate students the opportunity to study from an interdisciplinary perspective and add a technological component to their research. This interdisciplinary curriculum at the intersection of digital technologies and the humanities trains students in the theory and practice of Digital Humanities, including (but not limited to) digital archives, text mining and visualization, and image analysis. In an increasingly straiten job market, the DH program will allow students to gain a wide variety of methodological skills and perspectives that will improve their chances for the academic and non-academic employment.

Campus Code
Knoxville Campus

Graduate Certificate Type
Add-On

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

Students are generally admitted to the program prior to completing six graduate credit hours toward the certificate but may be admitted after having completed up to nine graduate credit hours, excepting requirement III, below. Students will select their graduate coursework in conjunction with the DH program chair, who must approve each student's curriculum.

Academic Standards
Students must maintain a minimum 3.00 graduate grade point average throughout the program.

Credit Hours Required
12 graduate credit hours

The DH Graduate Certificate consists of a minimum of 12 graduate credit hours in interdisciplinary coursework outlined as follows.

- A maximum of nine graduate credit hours can overlap between the DH certificate and the student's home discipline, as approved by the DH program chair.
- At least six credit hours toward the DH Graduate Certificate must be taken at the 500-level or above.
- Students should work with individual instructors to define course projects as Digital Humanities projects that can be showcased in their Certificate Portfolio. As part of the non-course requirement, students will assemble and submit a portfolio in ENGL 593 (or the equivalent) for evaluation to a faculty review committee consisting of the DH program chair and one faculty member assigned by the program chair. The portfolio will include the student's final Digital Humanities Project, which will serve as the centerpiece for the portfolio, and will also showcase work in each class they have taken toward the DH Certificate.

Required Courses

ENGL 590 (3 credit hours)

Six (6) credit hours chosen from:

- CLAS 562
- CLAS 436
- CLAS 444
- CNST / WGS 469
- ENGL 412
- ENGL 462
- ENGL 466
- ENGL 494
- ENGL 508
- ENGL 531
- ENGL 594
- ENGL 610
- ENGL 640
- ENGL 680
- GERM 556
- GERM / CNST 423
- HIST 530
- HIST 630
- HIST 642
- Special topics courses as approved by the DH program chair:
  - ENGL 470
  - ENGL 688
  - ENGL / CNST 489
  - HIST 541
  - MRST 510
- ENGL 593 or an additional 3 graduate credit hour course – either an independent study or a non-designated DH class – for which students will complete an independent DH project and compile their Certificate Portfolio, intended to be a tool for job-seeking purposes.

Note: courses that may fulfill a DH requirement have been submitted by faculty and include the above. Due to possible changes in course staffing and variable topics, it is recommended that students confirm program approval of courses in advance with the DH chair.

Only 400-level courses listed in the Graduate Catalog may be taken for graduate credit and be applied toward the certificate.

Non-Course Requirements

To receive the certificate, students must

1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and
2) through MyUTK, apply to graduate from the certificate program.

Rationale: The Digital Humanities are located at the intersection of digital technologies and the humanities, fostering collaboration that is interdisciplinary and methodologically diverse. An increasing number of UT's peer or aspirational peer universities offer DH graduate certificate programs, including Texas A&M, U of Colorado - Boulder, U Nebraska - Lincoln, and U Virginia. By adding this program, UT will signal its research competitiveness and expertise in digital approaches to the humanities. It offers the possibility of connecting humanities graduate students and faculty to the STEM fields at UT and to ORNL through course offerings and collaborative research projects, such as Humanities Center research seminars about DH topics. This program will also help graduate students gain interdisciplinary and technological expertise that will assist in academic and non-academic job searches by offering additional outlets and methods for publication as well as broader job categories for application. Impact on other units: none.

Financial impact: None initially, but if the program location shifts to the UT Humanities Center, the program director will receive a service effort (12.5%) in the faculty member's home department to be placed at the UTHC. Should the certificate program attract a lot of students, the director may receive a service release and, depending on student enrollment, either UTHC compensation or a course release from the department. **CIP Code: 30.5202**

DEPARTMENT OF MATHEMATICS

REVISE REQUIREMENTS - MATHEMATICS MAJOR, MMATH

In the 2021-2022 Graduate Catalog, revise as shown below.

1. Under the Admissions Standards/Procedures heading, revise last bullet as follows:

    - Applicants must have successfully completed one year of calculus (141-142 or equivalent) and a mathematics course beyond the calculus sequence.

Formerly:
Applicants must have successfully completed one year of calculus (141-142 or equivalent) and a course in matrix algebra (251 or equivalent).

2. Under the Required Courses heading, remove the current list of courses and paragraph and replace with the following.

Required Courses

- MATH 503 (Discrete Math for Teachers) or MATH 504 (Discrete Math for Teachers)
- MATH 505 (Analysis for Teachers)
- MATH 506 (Algebra for Teachers)
- MATH 507 (Probability for Teachers) or MATH 508 (Statistics for Teachers)
- MATH 509 (Seminar for Teachers)
- MATH 510 (Math Modeling for Teachers)
- MATH 530 (Differential Equations for Teachers) or MATH 550 (Linear Algebra for Teachers)
- Any course in the MM program can serve as a source of ideas for portfolio projects. Students can also elect to take MATH 400 or MATH 460. At most, 6 credit hours may be in areas outside the Department of Mathematics [e.g., Educational Administration (EDAM), Educational Psychology (EDPY), Instructional Technology (IT), Theory and Practice in Teacher Education (TPTE)] selected in consultation with the advisor.

Formerly:
MATH 400
MATH 460
MATH 504
MATH 505
MATH 506
MATH 507, and
MATH 509 (6 credit hours)
At most, 6 credit hours may be in areas outside the Department of Mathematics [e.g., Educational Administration (EDAM), Educational Psychology (EDPY), Instructional Technology (IT), Theory and Practice in Teacher Education (TPTE)] selected in consultation with the advisor.

3. Under the Non-Course Requirements heading, delete current bullet and replace as shown.

    - Pass a final portfolio examination upon completion of all course work.

Formerly: Pass a final examination upon completion of all course work.

Rationale: For admission requirements, MM students come from a range of backgrounds and institutions, and these don't always entail a matrix algebra course. The intention of the matrix algebra course requirement was not for the content of matrix algebra but for students to have had some exposure to more conceptual mathematics beyond what is considered an introductory sequence (I. e. the calculus sequence). The MMath program was traditionally a face-to-face program until the 2010s. Because of recent requirements regarding the allowed courses for distance education versus traditional face to face students, MM students could now only access MATH 400, 460, 504, 505, 506, 507, and 509 for their degree program, which is 6 credits short of the 30 graduate credit hours. In addition, other 500 level math courses are typically not appropriate for the MM students and they target potential research students instead of math educators. To ensure that MM students have sufficient choices of math courses that are designed for teachers, the Department of Mathematics launched an initiative in summer of 2019 to revamp existing courses and to propose new courses. In additions with changing demographics of MM applicants, more students have taken version of MATH 400 and 460 in their undergraduate degrees so these classes should not be part of the required MM coursework. Furthermore, MATH 509 is the Seminar for Teachers course and serves as the topics course for the MM program. With the new course offerings, students will have more specific choices that do not require them to take MATH 509 twice to complete their degrees. Lastly, the format of the MM final examination has changed, and the inclusion of the portfolio clarifies what the exam entails. Impact on other units: None. Financial impact: none.

❖ **DROP CONCENTRATION – MATHEMATICS MAJOR, MS**

APPLIED MATHEMATICS

In the 2021-2022 Graduate Catalog, drop the Applied Mathematics concentration and all program text associated with the Applied Mathematics concentration.

Rationale: We are removing the Applied Mathematics Concentration due to lack of interest by students during the last several years. Impact on other units: none. Financial impact: none.

REVISE PROJECT OPTION - MATHEMATICS MAJOR, MS-NO CONCENTRATION

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

For the Project Option, under Non-Course Requirements heading, revise the bullet as shown below:

- A written final project and oral presentation to committee are required.

Formerly: A written final examination and presentation of project

Rationale: Removing examination portion of MS project option. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS - MATHEMATICS MAJOR, PHD

In the 2021-2022 Graduate Catalog, revise as shown below.

1. Under the Required Courses heading, under the second sub-bullet, revise the last bullet as shown below:

    - Pass two written examinations each based on material from a course sequence in the following list:
        - A student must pass one examination by the middle of their third year and both examinations by the middle of their fourth year.

Formerly:
Pass two written examinations each based on material from a course sequence in the following list:
A student must pass one examination by the middle of his/her third year and both examinations by the middle of his/her fourth year. A student may not take any examinations after four failures.

2. Under the Required Courses heading, under the first bullet, replace the fifth sub-bullet as shown below:

    - In addition to the two year-long sequences chosen for the preliminary examinations, a student must take the following:
        1. A 600-level sequence outside the student's area of specialization.
        2. Six additional one-semester 500-600 level mathematics courses which must include
            - A one year-long sequence in a third area (i.e., an area different from those represented in the two preliminary examinations); and
            - At least one course in a fourth area (this fourth area must be distinct from the two preliminary exam areas but may coincide with the area of the sequence used to satisfy (1)).
            - Students must earn a grade of B- (B minus) or better in each of these six courses.

Formerly:
Pass a one-year, 600-level sequence in mathematics outside the student's area of specialization. The sequence selected to fulfill this requirement must be approved by the department head and the student's doctoral committee.
In addition to the two year-long sequences chosen for the written examinations (second bullet), a student must take six other one-semester 500-600 level courses. At least five of these courses must be chosen from the following list grouped by examination area – Algebra (MATH 551-MATH 552, MATH 555-MATH 556),
Analysis (MATH 545-MATH 546, MATH 545-MATH 547),
Computational and Applied Mathematics (MATH 571-MATH 572, MATH 574, MATH 577, MATH 578),
Differential Equations (MATH 513, MATH 515-MATH 516, MATH 531-MATH 532, MATH 535-MATH 536, MATH 537, MATH 581-MATH 582, MATH 585)
Stochastics (MATH 521-MATH 522, MATH 523-MATH 524, MATH 525-MATH 526), and
Topology-Geometry (MATH 561-MATH 562, MATH 567-MATH 568)

The sixth course may be either a 500-level course listed above, or a 600-level mathematics course not used to satisfy the fifth bullet.
These six courses must contain a year-long sequence in an area different from the two written examinations and the remaining courses must contain a course representing a fourth area.
A grade of B or better is required in each of the six courses.

Rationale: The time requirement for passing these exams is sufficient, and the rule about the number of failures is not needed. This change gives more flexibility in the choices of the coursework for the breadth requirement. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS - MATHEMATICS MAJOR, PHD - MATHEMATICAL BIOLOGY CONCENTRATION

In the 2021-2022 Graduate Catalog, revise as shown below.

1. Under the Required Courses heading, under the first bullet, revise the second sub-bullet as follows:

    - A student must pass written examinations on mathematical ecology (MATH 581-MATH 582) and one of the following year-long sequences –
        - Analysis (MATH 545-MATH 546),
        - Computational and Applied Mathematics (MATH 571-MATH 572),
        - Differential Equations (MATH 535-MATH 536),
        - Stochastics (MATH 523-MATH 524),
        - A student must pass one examination by the middle of their third year and both examinations by the middle of their fourth year.

Formerly:
A student must pass written examinations on mathematical ecology (MATH 581-MATH 582) and one of the following year-long sequences –
Analysis (MATH 545-MATH 546),
Computational and Applied Mathematics (MATH 571-MATH 572),
Differential Equations (MATH 535-MATH 536),
Stochastics (MATH 523-MATH 524), and
Topology-Geometry (MATH 561-MATH 562)
A student must pass one examination by the middle of his/her third year and both examinations by the middle of his/her fourth year. A student cannot take any examinations after four failures.

2. Under the Required Courses heading, under the first bullet, revise the sixth sub-bullet as follows:

    - In addition to the two year-long sequences chosen for the preliminary examinations, a student must take the following:
        1) A 600 level sequence outside the student's area of specialization;
        2) Six additional one-semester 500-600 level courses. Two of those courses may be from the area of biology (courses from the Department of Ecology and Evolutionary Biology, College of Veterinary Medicine or Public Health) approved by their advisor.
            - These six courses must include
                a. A one year-long mathematics sequence in a third area (i.e. an area different from those represented in the two preliminary examinations); and
                b. At least one mathematics course in a fourth area (this fourth area must be distinct from the two preliminary exam areas, but may coincide with the area of the sequence used to satisfy (1)).
            - Students must earn a grade of B- (B minus) or better in each of these six courses.

Formerly:
In addition to the two year-long sequences chosen for the written examinations (second bullet), a student must take six other one-semester 500-600 level courses.
At least five of these courses must be chosen from the following list grouped by examination area –
Analysis (MATH 545-MATH 546, MATH 545-MATH 547),
Computational and Applied Mathematics (MATH 571-MATH 572, MATH 574, MATH 577, MATH 578),
Differential Equations (MATH 513, MATH 515-MATH 516, MATH 531-MATH 532, MATH 535-MATH 536, MATH 537, MATH 581-MATH 582, MATH 585)
Stochastics (MATH 521-MATH 522, MATH 523-MATH 524, MATH 525-MATH 526), and
Mathematical Ecology/Evolution (MATH 583, EEB 509, EEB 511)
The sixth course may be either a 500-level course listed above or a 600-level mathematics course not used to satisfy the fifth bullet.
These six courses must contain a year-long sequence in an area different from the two written examinations and at least two areas different from the two written examinations.
A grade of B or better is required in each of the six courses.
Rationale: The time requirement for passing these exams is sufficient, and the rule about the number of failures is not needed. This also gives more flexibility in the choices of the coursework for the breadth requirement. Impact on other units: none. Financial impact: none.

SCHOOL OF MUSIC

✚ **DROP CERTIFICATE**

Artist Certificate in Music

In the 2021-2022 Graduate Catalog, drop the Artist Certificate in Music and all program text associated with the dropped certificate program.

Rationale: The Artist Certificate in Music Certificate is being dropped and two specific Artist Certificates in keyboard and strings are being added to take the place. This will enable students to complete artist certificates with each of these two concentrations, ie. two different certificates, one in keyboard, one in strings. Impact on other units: none. Financial Impact: none.

✚ **ADD CERTIFICATE**

Artist Certificate in Keyboard Performance

In the 2021-22 Graduate Catalog, adding heading, text, and requirements for new certificate.

Artist Certificate in Keyboard Performance
The Artist Certificate in Keyboard Performance requires 8 graduate credit hours of applied study, 4 graduate credit hours of music ensemble, 6 graduate credit hours of area literature, 2 graduate credit hours of music electives and a graduate recital (2 credit hours).

Ensemble participation is required during each semester of residence. Classes chosen to fulfill the music electives requirements should be lecture courses to be determined with the program adviser.

Campus Code
Knoxville Campus

Graduate Certificate Type
Stand-alone

Admissions Standards/Procedures
Applicants to this graduate certificate must hold a minimum of the bachelor's degree or equivalency and follow the procedures and regulations for applying for admission to graduate study at the University of Tennessee, Knoxville, and the Graduate Division of the School of Music. Required credentials for admission to the School of Music include:

- A completed online application submitted to the Graduate Admissions Office
- University application fee
- Official transcripts of all post-secondary studies
- Two letters of recommendation, and a repertoire list
- Applicants whose native language is not English are required to take and pass the Test of English as a Foreign Language (TOFEL) or the International English Language Testing System (IELTS). Passing marks are 550, 80, and 6.5 for paper-based, internet-based (IBT) TOEFL, and IELTS respectively.
- In addition to applying to the University of Tennessee, Knoxville Graduate School, applicants must apply to the School of Music through the Accepted (https://app.getacceptd.com/utkmusic) portal on the School of Music website (http://www.music.utk.edu/).

Final admission to the certificate program is granted following successful completion of a thirty-minute admission audition. The audition repertoire should include selections demonstrating the student's ability to perform in various musical styles. If distance to the audition is a hardship, applicants may submit a thirty-minute videotape/DVD (public performance preferred). The student must also present a live audition before a designated faculty committee during the first semester of residence.

Once accepted, all students are required to take the diagnostic examinations in musicology, area literature, music theory, and ear training before registering for courses. The examinations are given on the first day of registration each semester, beginning at 9:00 a.m. and concluding at approximately 4:00 p.m. Each entering student should notify the graduate administrative assistant to indicate the semester that s/he intends to enter and take the examinations.

Academic Standards
Cumulative graduate GPA of 3.00 or better

Credit Hours Required
23 graduate credit hours

Required Courses

- Private Instruction: 8 credit hours
- [1]Music Ensemble: 4 credit hours
- Area Literature: 6 credit hours

- [2]Music Electives: 3 credit hours
- Graduate Recitals: 2 credit hours

[1] Ensemble Participation is required during each semester of residence.
[2] Classes chosen to fulfill the music electives requirements may include a maximum of 3 graduate credit hours of MUEN or MUPF courses.

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: We are dropping the Artist Certificate in Music and replacing it with two specific performances - Artist Certificate in Keyboard Performance and Artist Certificate in String Performance. This will enable students to complete a keyboard Artist Certificate as well as a strings Artist Certificate. Impact on other units: none. Financial Impact: none. **CIP Code: 30.50.0901.**

+ ADD CERTIFICATE

Artist Certificate in String Performance

In the 2021-22 Graduate Catalog, adding heading, text, and requirements for new certificate.

Artist Certificate in String Performance
The Artist Certificate in String Performance requires 8 graduate credit hours of applied study, 4 graduate credit hours of orchestra, 2 graduate credit hours of chamber music ensemble, 3 graduate credit hours of area literature, 5 graduate credit hours of music electives and a graduate recital (2 hours).

Orchestra participation is required during each semester of residence. Classes chosen to fulfill the music electives requirements should be lecture courses to be determined with the program adviser.

Campus Code
Knoxville Campus

Graduate Certificate Type
Stand-alone

Admissions Standards/Procedures
Applicants to this graduate certificate must hold a minimum of the bachelor's degree or equivalency and follow the procedures and regulations for applying for admission to graduate study at the University of Tennessee, Knoxville, and the Graduate Division of the School of Music. Required credentials for admission to the School of Music include:

- A completed online application submitted to the Graduate Admissions Office
- University application fee
- Official transcripts of all post-secondary studies
- Two letters of recommendation, and a repertoire list
- Applicants whose native language is not English are required to take and pass the Test of English as a Foreign Language (TOFEL) or the International English Language Testing System (IELTS). Passing marks are 550, 80, and 6.5 for paper-based, internet-based (IBT) TOEFL, and IELTS respectively.
- In addition to applying to the University of Tennessee, Knoxville Graduate School, applicants must apply to the School of Music through the Accepted (https://app.getacceptd.com/utkmusic) portal on the School of Music website (http://www.music.utk.edu/).

Final admission to the certificate program is granted following successful completion of a thirty-minute admission audition. The audition repertoire should include selections demonstrating the student's ability to perform in various musical styles. If distance to the audition is a hardship, applicants may submit a thirty-minute videotape/DVD (public performance preferred). The student must also present a live audition before a designated faculty committee during the first semester of residence.

Once accepted, all students are required to take the diagnostic examinations in musicology, area literature, music theory, and ear training before registering for courses. The examinations are given on the first day of registration each semester, beginning at 9:00 a.m. and concluding at approximately 4:00 p.m. Each entering student should notify the graduate administrative assistant to indicate the semester that s/he intends to enter and take the examinations.

Academic Standards
Cumulative graduate GPA of 3.00 or better

Credit Hours Required
23 graduate credit hours

Required Courses

- Applied Study: 8 credit hours
- [1]Orchestra: 4 credit hours
- Chamber Music Ensemble: 2 credit hours
- Area Literature: 3 credit hours
- [2]Music Electives: 4 credit hours
- Graduate Recitals: 2 credit hours

[1] Orchestra participation is required during each semester of residence.
[2] Classes chosen to fulfill the music electives requirements should be lecture courses to be determined with the program adviser.

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: We are dropping the Artist Certificate in Music and replacing it with two specific music performances - Artist Certificate in Keyboard Performance and Artist Certificate in String Performance. This will enable students to complete a keyboard Artist Certificate as well as a strings Artist Certificate. Impact on other units: none. Financial Impact: none. **CIP Code: 30.50.0901.**

DEPARTMENT OF PSYCHOLOGY

REVISE ADMISSIONS REQUIREMENTS - PSYCHOLOGY MAJOR, MA

In the 2021-2022 Graduate Catalog, under the Admissions Standards/Procedures heading, revise the third bullet as follows:

- Scores from the Graduate Record Examination (general and/or Psychology) may be submitted, but are not required.

Formerly: All students must submit scores from the Graduate Record Examination (general)

REVISE ADMISSIONS REQUIREMENTS - PSYCHOLOGY MAJOR, PHD

In the 2021-2022 Graduate Catalog, under the Admissions Standards/Procedures heading, revise bullet as follows:

- All students must submit an online application to the Graduate Admissions Office. Scores from the Graduate Record Examination (general and/or Psychology) may be submitted, but are not required.

Formerly:
All students must submit an online application to the Graduate Admissions Office and scores from the Graduate Record Examination (general).

Rationale: Rationale: In response to data on the predictive validity of GRE scores and evidence they may foster inequities in admission, more and more graduate programs are dropping the requirement for standardized test scores, like the GRE. The pandemic also creates new challenges in completing the test for applicants. Impact on other units: none. Financial impact: none.

DEPARTMENT OF RELIGIOUS STUDIES

+ ADD CERTIFICATE

Religious Studies

In the 2021-22 Graduate Catalog, add heading, text and requirements for new certificate.

Religious Studies Graduate Certificate
The add-on Graduate Certificate in Religious Studies offers graduate students the opportunity to study religion from an academic perspective, and prepares students to be knowledgeable global citizens. The Department of Religious Studies at UT promotes the critical and comparative study of religion. Drawing upon a range of perspectives – historical, anthropological, textual, and theoretical – the Department highlights both the variety and complexity of religious beliefs, practices, communities, and institutions. Our curriculum and faculty thus provide students with a wide variety of methodological skills and perspectives with which to conduct their own research, scholarship, and engagement.

Campus Code
Knoxville Campus

Graduate Certificate Type
Add-On

Admissions Standards/Procedures
Application to the Religious Studies graduate certificate must be made through the Office of Graduate Admissions and by submitting a letter of application and copies of relevant transcripts to the Religious Studies Department Head. The Religious Studies certificate is intended as additional study for graduate students who are concurrently enrolled in a master's or doctoral program in another discipline at the University of Tennessee. Students must be admitted to the certificate program prior to completing six graduate credit hours toward the certificate. Students will select their coursework in conjunction with a Religious Studies faculty advisor, who must approve each student's curriculum for the certificate.

Academic Standards
Students must maintain a minimum 3.00 graduate grade point average throughout the program.

Credit Hours Required
12 graduate credit hours

Required Courses
A maximum of 6 graduate credit hours can overlap between the Religious Studies certificate and the student's home discipline:

Successful completion of:
REST 510
REST 599

Successful completion of an additional 6 graduate credit hours in Religious Studies at the 400-level or above; these can include independent study (REST 593), or regularly scheduled 400- or 500-level seminars. Only the 400-level courses listed in the Graduate Catalog may be taken for graduate credit and be applied toward the certificate.

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: We know there is interest in learning about religion from an academic perspective among many graduate students around campus. We do not have our own graduate program in Religious Studies, so we would like to offer a graduate certificate. This will help graduate students in other humanities programs but could also be of interest to those enrolled in numerous other programs such as Nursing, Business, Social Work, Law, etc. who want to know more about Religion in the Workplace training, Religion and Nonprofit leadership, how to work in different cultures, etc. Impact on other units: none. Financial impact: none. **CIP Code: 38.0201**

DEPARTMENT OF SOCIOLOGY

REVISE REQUIREMENTS - SOCIOLOGY MAJOR, MA, CRIMINOLOGY CONCENTRATION

In the 2021-2022 Graduate Catalog, under the Required Courses heading (for the Criminology concentration), revise the list as follows

- SOCI 506 (2 credit hours)
- SOCI 511 (1 credit hour)
- SOCI 521 (3 credit hours)
- SOCI 531 (3 credit hours)
- SOCI 505 (3 credit hours)
- Select a course from SOCI 552, SOCI 652, SOCI 654, SOCI 655, SOCI 656, and SOCI 657 (3 credit hours).
- SOCI 500 (6 credit hours).

Formerly:
All MA students must complete the following requirements (6 courses for 15 credit hours):
SOCI 506 (2 credit hours)
SOCI 511 (1 credit hour)
SOCI 521 (3 credit hours)
SOCI 531 (3 credit hours)
SOCI 505 (3 credit hours)
Select a course from SOCI 652, SOCI 654, and SOCI 655 (3 credit hours).
SOCI 500 (6 credit hours).

Rationale: New and established faculty are teaching new courses which provide graduate-level grounding in the field. The change reflects new learning opportunities. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS - SOCIOLOGY MAJOR, PHD, CRIMINOLOGY CONCENTRATION

In the 2021-2022 Graduate Catalog, under the Required Courses heading (for the Criminology concentration), revise the list as follows:

Under the second bullet, revise the first and third sub bullet as follows:

- Three core courses: SOCI 621; SOCI 631; one from SOCI 632, SOCI 633, SOCI 636, SOCI 638, or SOCI 641 (9 credit hours)
- 6 credit hours from SOCI 552, SOCI 652, SOCI 654, SOCI 655, SOCI 656, and SOCI 657

Formerly:
Three core courses: SOCI 621; SOCI 631; one from SOCI 633, SOCI 636, SOCI 638, or SOCI 640 (9 credit hours)
6 credit hours from SOCI 652, SOCI 654, and SOCI 655

Rationale: New and established faculty are teaching new courses which provide graduate-level grounding in the field. The change reflects new learning opportunities and research methods courses. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS - SOCIOLOGY MAJOR, PHD, CRITICAL RACE AND ETHNIC STUDIES CONCENTRATION

In the 2021-2022 Graduate Catalog, under the Required Courses heading (for the Critical Race and Ethnic Studies concentration), revise the list as follows:

Under the second bullet, revise the first sub bullet as follows:

- Three core courses (9 credit hours): SOCI 621; SOCI 631; one from SOCI 632, 633, SOCI 636, SOCI 638, or SOCI 641.

Formerly:
Three core courses: SOCI 621; SOCI 631; one from SOCI 633, SOCI 636, SOCI 638, or SOCI 640 (9 credit hours).

Rationale: New and established faculty are teaching new research methods courses. The change reflects new learning opportunities. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS - SOCIOLOGY MAJOR, PHD, ENVIRONMENTAL SOCIOLOGY CONCENTRATION

In the 2021-2022 Graduate Catalog, under the Required Courses heading (for the Environmental Sociology concentration), revise the list as follows:

Under the second bullet, revise the first sub bullet as follows:

- Three core courses (9 credit hours): SOCI 621; SOCI 631; one from SOCI 632, 633, SOCI 636, SOCI 638, or SOCI 641.

Formerly: Three core courses: SOCI 621; SOCI 631; one from SOCI 633, SOCI 636, SOCI 638, or SOCI 640 (9 credit hours).

Rationale: New and established faculty are teaching new research methods courses. The change reflects new learning opportunities. Impact on other units: none. Financial impact: none.

REVISE REQUIREMENTS - SOCIOLOGY MAJOR, PHD, POLITICAL ECONOMY AND GLOBALIZATION CONCENTRATION

In the 2021-2022 Graduate Catalog, under the Required Courses heading (for the Political Economy and Globalization concentration), revise the list as follows:

Under the second bullet, revise the first sub bullet as follows:

- Three core courses (9 credit hours): SOCI 621; SOCI 631; one from SOCI 632, 633, SOCI 636, SOCI 638, or SOCI 641.

Formerly: Three core courses: SOCI 621; SOCI 631; one from SOCI 633, SOCI 636, SOCI 638, or SOCI 640 (9 credit hours).

Rationale: New and established faculty are teaching new research methods courses. The change reflects new learning opportunities. Impact on other units: none. Financial impact: none.

HASLAM COLLEGE OF BUSINESS

All changes effective Fall 2021

I. COURSE CHANGES

DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

(ACCT) Accounting

ADD

ACCT 510 Analytics and Disruptive Technologies II in Tax (3) Focuses on advanced data analysis methodologies and disruptive information technologies relevant to tax processes and tax decision-making. Cases, hands-on projects, and real-world activities are applied to enhance learning.
(RE) Prerequisite(s): ACCT 504.
Comment(s): Consent of instructor.
Registration Restriction(s): Master of Accountancy - accounting major.

Rationale: Tax professionals need to develop an increasing amount of technology skills for their jobs and to be competitive in the field. Financial impact: No impact. Current faculty already on staff are qualified to teach this course. No new hire is needed to staff this course.

ACCT 598 Special Topics in Tax (1-3) Seminar designed to study new and innovative areas of interest in tax.
Repeatability: May be repeated. Maximum 9 hours.
Registration Restriction(s): Master of Accountancy - accounting major.
Registration Permission: Consent of Instructor.

Rationale: We need the flexibility in our curriculum to present new and relevant content as it becomes more important in the tax field. Financial impact: No impact. Current faculty already on staff are qualified to teach this course. No new hire is needed to staff this course.

REVISE TO REMOVE (RE) PREREQUISITE AND ADD (RE)COREQUISITE

ACCT 532 Corporate Taxation and Reorganizations (3)
(RE) Corequisite(s): 531.

Formerly: (RE) Prerequisite(s): 531.

Rationale: This change supports the revised program course flow. Financial impact: No impact.

REVISE TO REMOVE (RE)COREQUISITE

ACCT 533 Taxation of Partnerships and S Corporations (3)

Formerly: (RE) Corequisite(s): 531.

Rationale: This change supports the revised program course flow. Financial impact: No impact. Current faculty already on staff are qualified to teach this course. No new hire is needed to staff this course. Corequisite is no longer needed.

(INMT) INFORMATION MANAGEMENT

ADD

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

Rationale: The flexibility is needed to present new and relevant content as it becomes more important in the information management field. Financial impact: No impact. Current faculty already on staff are qualified to teach this course. No new hire is needed to staff this course.

REVISE TITLE AND DESCRIPTION

INMT 540 IT Governance, IT Audit, and Corporate Applications (3) Focus is on IT Governance (including IT Management Frameworks, Enterprise Risks management and IT Risks and Controls), the IT Audit process and managing/auditing enterprise resource management systems.

Formerly: IT Audit, Governance, and Frameworks.
Focus is on IT Governance, IT Management Frameworks, IT Acquisition and Development, Project Management and other related concepts in preparation for work in IT Audit.

Rationale: The new title and description more accurately reflect the content of the course.

INMT 544 Corporate Databases and System Acquisition (3) Focus is on (1) the design, management and auditing of corporate databases (including SQL logic and skills development), and (2) managing and auditing Systems Acquisition (including introductions to Project Management, Project Governance, and IT Acquisition, Systems Development and Implementation).

Formerly: Corporate Applications
Focus is on large systems in corporate environments. Topics include audit of enterprise resource management systems and database systems.

Rationale: The new title and description more accurately reflect the content of the course.

DEPARTMENT OF BUSINESS ANALYTICS AND STATISTICS

(BZAN) Business Analytics

ADD

BZAN 536 Case Studies in Business Analytics (1.5) Presents data from real-world consulting engagements to give students practical experience solving problems. Topics include translating data to information, formulating models, and communicating results to diverse constituencies. Demonstrates the importance of developing solutions that address people, process, and technology.

Rationale: Update curriculum to increase business applications and maintain market relevance. Financial Impact: None. The new MSBA curriculum will require 2 hours less in total than the old and the fact that this will involve reallocation of current teaching resources, there will be no financial impact.

BZAN 537 Data Security and Ethics (1.5) An introduction to data security issues and the ethical use of analytics and data in business applications.
Registration Restriction(s): Master of Science – Business Analytics major, or Dual MS-MBA Program, Business Analytics major. Minimum student level – graduate.

Rationale: Update curriculum to add needed content in data ethics & security and maintain market relevance. Financial Impact: None. Because the new MSBA curriculum will require 2 hours less in total than the old and the fact that this will involve reallocation of current teaching resources, there will be no financial impact.

REVISE DECRIPTION; DROP CURRENT CROSS LIST COURSE AND ADD NEW CROSS-LISTED COURSE

BZAN 552 Multivariate and Data Mining Techniques (3)
Multivariate normal distribution, data visualization, handling missing data, dimension reduction techniques, supervised learning, clustering, outlier detection.
Cross-listed: (Same as Statistics 579.)

Formerly: Multivariate normal distribution, data visualization, handling missing data, dimension reduction techniques, supervised learning, clustering, outlier detection, including a team-based project and common data mining software.
Cross-listed: (Same as Statistics 576.)

Rationale: Dropping the current cross-list of STAT 576. Replacing cross-list with STAT 579. To update description to be consistent with new course content and change the cross-listing to be consistent with the STAT curriculum.

REVISE REGISTRATION RESTRICTION

BZAN 530 Business Skills Development (1.5)
Registration Restriction(s): Master of Science – Business Analytics major, Dual MS-MBA Program, Business Analytics major. Minimum student level – graduate.

Formerly: Registration Restriction(s): Master of Science - Business Analytics major. Minimum student level – graduate.

Rationale: Establish standard registration restrictions and prerequisites for registration across all core MSBA courses.

BZAN 531 Decision Optimization (3)
Registration Restriction(s): Master of Science – Business Analytics major, Dual MS-MBA Program, Business Analytics major; or Master of Business Administration – Business Analytics concentration, or permission of instructor. Minimum student level – graduate.

Formerly: *Registration Restriction(s): Master of Science – Business Analytics major; Dual MS-MBA Program, Business Analytics major; or Master of Business Administration – Business Analytics concentration. Minimum student level – graduate.*

Rationale: Establish standard registration restrictions and prerequisites for registration across all core MSBA courses and MSBA/MBA concentration courses.

BZAN 535 Statistical Methods for Business (3)
Registration Restriction(s): Master of Science – Business Analytics major, Dual MS-MBA Program, Business Analytics major or permission of instructor. Minimum student level – graduate.

Formerly: *Registration Restriction(s): Master of Science – Business Analytics major; Dual MS-MBA Program, Business Analytics major; or Master of Business Administration – Business Analytics concentration. Minimum student level – graduate.*

Rationale: Establish standard registration restrictions and prerequisites for registration across all core MSBA courses.

BZAN 540 Applied Regression Analysis for Business (3)
Registration Restriction(s): Master of Science – Business Analytics major, Dual MS-MBA Program, Business Analytics major or permission of instructor. Minimum student level – graduate.

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

Rationale: Establish standard registration restrictions and prerequisites for registration across all core MSBA courses.

BZAN 550 Business Analytics Experience (3)
Registration Restriction(s): Master of Science – Business Analytics major, Dual MS-MBA Program, Business Analytics major or permission of instructor. Minimum student level – graduate.

Formerly: *Registration Restriction(s): Master of Science – Business Analytics major, or Dual MS-MBA Program, Business Analytics major. Minimum student level – graduate.*

Rationale: Establish standard registration restrictions and prerequisites for registration across all core MSBA courses.

REVISE TO REMOVE (RE) PREREQUSITES AND COMMENTS; AND REVISE REGISTRATION RESTRICTIONS

BZAN 542 Data Mining Methods for Business Applications (3)
Registration Restriction(s): Master of Science – Business Analytics major, Dual MS-MBA Program, Business Analytics major or permission of instructor. Minimum student level – graduate.

Formerly: *(RE) Prerequisite(s): 535.*
Comment(s): Or permission of instructor.
Registration Restriction(s): Master of Science – Business Analytics major or Dual MS-MBA Program, Business Analytics major or PhD, Management Science major. Minimum student level – graduate.

Rationale: Establish standard registration restrictions and prerequisites for registration across all core MSBA courses.

REVISE TITLE, HOURS, DESCRIPTION, REGISTRATION RESTRICTIONS

BZAN 533 Probability and Statistics for Business Analytics (3) Introduction to the application of probability and statistics models in Business Analytics. Extensive use of statistical programming languages.
Registration Restriction(s): Master of Science – Business Analytics major, Dual MS-MBA Program, Business Analytics major or permission of instructor. Minimum student level – graduate.

Formerly: Quantitative Methods for Business Analytics (**5 Credit Hours**) Probability, conditional probability and Bayes' rules, univariate and multivariate probability models and random variables, review of basic calculus, maximum likelihood estimation and inference including confidence intervals and hypothesis testing. Common sampling distributions: t, Chi-square, and F. Introduction to Monte Carlo simulation and bootstrapping. Mathematical methods for statistical modeling using matrix algebra. Extensive use of statistical programming languages.

Registration Restriction(s): Master of Science – Business Analytics major, or Dual MS-MBA Program, Business Analytics major. Minimum student level – graduate.

Rationale: The content has been revised to reflect market trends and the course no longer requires 5 credit hours to be delivered. Establish standard registration restrictions and prerequisites for registration across all core MSBA courses. Financial Impact: None for the students, department, college or university. Students will continue taking a full-time graduate-level course load, so the reduction of credit hours will not create a financial impact.

REVISE TITLE AND DESCRIPTION; REMOVE (RE) PREREQUSITES; ADD REGISTRATION RESTRICTIONS

BZAN 545 Data Engineering for Business Applications (3) Fundamentals of data engineering pipelines with particular focus on extracting, transforming, combining, validating and loading data for further analysis and visualization. Topics include, but are not limited to, navigating the Linux operating system, version control and collaboration, SQL and NoSQL databases, distributed computing, and high-level programming.
Registration Restriction(s): Master of Science – Business Analytics major, Dual MS-MBA Program, Business Analytics major or permission of instructor. Minimum student level – graduate.

Formerly: Database and Big Data Technologies
Focuses on current technologies used to manage and implement analytics in big data environments. After a basic introduction to the Linux operating system, students will be exposed to a range of important database and data warehouse technologies and learn to interact with them using scripting languages such as python, R, and SQL. Topics will reflect currently important technologies, and may include an extensive discussion of relational and non-relational databases including graph, columnar, and document databases and data warehouse appliances. In addition, the map-reduce paradigm and distributed computing platforms such as Apache Hadoop, and Spark will be introduced. Students will also be exposed to implementations of the technology in cloud computing environments.
(RE) Prerequisite(s): 535.

Rationale: Big data is a subset of data engineering; therefore, we are expanding the educational scope of the class to ensure content remains up-to-date and relevant to market.

(STAT) Statistics

ADD

STAT 581 Current Topics in Data Science (3) Current topics in data science as selected by the instructor.

Rationale: New course will allow dynamic topical content in this rapidly evolving field. Financial Impact: None.

DROP AS A SECONDARY CROSS-LISTED COURSE

STAT 576 Multivariate and Data Mining Techniques (3)
Cross-listed: BZAN 552.)

Rationale: Dropping as a secondary cross-listed course. Content of this course is being replaced by adding STAT 581.

REVISE TITLE AND DESCRIPTION; REMOVE (RE)PREREQ; AND ADD AS SECONDARY CROSS-LISTED COURSE

STAT 579 Multivariate and Data Mining Techniques (3)
Multivariate normal distribution, data visualization, handling missing data, dimension reduction techniques, supervised learning, clustering, outlier detection.
Cross-listed: (See Business Analytics 552.)

Formerly: Applied Multivariate Methods (3)
Multivariate techniques: Hotellings T-sq. MANOVA, discriminant analysis, canonical correlation, principal component analysis, and factor analysis. Computer oriented approach: analysis and interpretation. Knowledge of basic matrices and SAS essential.
(RE) Prerequisite(s): 538 or knowledge of regression and analysis of variance.

Rationale: For the primary course BZAN 552, revising to change the secondary cross-listed number from STAT 576 to STAT 579, for a more logical sequence of course offerings.

DEPARTMENT OF FINANCE

(FINC) Finance

ADD

FINC 601 Finance Databases and Research Methods (3) Reviews standard databases used in Academic Finance research. Also included is an examination of research methodologies.
Comment(s): Consent of instructor required.
Registration Restriction: Minimum student level - graduate.

Rationale: The databases and research methods course has been offered for at least the last five years under the course number. Financial Impact: None.

DEPARTMENT OF MANAGEMENT AND ENTREPRENEURSHIP

(MGT) Management

ADD

MGT 598 Leadership Practicum/Project (3) Personal and professional leadership learning and development outside the classroom. Students are required to clearly document key learning objectives and outcomes in a final deliverable.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated. Maximum 6 hours.
Registration Permission: Admission to the Management and Human Resources major (MS) program, and consent of instructor.

Rationale: This change will allow our students more flexible options to develop as leaders and managers. The MS Management & Human Resources program currently requires 6 hours of focused leadership development coursework (MGT 555, 3 hours; MGT 556, 3 hours). Students deemed eligible by the instructor may take 6 hours of this new course, MGT 598, as a substitute for MGT 555 and MGT 556. In many cases, students are working professionals with opportunities to learn those same lessons in structured settings outside the classroom. Financial Impact: The expected financial impact is small to nil. The addition to the program director's workload will be negligible.

DROP

MGT 520 Foundations of Management (1)

Rationale: The quick immersion into HRM topics students are receiving in the current 1-credit incarnation of HRM 521, is inferior to the 3-credit full-term version of HRM 521 which previously employed. In order to go back to a full-term 3-credit version of HRM 521, there is a need to re-claim the 1 credit hour from MGT 520 – hence the proposal to drop that course as a for-credit offering. Financial Impact: None.

(HRM) Human Resource Management

REVISE HOURS

HRM 521 Foundations of Strategic Human Resources Management (3)

Formerly: 1

Rationale: The faculty decided that the quick immersion into HRM topics students are receiving in the current 1-credit incarnation of HRM 521, was inferior to the 3-credit full-term version of HRM 521 which we previously employed. Hence the need to return to the full-term 3-credit version of HRM 521. There is no net change in credit hours associated with this change; the 2 hours that we propose to add to HRM 521 are being reclaimed from MGT 520 (1 credit, proposal to drop this course is included in this document, effective Fall 2021) and MGT 565 (1 credit, proposal to drop this course will be put forth once all current students have completed their degree requirements). Financial Impact: This change will have no financial impact. In terms of teaching load, the director will assume responsibility for teaching the 3-credit version of HRM 521 instead.

DEPARTMENT OF MARKETING

(MARK) Marketing

REVISE DESCRIPTION

MARK 506 Marketing Strategy II (1.5) Builds upon the foundational framework introduced in the MARK 505 and delves into the action plan that is needed in order to create, communicate, and deliver value for customers, and in turn, drive key business outcomes for the firm. The course culminates with an analytical exercise, which permits students to apply the learning from the Marketing Strategy course sequence.

Formerly: 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.

Rationale: The course will now incorporate a business simulation (instead of a marketing plan) based on students' expressed interest in more data-driven decision-making and a greater experiential learning component.

DEPARTMENT OF SUPPLY CHAIN MANAGEMENT

(SCM) Supply Chain Management

REVISE TITLES AND DESCRIPTIONS

SCM 505 Supply Chain Management Strategy, Customer Value, and Innovation (1.5) Defines a supply chain orientation through which businesses can create value for their customers. Particular focus on how to create SCM strategies, structures, processes and metrics that meet customer, organizational and shareholder needs. Emphasis is also placed on how SCM can nurture and enable new products.processes innovations and introductions.

Formerly: Supply Chain Management I: Strategic Issues in Supply Side Supply Chain Management
Strategic logistics-related management issues and frameworks associated with managing the supply side of contemporary supply chains. Topics such as procurement, strategic sourcing, inbound logistics, MRP and inventory management will be discussed.

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.

SCM 506 Supply Chain Management Operating Elements, Enablers, and Execution (1.5) Explores critical operating elements of supply chains including planning, sourcing, operations, and logistics. Introduces key enablers such as technology, international business, sustainability, and a strong connection with finance. Emphasis is placed on how to successfully execute a SCM strategy.

Formerly: Supply Chain Management II: Strategic Issues in Demand Side Supply Chain Management
Logistics-related issues associated with strategically managing the demand side of contemporary supply chains. Emphasis will be placed on topics such as warehousing, transportation, logistics customer service and service quality, information systems, DRP, and logistics networks.

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.

SCM 545 Supply Chain Strategy & Customer Value (3.0) Defines the principles and practice of end-to-end integrated supply chain management with particular emphasis on how supply chains serve customers to create organizational value. Covers foundational concepts on integrating business activities through improved processes and relationships to achieve and maintain competitive advantage through supply chain management.

Formerly: Supply Chain Strategy
Defines the principles and practice of end-to-end integrated supply chain management with particular emphasis on how supply chains create organizational value. Covers foundational concepts on integrating business activities through improved processes and relationships to achieve and maintain competitive advantage through supply chain management.

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.

SCM 571 Strategic Supply Management & Sustainability (3.0) Addresses the processes that facilitate the structure, creation, and management of value-added transactions and relationships between supplier and customer organizations in a channel, supply chain, and integrated value system context with a particular focus on financial techniques to better manage supply chain costs. Will help you learn to apply financial measures to supply chain decision-making problems and also to become an effective and efficient supply chain manager. The course also identifies and advocates for sustainable approaches to sourcing and SCM in general. This is a highly interactive class using cases, simulations and in-class exercises to better align with “real-world” thinking while focusing on foundations of the supply chain and the interactive role of supply management within an organization and as a boundary spanner.

Formerly: Strategic Supply and Cost Management (3.0)
Addresses the processes that facilitate the structure, creation, and management of value-added transactions and relationships between supplier and customer organizations in a channel, supply chain, and integrated value system context with a particular focus on financial techniques to better manage supply chain costs. Will help you learn to apply financial measures to supply chain decision-making problems and also to become an effective and efficient supply chain manager. This is a highly interactive class using cases, simulations and in-class exercises to better align with “real-world” thinking while focusing on foundations of the supply chain and the interactive role of supply management within an organization and as a boundary spanner.

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.

REVISE TITLE

SCM 565 - Supply Chain Information Management & Technology (3.0)

Formerly: Supply Chain Information Management (3.0)

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.

II. PROGRAM CHANGES

DEPARTMENT OF ACCOUNTING AND INFORMATION MANAGEMENT

REVISE REQUIREMENTS, ACCOUNTING MAJOR, MASTERS OF ACCOUNTANCY (MACC)

In the 2021-2022 Graduate Catalog, revise program description has follows:

1) remove the current two introductory paragraphs and replace with three paragraphs as shown below:

The objective of the Master of Accountancy program is to prepare individuals who have a high level of ability and motivation for successful careers in professional accounting and industry. This nationally recognized program uses active learning methods to engage students in global business planning, practices, and strategies. The program offers students a broad business perspective and exposure to cutting-edge management issues. It also provides students with the technical depth required for a career that begins in information auditing, information management, or taxation. Course work includes a particular focus on the development of analytical skills, communication skills (both oral and written), and research skills.

The Master of Accountancy program is a full-time, weekday program. The nature of the program precludes students from simultaneously working full-time outside of classes. UT's accounting undergraduate and graduate programs are accredited by AACSB International and are among the first programs in the nation to receive this accreditation.

A student's program encompasses a minimum of 30 semester credit hours of graduate course work. Students take 12 credit hours each semester and 6 credit hours in the first summer session. Specifically, the student must complete courses in accounting and other areas as indicated below. Each course is 3 semester credit hours of graduate work.
Students may modify their program only with approval of the Director of the MACC program.

Formerly:
The objective of the Master of Accountancy program is to prepare individuals who have a high level of ability and motivation for successful careers in professional accounting and industry. This nationally recognized program uses active learning methods to engage students in global business planning, practices, and strategies. The program offers students the breadth of a broad business perspective and exposure to cutting-edge management issues. It also provides students with the technical depth required for a career that begins in auditing or taxation. Course work includes a particular focus on the development of analytical skills, communication skills (both oral and written), and research skills.

The Master of Accountancy program is a full-time, weekday program. The nature of the program precludes students from simultaneously working full-time outside of classes. UT's accounting undergraduate and graduate programs are accredited by AACSB International and are among the first programs in the nation to receive this accreditation.

2) For the concentration options – revise to remove "Course only with Comprehensive Exam" option and replace with **"Course Only Without Comprehensive Exam" option**

Audit and Controls – Course Only Without Comprehensive Exam
Information Management – Course Only Without Comprehensive Exam
Taxation – Course Only Without Comprehensive Exam

Formerly:
Audit and Controls – Course Only With Comprehensive Exam
Information Management – Course Only With Comprehensive Exam
Taxation – Course Only With Comprehensive Exam

3) Under the Admissions Standards/Procedures heading, revise the 7th bullet as shown below:

- The availability of the "prerequisite option" for non-accounting majors is at the discretion of the MAcc Admissions Committee and the Undergraduate Programs Office. Such approval will be based on the student's resume information, academic record, and potential for success in the accounting profession.

Formerly:
The availability of the "prerequisite option" for non-accounting majors is highly limited and selective, and approval to participate will be at the discretion of the MAcc Admissions Committee and the Undergraduate Programs Office. Such approval will be based on the student's resume information, academic record, and potential for success in the accounting profession.

4) Under the Audit and Controls Concentration revise to show "without Comprehensive Exam" option as shown below:

Audit and Controls Concentration / Course Only Without Comprehensive Exam

Formerly: Audit and Controls Concentration / Course Only With Comprehensive Exam

5) Under the Required Courses heading, revise courses as shown below:

Required Courses
ACCT 504
ACCT 507
ACCT 508
ACCT 509
ACCT 518
ACCT 599
INMT 540
INMT 544
Two of the following electives: ACCT 522, ACCT 531, INMT 543, INMT 546.

Formerly:
ACCT 504
ACCT 507
ACCT 508
ACCT 509
ACCT 518
ACCT 522
ACCT 535
ACCT 593
INMT 543
INMT 544

6) Under the Information Management Concentration revise to show "without Comprehensive Exam" option.

Information Management Concentration / Course Only Without Comprehensive Exam

Formerly: Information Management Concentration / Course Only With Comprehensive Exam

7) Under the Required Courses heading, revise courses as shown below:

Required Courses
ACCT 504
ACCT 507
ACCT 508
ACCT 509
ACCT 518
INMT 540
INMT 543
INMT 544
INMT 548
One of the following electives: ACCT 522, ACCT 531, INMT 546, INMT 599.

Formerly:
ACCT 504
ACCT 507
ACCT 508
ACCT 509
ACCT 518
ACCT 593
INMT 540
INMT 543
INMT 544
INMT 548

8) Under the Taxation Concentration revise to show "without Comprehensive Exam" option.

Taxation Concentration / Course Only Without Comprehensive Exam

Formerly: Taxation Concentration / Course Only With Comprehensive Exam

9) Under the Required Courses heading, revise courses as shown below:

Required Courses
ACCT 504
ACCT 507
ACCT 508

ACCT 510
ACCT 530
ACCT 531
ACCT 532
ACCT 533
ACCT 539
One of the following electives: ACCT 522, INMT 544, INMT 546.

Formerly:
ACCT 504
ACCT 507
ACCT 508
ACCT 522
ACCT 530
ACCT 531
ACCT 532
ACCT 533
ACCT 539
ACCT 593

DEPARTMENT OF BUSINESS ANALYTICS AND STATISTICS

REVISE PROGRAM DESCRIPTION - BUSINESS ANALYTICS MAJOR, MS

In the 2021-2022 Graduate Catalog, revise program text as shown below:

1) Under the Admissions Standards/Procedures heading, remove current text and replace with text below.

Admissions Standards/Procedures
- Formal online application submitted to the Office of Graduate Admissions
- Two applicant recommendation forms
- GRE or GMAT official scores
- Applications are encouraged from all majors, but a quantitative background and proficiency in a computer language is required.

Formerly:
Formal online application submitted to the Office of Graduate Admissions
Three applicant recommendation forms
GRE or GMAT official scores
Applications are encouraged from all majors, but a quantitative background and proficiency in a computer language is required.

2) Under the Credit Hours Required heading, revise credit hours required from 38 to 36 as shown below.

Credit Hours Required: 36 graduate credit hours

Formerly: Credit Hours Required: 38 graduate credit hours

3) Under the Required Courses heading, revise courses and Applied Specialization as shown below.

Required Courses
Core Requirements (25.5 credit hours)
- BZAN 530
- BZAN 531
- BZAN 533
- BZAN 535
- BZAN 536
- BZAN 537
- BZAN 540
- BZAN 542
- BZAN 545
- BZAN 550

Applied Specialization Area (10.5 credit hours)
- Must be selected in consultation with and approved by the student's advisor.

Formerly: Core Requirements (29 credit hours)
BZAN 530
BZAN 531
BZAN 533
BZAN 535
BZAN 540
BZAN 542
BZAN 543
BZAN 544
BZAN 545
BZAN 550
BZAN 548

Applied Specialization Area (9 credit hours)
Any 500 level Haslam College of Business class (ACCT, STAT, BAS, FINC, MARK, SCM, MGT, ECON) for which the student is eligible to enroll. Must be selected in consultation with and approved by the student's advisor.

4) Under the Non-Course Requirements heading, revise to remove two bullets and replace with one bullet as follows:

Non-Course Requirements
- In lieu of Comprehensive Exams, students must complete and pass a 1-semester project (BZAN 550) as part of the degree requirement.

Formerly: Non-Course Requirements:
The degree requires the completion of an internship/practicum that is relevant to the program. Summer internship employment is not for course credit.
In lieu of comprehensive exams, students must complete and pass a 1-semester project (BZAN 550) as part of the degree requirement.

Rationale: The MSBA program will go from a 17-month program (fall, spring, fall) to a 10 ½ month program (second summer session, fall, spring) which should increase student enrollment and place the students on a graduation cycle that aligns with the market.

Financial Impact: The overall credit hours are reduced by two, however, students in the MSBA program will continue taking over nine credit hours in the fall and spring semesters; therefore, student tuition will remain the same. In the summer, students will take only six hours, so tuition costs will be reduced for that semester. Program fees will remain the same.

DEPARTMENT OF MANAGEMENT AND ENTREPRENEURSHIP

REVISE PROGRAM DESCRIPTION – MANAGEMENT AND HUMAN RESOURCES MAJOR, MS

In the 2021-2022 Graduate Catalog, revise program description has follows:

1) Under the Admissions Standards/Procedures heading, remove current text and replace with text below.

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

To be considered for admission, the applicant's file must be complete
- The online application submitted to the Office of Graduate Admissions
- Transcripts of prior college work
- An MS Management and HR program application
- Applicant resume
- Statement of interest or purpose
- Two completed applicant recommendation forms (professional and/or academic references only)
- Either the Graduate Record Examination (GRE) score report or the Graduate Management Admission Test (GMAT) score report.
- Additional information, including the TOEFL score (Test of English as a Foreign Language), may be required by the Office of Graduate Admissions for international candidates.

For admission to the Management and Human Resources Master of Science degree program, consideration is given to
- Applicant's academic record with particular attention to the last two years of undergraduate work and previous graduate studies (where applicable)
- Quality of work experience and other activities that demonstrate potential for leadership
- Scores on the GMAT or GRE and the Test of English as a Foreign Language (TOEFL) for those whose native language is not English
- Fit of career goals and intentions with program content

- Recommendations from professors and/or work supervisors.
- The admission decision is based on all factors that make up the total application; therefore, there is no automatic cut-off for either grade point averages or GMAT/GRE scores. However, admission preference is given to applicants with full-time work experience after obtaining the undergraduate degree.

As a general policy, all applicants to the Management and Human Resources Master of Science degree program are required to submit a valid (no older than five years) GRE or GMAT score as part of the application process. However, applicants who have at least 5 years of professional work experience or are a military veteran, and have an undergraduate GPA of 3.00 or higher may request in writing an exemption from this requirement by contacting MSMHR@utk.edu. GRE/GMAT exemption requests are reviewed by selection committee, and applicants will be notified as to whether the request has been approved. Approval of a GRE/GMAT waiver request is not a guarantee of admission into the Management and Human Resources Master of Science degree program. Additionally, the program admissions committee reserves the right to request that the applicant take the GRE or GMAT if more information about academic potential (including writing, analytical thinking, and quantitative abilities) is needed after the admissions file is reviewed.

There are no specific course prerequisites for admission; however, it is recommended that non-business undergraduates take an introductory course in accounting, finance, Excel, and statistics prior to entry.

Formerly:
Students may only begin graduate course work for the Master of Science with a major in management and human resources in the fall semester.
The online application deadline is February 1 (for domestic and international students).
Online applications by U.S. citizens and permanent residents received after the February 1 application deadline will be considered as space allows.
In addition to the general admission requirements, MS applicants are required to take
The Graduate Record Exam (GRE) or the Graduate Management Admission Test (GMAT).
The GRE/GMAT admission requirement may be waived if the applicant holds an existing graduate degree in another discipline from an accredited university. To be considered for this exemption, applicants must submit a formal request in writing to MSMHR@utk.edu, and they should attach a resume and transcripts. GRE/GMAT exemption requests are reviewed by selection committee, and applicants will be notified as to whether the request has been approved. Please note that approval of a GRE/GMAT waiver request is not a guarantee of admission into the Management and Human Resources Master of Science degree program.
Applicants whose native language is not English must submit results of the Test of English as a Foreign Language (TOEFL).
For admission to the MS program, consideration is given to:
Applicant resume, cover letter, and/or personal statement of interest.
Employment history
Professional and/or academic references (2 recommendations are required)
Applicant's academic record with particular attention to the last two years of undergraduate work.
Scores on the GMAT or GRE (unless waived), and TOEFL for those whose native language is not English.

2) Under the Required Courses heading, remove current course listing and replace as shown below.

Required Courses:

MGT 553 (3 credit hours)
MGT 555 (3 credit hours)
MGT 556 (3 credit hours)
MGT 558 (3 credit hours)
MGT 561 (3 credit hours)
MGT 562 (3 credit hours)
HRM 521 (3 credit hours)
HRM 535 (3 credit hours)
HRM 540 (3 credit hours)
HRM 545 (3 credit hours)
HRM 550 (3 credit hours)

Formerly:
MGT 520 (1 credit hour)
MGT 553 (3 credit hours)
MGT 555 (3 credit hours)
MGT 556 (3 credit hours)
MGT 558 (3 credit hours)
MGT 561 (3 credit hours)
MGT 562 (3 credit hours)
MGT 565 (1 credit hour)
HRM 521 (1 credit hour)
HRM 535 (3 credit hours)
HRM 540 (3 credit hours)
HRM 545 (3 credit hours)
HRM 550 (3 credit hours)

3) Under the Additional Course Requirements heading, remove current text and replace as shown below.

Additional Course Requirements

- In their final semester, students must complete an integrative Capstone experience, consisting of case studies and/or other activities requiring synthesis and application of knowledge from all areas of the program curriculum.
- As determined by the program director for the Management and Human Resources Master of Science program, students may be eligible to complete up to 6 hours of MGT 598 Leadership Practicum/Project as substitute for MGT 555 and MGT 556. Students who completed the accredited Tennessee Certified Public Manager (CPM) program (or an accredited CPM from another state) no more than three years prior to their admission to the Management and Human Resources Master of Science degree program are eligible for MGT 598.

Formerly:
In lieu of comprehensive exams, students must complete and pass a Capstone course (MGT 565) consisting of case studies and/or other activities requiring synthesis and application of knowledge from all areas of the program curriculum.

Rationale: These proposed changes to the catalog description of the program serve two purposes. The first is to bring the language about admission requirements into closer alignment with other graduate business programs in the Haslam College of Business (most notably, the Full-time MBA program). The second is to reflect curriculum changes reflected in other portions of this document.
Financial Impact: There is no financial impact associated with these changes.

COLLEGE OF COMMUNICATION AND INFORMATION

All Changes Effective Fall 2021

I. COURSE CHANGES

COLLEGE OF COMMUNICATION AND INFORMATION

(CCI) Communication and information

DROP

CCI 501 Orientation to Graduate Study (1)

Rationale: CCI Schools and Graduate Orientation for incoming graduate students now cover the material. Impact on other units: None. Financial impact: None.

SCHOOL OF ADVERTISING AND PUBLIC RELATIONS

(ADVT) Advertising

ADD

ADVT 516 Seminar in Advertising Issues (3) Detailed study of a specialized area of advertising. Topics vary by semester.
Repeatability: May be repeated; maximum 6 hours.
Registration Restriction: Enrollment is limited to graduate students.

Rationale: Formerly, students registered for ADVT 490 for the advertising special topics course. The new course reflects graduate special topics courses to facilitate registration processes and better reflect graduate coursework on the transcript. Impact on other units: None. Financial impact: None.

ADVT 592 Advertising Internships (1-3) Experience in a functional area of advertising.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated; maximum 3 hours.
Registration Restriction: Enrollment is limited to graduate students.

Rationale: This course allows graduate students to earn internship credit. Impact on other units: None. Financial impact: None.

ADVT 616 Seminar in Advertising Issues (3) Detailed study of a specialized area of advertising. Topics vary by semester.
Repeatability: May be repeated; maximum 6 hours.
Registration Restriction: Minimum student level – graduate. Enrollment is limited to graduate students.

Rationale: The new course reflects graduate special topics courses to facilitate registration processes and better reflect graduate doctoral-level coursework on the transcript. Impact on other units: None. Financial impact: None.

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

ADVT 470 Advertising Campaigns (3) Group-based development, execution, and evaluation of an advertising campaign for a regional or national client.
(RE) Prerequisite(s): Advertising 450 and Public Relations 270.
Registration Restriction(s): Advertising or public relations major.

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT

ADVT 490 Special Topics

Rationale: ADVT 490 is being replaced by ADVT 516. Impact on other units: None. Financial impact: None.

~~Equivalency table, effective fall 2021~~

~~Current Courses~~	~~Equivalent Courses~~
~~ADVT 490~~	~~ADVT 516~~

Cannot have equivalents for UG and GR courses

DROP

ADVT 530 Advertising and Public Relations Research (3)

Rationale: Dropping course under the ADVT subject code. Adding course back under the ADPR subject code.

Equivalency table, effective fall 2021

Current Courses	Equivalent Courses
ADVT 530	ADPR 530

DROP PRIMARY CROSS-LISTED COURSE

ADVT 561 Social Media in Advertising and Public Relations (3)
Cross-listed: Same as Public Relations 561.

Rationale: ADVT 561 is being replaced by a new social media course (ADPR 562) that is more appropriate for Master's students than ADVT/PBRL 561. Impact on other units: None. Financial impact: None.

Equivalency table, effective fall 2021

Current Courses	Equivalent Courses
ADVT 561	ADPR 562
PBRL 561	ADPR 562

REVISE TO DROP CREDIT LEVEL RESTRICTION

ADVT 510 Advertising and Society (3)

Formerly: Credit Level Restriction: Graduate credit only.

ADVT 520 Advertising and Communications Theory (3)

Formerly: Credit Level Restriction: Graduate credit only.

ADVT 540 Advertising Decision Making (3)

Formerly: Credit Level Restriction: Graduate credit only.

ADVT 590 Project (3)

Formerly: Credit Level Restriction: Graduate credit only.

(ADPR) Advertising and Public Relations

ADD

ADPR 516 Seminar in Advertising and Public Relations Issues (3) Detailed study of a specialized area of advertising and public relations. Topics vary by semester.
Repeatability: May be repeated; maximum 6 hours.
Registration Restriction: Enrollment is limited to graduate students.

Rationale: Previously, students registered for ADVT 490 or PBRL 490. The new course reflects graduate special topics courses to facilitate registration processes and better reflect graduate coursework on the transcript. Impact on other units: None. Financial impact: None.

ADPR 530 Advertising and Public Relations Research (3) Nature, scope, and application of research function to advertising and public relations decisions.
Registration Restriction(s): Enrollment is limited to graduate students.

Rationale: Dropping ADVT 530. Adding the course back as ADPR 530, which better reflects and serves both advertising and public relations concentration students. Impact on other units: None. Financial impact: None.

ADPR 590 Advertising and Public Relations Projects (3) Capstone project under guidance of faculty that applies strategies and principles from previous coursework.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated; maximum 6 hours.
Registration Restriction: Enrollment is limited to graduate students.

Rationale: This course serves students in both advertising and public relations. Impact on other units: None. Financial impact: None.

ADPR 592 Advertising and Public Relations Internships (1-3) Experience in a functional area of advertising and public relations.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated; maximum 3 hours.
Registration Restriction: Enrollment is limited to graduate students.

Rationale: This course allows graduate students to earn internship credit. Impact on other units: None. Financial impact: None.

ADPR 616 Seminar in Advertising and Public Relations Issues (3) Detailed study of a specialized area of advertising and public relations. Topics vary by semester.
Repeatability: May be repeated; maximum 6 hours.
Registration Restriction: Minimum student level – graduate.

Rationale: The new course reflects graduate special topics courses to facilitate registration processes and better reflect graduate doctoral-level coursework on the transcript. Impact on other units: None. Financial impact: None.

(PBRL) Public Relations

ADD

PBRL 592 Public Relations Internships (1-3) Experience in a functional area of public relations.
Grading Restriction: Satisfactory/No Credit grading only.
Repeatability: May be repeated; maximum 3 hours.
Registration Restriction: Enrollment is limited to graduate students.

Rationale: This course allows graduate students to earn internship credit. Impact on other units: None. Financial impact: None.

PBRL 616 Seminar in Public Relations Issues (3) Detailed study of a specialized area of public relations. Topics vary by semester.
Repeatability: May be repeated; maximum 6 hours.
Registration Restriction: Minimum student level – graduate.

Rationale: The new course reflects graduate special topics courses to facilitate registration processes and better reflect graduate doctoral-level coursework on the transcript. Impact on other units: None. Financial impact: None.

ADD 400-LEVEL S-COURSE FOR GRADUATE CREDIT

PBRL 470S Public Relations Campaigns (3) Research, planning, and communication and evaluation of major public relations campaigns. Oral and written presentation of written public relations project from inception to completion. Requires extensive out-of-class work.
(RE) Prerequisite(s): PBRL 320 and PBRL 370 and ADVT 250.
Registration Restriction(s): Public relations major.

Rationale: PBRL 470S should carry graduate credit; currently PBRL 470 carries graduate credit. The courses are the same with regard to content and for repeat and replace purposes. Impact on other units: None. Financial impact: None.

DROP 400-LEVEL COURSE FOR GRADUATE CREDIT

PBRL 490 Special Topics in Public Relations

Rationale: PBRL 490 is being replaced by PBRL 516. Impact on other units: None. Financial impact: None.

Equivalency table, effective fall 2021

Current Courses	Equivalent Courses
PBRL 490	PBRL 516

DROP SECONDARY CROSS-LISTED COURSE

PRBL 561 Social Media in Advertising and Public Relations (3)
Cross-listed: (See Advertising 561.)

Rationale: Primary course ADVT 561 is being dropped and replaced ADPR 562. Equivalency table provided above.

SCHOOL OF JOURNALISM AND ELECTRONIC MEDIA

(JREM) Journalism and Electronic Media

ADD

JREM 567 Journalism & Media for Social Change (3) Understanding the competing and complementary institutional, sociological, and cultural forces that shape media and journalism production practices and content.
Registration Restriction: Enrollment is limited to graduate students. Minimum student level – graduate.

Rationale: Currently, no graduate-level JREM or CCI course is dedicated to examining how news and other media perpetuate racists, sexist, classist, heterosexist, and ableist views. This lack of consideration is implicit in enabling the structure that enable current power arrangements to remain intact. Impact on other units: None. Financial impact: None.

ADD 400-LEVEL COURSES FOR GRADUATE CREDIT

JREM 411 Television News Reporting (3) Writing, reporting, shooting, editing, and producing for the electronic news media. Lecture and lab course providing students with experience as reporters/producers for a television and cable news program. Includes an overview of electronic news-gathering equipment, as well as non-linear video editing. Prepares students to become multimedia and backpack journalists.
Contact Hour Distribution: Lecture and Lab.
(RE)Prerequisite(s): JREM 230.

Rationale: For students who enter the MS program without a degree in journalism and/or media in hand, it is necessary to develop media production skills. The current slate of MS courses offers few such opportunities. Impact on other units: None. Financial impact: None.

JREM 414 Magazine and Feature Writing (3) Techniques of writing features and in-depth articles for mass circulation and specialized magazines or newspapers. Organizing and presenting material with attention to problems in areas such as business, science, agriculture, and the humanities.
(RE)Prerequisite(s): JREM 220 or JREM 230 or PBRL 320; ENGL 102, ENGL 132*, ENGL 290*, or ENGL 298*.*

Rationale: For students who enter the MS program without a degree in journalism and/or media in hand, it is necessary to develop media production skills. The current slate of MS courses offers few such opportunities. Impact on other units: None. Financial impact: None.

JREM 420 Media Sales (3) Students learn the process of identifying, packaging, and selling media audiences to advertising agencies and direct retail accounts. Students learn how to sell radio, television, print, and digital time and space by creating value for advertisers based on audience research and ad pricing strategies.
(RE)Prerequisite(s): JREM 220 or JREM 230.

Rationale: For students who enter the MS program without a degree in journalism and/or media in hand, it is necessary to develop media production skills. The current slate of MS courses offers few such opportunities. Impact on other units: None. Financial impact: None.

JREM 422 Social Journalism (3) Students are introduced to a variety of social media and the ways in which they may be used by journalists for information gathering, reporting, publicity, and engagement. Topics covered will include curation, verification, ethical considerations, and analytics.
Contact Hour Distribution: Lecture and Lab.
(RE)Prerequisite(s): JREM 220 or JREM 230.

Rationale: For students who enter the MS program without a degree in journalism and/or media in hand, it is necessary to develop media production skills. The current slate of MS courses offers few such opportunities. Impact on other units: None. Financial impact: None.

SCHOOL OF INFORMATION SCIENCES

(INSC) Information Sciences

ADD

INSC 525 Information Architecture (3) Introduces fundamental concepts, methods, and practices in information architecture for virtual space. Focuses on organization, navigation, labeling, and searching of Web sites and intranets, as well as user experience.
(RE) Prerequisite(s): INSC 512 or INSC 520.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Rationale: (New number, existing course) Move course into 520 sequence with similarly-themed courses. Impact on other units: none. Financial impact: none

INSC 536 User Legal Research (3) Introduction to the United States legal system and legal research resources. Basic competencies in conducting legal research.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Rationale: Assign permanent course number for special topics course Impact on other units: none. Financial impact: none.

INSC 549 Museum Studies (3) Museum studies through discussions of theory and practice. Introduction to museums as a profession, historical context of the field, and current topics.
Registration Restriction(s): Minimum student level – graduate.

Rationale: Assign permanent course number for special topics course. Impact on other units: none. Financial impact: none.

INSC 563 Data Management (3) Foundational data management concepts and models used to describe the creation, organization, distribution, storage, access, retrieval, management, use, and preservation of data throughout the data lifecycle. Includes a review of socio-technical systems, including people, infrastructures, and stakeholders used to understand data management best practices, guidelines, and policies.
Registration Restriction(s): Minimum student level – graduate.

Rationale: Assign permanent course number for special topics course. Impact on other units: none. Financial impact: none.

INSC 567 Digital Humanities (3) Digital Humanities (DH), especially as it pertains to libraries. Conceptualizing, planning, and developing DH scholarship and pedagogy. Introduction to entry-level DH research methodologies and tools.
Registration Restriction(s): Minimum student level – graduate.

Rationale: Assign permanent course number for special topics course. Impact on other units: none. Financial impact: none.

INSC 589 Web Design (3) Provides hands-on experience with creating websites using latest web site design tools and techniques as well as a theoretical insight into emerging trends and techniques. Emphasizes understanding the basics of web design, website creation and evaluation. Covers basics of usability testing and search engine optimization.
(RE) Prerequisite(s): 581 or instructor's consent.
Registration Restriction(s): Minimum student level – graduate.

Rationale: (New number, existing course) Move course into 580 sequence with similarly-themed courses. Impact on other units: none. Financial impact: none.

DROP

INSC 510 The Information Environment (3)

INSC 520 Information Representation and Organization (3)

INSC 530 Information Access and Retrieval (3)

Rationale: Courses no longer offered. Impact on other units: none. Financial impact: none.

INSC 597 Information Architecture (3)

INSC 598 Web Design (3)

Rationale: Course numbers shifted to more appropriate places in sequence. Impact on other units: none. Financial impact: none.

Equivalency table, effective fall 2021

Current Courses	Equivalent Courses
INSC 597	INSC 525
INSC 598	INSC 589

REVISE TITLES AND DESCRIPTIONS

INSC 553 Special Libraries and Information Centers (3) Overview of specialized information agencies and services, with emphasis on client-centered systems in the profit and not-for-profit sectors. The evolving role of special librarians. Strategies for associating information services with the specific requirements of organizations.

Formerly: Specialized Information Agencies and Services (3)
Development and present status, scope and objectives. Information resources external to organization.

Rationale: Make title more similar to those of other courses in 550 sequence. Impact on other units: none. Financial impact: none.

INSC 554 Public Libraries (3) Development, roles, political environment, governance, organization, fiscal management, services, marketing, and performance evaluations of public libraries.

Formerly: Public Library Management and Services (3)
Development, roles, political environment, governance, organization, fiscal management, services, marketing, and performance evaluations.

Rationale: Make title more similar to those of other courses in 550 sequence. Impact on other units: none Financial impact: none.

REVISE TITLE, DESCRIPTION; AND ADD (RE)PREREQUISITES

INSC 575 Nonfiction for Youth (3) Evaluation, selection, and use of nonfiction materials for youth (birth through high school), in both school and public library settings.
(RE) Prerequisite(s): INSC 571 and INSC 572 or permission of instructor.

Formerly: Valuing Diversity: International and Intercultural Resources for Youth (**3**)
Examines texts and materials for youth that reflect the contemporary settings and lives of young people from all over the world. Reviews the scholarship of literature and film to determine how to recognize stereotypes; how to understand publishing worlds; and how to recognize universal themes that transcend ethnicity, religion, gender, class, and nationhood.

Rationale: Revise course title and description to reflect current pedagogical approaches to subject matter. All children's and young adult resources and services classes feature multicultural materials and themes, making a special course unnecessary. Continuing to feature a "diversity" course may give students, instructors, and other stakeholders the misapprehension that DEI-related issues and materials need not be addressed in all courses. Impact on other units: none. Financial impact: none.

REVISE DESCRIPTIONS AND ADD REGISTRATION RESTRICTIONS

INSC 511 Information Concepts and Foundations (3) Information Concepts and Foundations Concepts, principles, models and theories of information sciences, including information behavior. History and nature of the discipline. Information policy, and the role of information in society. Evolution and scope of the information professions. Professional values and ethical frameworks.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Formerly: Information Concepts and Foundations (3) Required course. Introduction to foundational concepts and theories, principles, and models of Information Sciences, including information behavior. History and nature of the discipline. Information policy, and the role of information in society. Evolution and scope of the information professions and their central issues, values, and ethical frameworks.

INSC 512 Information Organization and Retrieval (3) Information Organization and Retrieval Introduction to online search, metadata, controlled vocabularies, and classification systems; theories and methods of information organization and retrieval, including approaches to evaluating information retrieval (IR) systems. Practical, ethical, and representational issues related to IR systems implementation.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Formerly: Information Organization and Retrieval (3) Required course. Introduction to subject vocabularies and classification systems; theories and methods of information organization and retrieval, including approaches to evaluating information retrieval systems. Practical, ethical, and representational issues related to IR systems implementation.

INSC 514 Information Technology Foundations (3) Introduction to foundational concepts; theories, models, and frameworks for designing, adopting, learning, and using information technology (IT); analysis, evaluation, and management of electronic tools and resources; trends, capabilities, and limitations of information technologies for accessing, managing, and applying information from service user and service provider perspectives in various information settings.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Formerly: Information Technology Foundations (3) Introduction to foundational concepts; theories, models, and frameworks for designing, adopting, learning, and using information technology (IT); analysis, evaluation and management of electronic tools and resources; trends, capabilities, and limitations of information technologies for accessing, managing, and applying information from service user and service provider perspectives in various information settings.

INSC 538 User Instruction (3) Basic principles of instructional services for library users, including pedagogical and andragogical theory; instructional design, models and strategy for delivery, and instructional program planning and assessment.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Formerly: User Instruction (3) Theory, strategy, design, and practice in providing instructional services and technology for end users of information and information systems. Includes practical experience.

INSC 558 Planning and Assessment (3) History of and issues related to planning and assessment in libraries and other information organizations, including approaches, methods, and tools.
Registration Restriction(s): Minimum student level – graduate.

Formerly: Planning and Assessment (3) Overview of history of and issues related to planning and assessment in libraries and other information organizations, including approaches, methods, and tools.

INSC 577 Picture Books Across the Curriculum (3) Guidance for selecting and using quality picture books, wordless books, graphic novels and other media. Focus is on cross-curricular uses of these materials in traditional and nontraditional ways to enhance student learning for grades K-12.
Registration Restriction(s): Master of Science – Information Sciences major or permission of instructor Minimum student level – graduate.

Formerly: Picture Books Across the Curriculum (3) Provides guidance for selecting and using quality picture books, wordless books, graphic novels and other media for teachers and librarians. Will focus on cross-curricular with an emphasis on using these materials in traditional and nontraditional ways to enhance student learning for grades K-12.
Registration Restriction(s): Minimum student level – graduate.

INSC 583 Introduction to Youth Informatics (3) Presents essential concepts of the study of youth and informatics; explores the connection between youth, technology, and community. Project-driven, with intensive experiential learning components.
Registration Restriction(s): Minimum student level – graduate.

Formerly: Introduction to Youth Informatics (3) Introduces the study of youth informatics. Presents essential concepts of the study of youth and informatics. Explores the connection between youth, technology, and community. Project-driven with intensive experiential learning components.

INSC 593 Seminar in Youth Informatics (3) Research participation-based course in youth informatics.
Registration Restriction(s): Minimum student level – graduate.

Formerly: Seminar in Youth Informatics (3) Explores key areas in youth informatics. Seminar includes discussion of basic, applied, and evaluative research and projects at the national and international levels. Covers research trends in youth informatics. Provides a forum for presentation and criticism of past and current research by students.

REVISE TO ADD (RE)PREREQUISITES

INSC 521 Cataloging and Classification (3)
(RE) Prerequisite(s): INSC 512 or INSC 520.

Formerly: No (RE)Prereq.

INSC 551 School Libraries (3)
(RE) Prerequisite(s): INSC 511, INSC 512, INSC 514, INSC 560, INSC 571 and INSC 572, or permission of School Library Program Administrator.

REVISE REGISTRATION RESTRICTION AND ADD (RE)PREREQUISITES

INSC 522 Cataloging of Non-print Materials (3)
(RE) Prerequisite(s): INSC 512 or INSC 520.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

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

INSC 596 Field-Based Experience in School Libraries (1-2)
(RE) Prerequisite(s): INSC 511, INSC 512, INSC 514, INSC 560, INSC 571 and INSC 572. May be co-registered with INSC 551.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Formerly: Field-Based Experience in School Libraries (1-2)
Registration Restriction(s): Minimum student level – graduate.

Rationale for all: improve uniformity of course descriptions, remove extraneous language to make descriptions more concise. Impact on other units: none. Financial impact: none.

REVISE (DE)PREQUISITES TO (RE)PREREQUISITES AND ADD REGISTRATION RESTRICTION

INSC 524 Metadata (3)
(RE) Prerequisite(s): 520 or 512.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Formerly: Metadata (3)
(DE) Prerequisite(s): 520 or 512.

REVISE DESCRIPTIONS

INSC 516 Geospatial Technologies (3) Creation, distribution, growth, use and misuse of geospatial data. Application of geospatial technologies to generate maps, tables and imagery.

Formerly: Geospatial Technologies (3) Explores the creation, distribution and growth of geospatial data, highlighting their uses and misuses. Structured as an applications-based course where students learn how geospatial technologies are used to turn geospatial data into maps, tables and imagery through hands-on exercises and laboratory work.

INSC 531 Introduction to Information Sources and Services (3) Introduction to information sources and services in libraries and information centers, including the reference interview, service standards, guidelines, and models. Overview of general information sources and source types.

Formerly: Introduction to Information Sources and Services (3) Introduction to reference services in libraries and information centers, including the reference interview, service standards and guidelines, and general reference sources and source types.

INSC 532 Sources and Services for Science and Engineering (3) Information sources in engineering, physical, and life sciences. Information services for and scholarly communication patterns of scientists and engineers. Key issues and trends in science librarianship.

Formerly: Information sources in engineering, physical and life sciences.

INSC 534 Government Information Sources (3) Selection, acquisition, organization, and utilization of government information and data in variety of formats from legislative, judicial, and executive branches of federal, state, local, and international government and intergovernmental agencies.

Formerly: Government Information Sources (3) Selection, acquisition, organization, and utilization of government information in variety of formats from legislative, judicial and executive branches of federal, state, local, and international government and intergovernmental agencies.

INSC 535 Advanced Information Retrieval (3) Trends and major issues in information retrieval. Further exploration of online systems and databases, including methods for evaluation. Advanced techniques for developing search strategies, including query languages of several commercially available online systems.

Formerly: Advanced Information Retrieval (3) Bibliographic, non-bibliographic, full-text databases, (e.g., non-bibliographic formula and structure databases, contents-page/full-text databases), patents; document delivery alternatives, evaluation, and testing.

INSC 541 Knowledge Management for Information Professionals (3) Tools and techniques for knowledge acquisition, assessment, evaluation, management, organization and dissemination applied to business situations. Topics include knowledge generation, coordination, codification, transfer, and reuse. Strategies and information technologies to facilitate KM. Roles of information professionals in developing knowledge management initiatives.

Formerly: Knowledge Management for Information Professionals (3) Covers classic theories of knowledge and theories of first and second-generation knowledge management paradigms. Introduces related disciplines and the knowledge lifecycle, types of knowledge, organizational learning, intellectual capital, communities of practice, knowledge ecologies, knowledge audits, knowledge sharing repurposing of information, uses of information technology, and roles of information professionals in developing knowledge management initiatives.

INSC 542 Social Informatics (3) Causes and consequences of accessing and using information and technologies by individuals, communities, organizations, governments, and society.

Formerly: Social Informatics (3) Social consequences of information and communication technologies (ICT) at micro (e.g., personal level), meso (e.g., organizational level) and at macro level (e.g., information society studies), and applications of ICT for businesses, governments, and society are covered by the umbrella term "social informatics." It is a highly multi-disciplinary area worth exploring, since it will expose you to a range of contemporary global issues and phenomena shaped by ICT-mediated information.

INSC 543 Spatial Data Management (3) Concepts related to spatial data management, including types of spatial data, spatial data discovery, data curation, and metadata creation. Issues related to research data management policies and related information services.

Formerly: Spatial Data Management (3) Introduces the concepts related to spatial data management, including types of spatial data, spatial data discovery, data curation, and spatial dataset metadata creation. Issues related to research data management policies and related information services.

INSC 544 Business Intelligence for Information Professionals (3) Principles of and practices for gathering and synthesizing business intelligence, including competitive intelligence, environmental scanning, and issues management; information evaluation and synthesis, and the strategic role of information in organizations.

Formerly: Business Intelligence for Information Professionals(3) Principles and practices of gathering and synthesizing business intelligence: including competitive intelligence, environmental scanning, and issues management; information evaluation and synthesis; role of strategic information in modern organizations.

INSC 545 Scientific and Technical Communications (3) Overview of the evolution of scientific and technical communication. Current trends in the field; the role of formal and informal communications, and major Scientific and Technical organizations and their roles.

Formerly: Scientific and Technical Communications (3) Evolution of scientific and technical communication; current trends; role of formal and informal communications; major STI organizations and their roles.

INSC 546 Environmental Informatics (3) Collection, classification, storage, retrieval, dissemination, integration and visualization of environmental information in the interdisciplinary field of environmental informatics. Reviews the role of computer technology including geographic information systems.

Formerly: Environmental Informatics (3) Focuses on the interdisciplinary field of environmental informatics. Explores collection, classification, storage, retrieval, dissemination, integration and visualization of environmental information. Reviews the role of computer technology including geographic information systems.

INSC 547 Health Sciences Information Centers (3) Overview of health sciences libraries, including the role of health sciences libraries/information specialists, relevant management and administrative issues, collection management, reference and information sources and services, health and literacy, the process of evidence-based practice, and current information trends related to biomedical science.

Formerly: Health Sciences Information Centers (3) An overview of health sciences libraries, including management, collection development, reference, and current trends. Topics include the role of health sciences libraries/information specialists, relevant management and administrative issues, collection development and related matters, reference and information sources and services, consumer health and literacy, the process of evidence-based practice, and current information trends related to biomedical science.

INSC 548 Federal Libraries and Information Centers (3) Overview of the mission, status, and history of federal libraries and federal information center work in various settings across the three branches of government; trends in employment, government dissemination efforts, information policy, information technology, and government's impact on services in other types of libraries/information centers.

Formerly: Federal Libraries and Information Centers (3) Mission, status, and history of federal libraries and federal information center work in various settings across the three branches of government; trends in employment, government dissemination efforts, information policy, information technology, and government's impact on services in other types of libraries/information centers.

INSC 550 Management of Information Organizations (3) Theories and practices related to organizational behavior, human resources, strategy, marketing, and budgeting for managing and leading information organizations.

Formerly: Management of Information Organizations (3) Supervisory, management and leadership concepts, strategies, and techniques applicable to information professionals working in libraries, archives, records management, and other information organizations.

INSC 559 Grant Development for Information Professionals (3) Covers the grant-seeking process, including locating and evaluating grant opportunities, building relationships with funding agencies, analyzing the needs of the grant-seeking institution and the community at large, identifying and building key partnerships within the community, developing a grant proposal, and building a grant budget.

Formerly: Grant Development for Information Professionals (3) Develops grant-writing and strategic relationship management skills for information professionals who may benefit from external funding opportunities and proposals. Creates and manages community partnerships to provide innovative information services to various constituencies such as underserved populations, public libraries, special libraries, and others in diverse information-related environments.

INSC 560 Development and Management of Collections (3) Selecting and preserving collection items, regardless of format, to meet users' needs; community analysis; policies and procedures; evaluation; purchasing.

Formerly: Development and Management of Collections (3) Selecting and preserving a variety of items (tangible and intangible) to meet needs of particular users; community analysis; policies and procedures; evaluation; purchasing.

INSC 562 Digital Curation (3) Value-added, lifecycle management of born and reborn digital objects and databases. Content creation, digitization, selection, appraisal, ingest, storage, preservation, access, use and re-use. Digital and data repository standards, policies, and management.

Formerly: Digital Curation (3) Explores the life-cycle, value-added management and maintenance of scholarly and scientific digital content. Examines the diverse set of skills to select, execute and administer a range of approaches and procedures across the lifecycle of digital objects, from conceptualization, creation, appraisal and selection, and ingest through preservation, storage, access, use and re-use. Digital curation

occurs across a broad array of professional, disciplinary and organizational contexts. Introduces principles and practices to inform digital curation planning and practice for application in a variety of organizational settings, including archives, libraries, museums, data centers, and other cultural heritage and information agencies.

INSC 564 Archives and Records Management (3) History, theory, methodology, and practice of archival studies and records management. Fundamentals of acquisition and appraisal, evaluation and value, arrangement and description, preservation, reference and access, outreach and advocacy, and standards, tools and technologies.

Formerly: Archives and Records Management (3) Objectives and functional elements of records systems, archival programs, management information systems and techniques within various types of organizations. Management of information internal to organizations.

INSC 565 Digital Libraries (3) Technological, social, and legal aspects of planning, building, and managing digital collections and digital libraries. Software architecture, platforms, digitization technology, protocols, and standards that enable digital libraries. Various formats of digital objects and their organization and representation.

Formerly: Digital Libraries (3) Technological and social aspects of electronic publishing and digital libraries. Technologies and standards that enable electronic publishing and digital libraries. History of electronic publishing and digital libraries and their impact on user needs and information provision.

INSC 571 Children's Materials (3) Critical survey of diverse children's materials, for birth through age 12, in all formats and genres. Emphasis on evaluation, selection, and use in school and public libraries.
Registration Restriction(s): Master of Science – Information Sciences major or permission of instructor. Minimum student level – graduate.

Formerly: Critical survey of diverse children's materials, for birth through age 12, in all formats and genres, including print, digital, and multimodal. Emphasis on evaluation, selection, and recreational or curricular use in school and public libraries.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

INSC 572 Young Adult Materials (3) Critical survey of diverse young adult materials, for ages 13-18, in all formats and genres. Emphasis on evaluation, selection, and use in school and public libraries.
Registration Restriction(s): Master of Science – Information Sciences major or permission of instructor. Minimum student level – graduate.

Formerly: Young Adult Materials (3) Critical survey of diverse young adult materials, for ages 13-18, in all formats and genres, including print, digital, and multimodal. Emphasis on evaluation, selection, and recreational or curricular use in school and public libraries.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

INSC 574 Resources and Services for Adults (3) Strategies and procedures for public service librarians to create, evaluate, and improve programs for adult users, with some emphasis on reader's advisory.

Formerly: Resources and Services for Adults (3) Examines strategies and procedures for developing programs in libraries. The course provides public service librarians with the knowledge and skills to create, evaluate, and improve programs with some emphasis on reader's advisory.

I**NSC 576 Storytelling as a Communications and Learning Tool in Diverse Settings (3)** Storytelling as a communications tool in information agencies and other types of corporate and not-for-profit organizations. Focuses on various types of stories and best practices for gathering and telling stories.

Formerly: Storytelling as a Communications and Learning Tool in Diverse Settings (3) Explores storytelling as a communications tool in information agencies and other types of corporate and not-for-profit organizations. Students will learn the history of storytelling, various types of stories, and best practices for gathering and telling stories.

INSC 587 Mining the Web (3) Strategies for mining the web, web engines and directories, cognitive accessibility, web design and development, and usability engineering.

Formerly: Mining the Web (3) Covers strategies for mining the web, web engines and directories, cognitive accessibility, web design and development, and usability engineering.

INSC 592 Introduction to Data Analytics and Visualization (3) Concepts of big data and data analytics in settings such as academia, organizations, the sciences, and on the web. Basic concepts and process of data analytics, and data mining techniques and skills (ETL). Designing effective information visualizations.

Formerly: Introduction to Data Analytics and Visualization (3) Introduces the concepts of big data and data analytics in academics, businesses, sciences, the Web, etc. To master basic concepts and process of data analytics. To practice data mining techniques and skills (ETL). To design effective information visualizations.

REVISE TO REMOVE (DE)PREREQUISITES AND ADD (RE)PREQUISITES

INSC 573 Programming for Children and Young Adults (3)
(RE) Prerequisite(s): 571 or 572. or permission of instructor

Formerly: Programming for Children and Young Adults (3)
(DE) Prerequisite(s): 571 or 572.

REVISE (RE)PREREQUISITES

INSC 581 Information Networking Applications (3)
(RE) Prerequisite(s): 514 or instructor's consent.

Formerly: *(RE) Prerequisite(s): 580 or instructor's consent.*

REVISE DESCRIPTION AND REGISTRATION RESTRICTION

INSC 591 Independent Project or Research (3) Student-initiated independent project conducted under supervision of a SIS faculty member. Arranged by agreement between student, student's academic advisor, and project advisor.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Formerly: Independent Project or Research (3)
Registration Restriction(s): Minimum student level – graduate.

INSC 594 Graduate Research Participation (3) Faculty-led exploration of advanced research techniques under supervision of a SIS faculty member. Arranged by agreement between student, student's program advisor, and project advisor.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.

Formerly: Graduate Research Participation (3) Advanced research techniques under supervision of staff research director whose area coincides with interests of student.
Registration Restriction(s): Minimum student level – graduate.

REVISE DESCRIPTION AND REGISTRATION RESTRICTION; ADD COMMENTS

INSC 595 Student Teaching in School Libraries (9) Planned professional semester: full day school library work and classroom observation activities.
Registration Restriction(s): Master of Science – Information Sciences major. Minimum student level – graduate.
Comment(s): Before Registration for INSC 595: All other course work required for school licensure, or permission of School Library Program Administrator.

Formerly: Student Teaching in School Libraries (9) Planned professional semester: full day school library work and classroom observation activities.
Registration Restriction(s): Minimum student level – graduate.

I.PROGRAM CHANGES

COLLEGE OF COMMUNICATION AND INFORMATION

REVISE PROGRAM REQUIREMENTS FOR COMMUNICATION AND INFORMATION MAJOR, MS

In the 2021-22 Graduate Catalog, revise program requirements as shown below.

1) Program hours: revise program hours from 34 credit hours to 33 credit hours for all 4 concentrations.

2) Create heading "Required Hours" and insert paragraph below under the new heading.

Required hours
The MS program combines a cross-disciplinary core in theory and methods with a concentrated set of courses in a concentration area and elective courses. Both the thesis and non-thesis options require a minimum of 33 credit hours of approved graduate work. A minimum of 23 credit hours must be at the 500-level or above. Up to nine credit hours of graduate credit may be accepted for transfer into the program, but these hours are subject to approval by the program adviser and the associate dean. Students may be required to take up to 18 credit hours of pre-requisite courses. Full-time students with minimal pre-requisite or transfer credits are typically able to finish the degree in three to four semesters. See the Appendix in the CCI Graduate Handbook for Program Planning Guides for the Master of Science in Communication and Information.

3) Under the Required Courses heading for each concentration, revise to reduce core hours by 1 credit hour (due to the drop of CCI 501).

4) Under the Advertising concentration, under the Required Courses heading, revise as shown below.
   - Core (6 credit hours) to be taken during the first two semesters of the student's program, except with the written approval of the associate dean of the college. All students take the following.
     CCI 540
     ADVT 530

Formerly:
Core (7 credit hours) to be taken during the first two semesters
CCI 501 (1 credit hour)
CCI 540 (3 credit hours)
ADVT 530 (3 credit hours)

Rationale: CCI is dropping CCI 501 (1 hour). Revisions have been made to the above to reflect this change.

SCHOOL OF ADVERTISING AND PUBLIC RELATIONS

❖ **ADD CONCENTRATION – COMMUNICATION AND INFORMATION MAJOR, MS**

Advertising and Public Relations concentration

In the 2021-22 Graduate Catalog, add heading, text and requirements for new concentration.

Communication and Information Major, MS
Advertising and Public Relations concentration

The Advertising and Public Relations concentration is a 4+1 program that allows students who graduated with an advertising or public relations major (within the last 3 years) the ability to earn a Master's degree with a fifth year of coursework (30 additional graduate credit hours). The concentration is designed to help students gain a deeper understanding of the major in which they graduated; and also gain knowledge related to the other major within ADPR. Students will take graduate courses from each of five blocks. There is no capstone requirement, but block 4 requires at least six graduate credit hours from a list of courses that focus on application of concepts. Students can also take school and college electives.

Concentration option: Course Only Without Comprehensive Exams

Campus Code: Knoxville

Admissions Standards/Procedures
- A bachelor's degree is required for entry into the master's program. For admission into the Advertising and Public Relations concentration, students must have majored in either advertising or public relations and have graduated from the University of Tennessee within the past 3 academic years. The following are normally minimal requirements for admission to full potential candidate status.
- A 3.00 (4.00 system) grade point average in undergraduate studies.
- The submission of Graduate Record Examination scores is optional for MS applicants.

- Recommendation letters from at least three former teachers or professional colleagues.
- A statement of the applicant's goals and reasons for pursuing the degree.
- The University of Tennessee, Knoxville, requires all who teach to be competent in spoken English. The specific policy, as it relates to graduate students who teach, is as follows: Since a certain level of competency with English as a spoken language is necessary for effective communication and teaching, all Graduate Teaching Assistants and Graduate Teaching Associates whose first language is not English are required to demonstrate an appropriate level of comprehensibility for classroom teaching by taking the Oral Proficiency Interview by computer (OPIc) administered through the Graduate School. Students need to consult the ITA-OPIc website for more specific details on the ITA-OPIc, including test dates.
- New students normally begin classes in the fall semester. Applications for both admission and financial aid are due on January 15.

Academic Standards

A student in the College of Communication and Information whose graduate grade point average (GPA) is below 3.00 after the end of 9 credit hours of graduate credit will be placed on academic probation. A student will be allowed to continue graduate study in subsequent semesters if each semester's grade point average is 3.00 or greater. Upon achieving a cumulative GPA of 3.00, the student will be removed from probationary status. A student must achieve a cumulative GPA of 3.00 in order to graduate. A student who earns less than a grade of C in a required course will have their program terminated. A graduate student cannot repeat a course.

Advertising and Public Relations Concentration - Course only option without comprehensive exam.

The advertising and public relations concentration requires that students select from the list of courses that are specific to this concentration. The concentration requires a minimum of 30 graduate credit hours of approved course work.

Credit Hours Required

30 graduate credit hours

Required Courses:

Block 1: Core Advertising Classes (Minimum 6 credit hours)
ADVT 510 Advertising and Society
ADVT 520 Advertising and Communication Theory
ADVT 540 Advertising Decision Making
ADVT 560 Account Planning (cannot take if already had ADVT 460)

Block 2: Core Public Relations Classes (Minimum 6 credit hours)
PBRL 525 Public Opinion
PBRL 530 Issues and Crisis Management
PBRL 540 Public Relations Management
PBRL 550 Public Relations Strategies

Block 3: Additional Strategic Communication Courses (Minimum 3 credit hours)
ADPR 530 Advertising and Public Relations Research
ADPR 542 Strategic Communication Management
ADPR 562 Social Media Strategy and Tactics
CCI 540 Communication Theory

Block 4A: Concept Application Courses (Minimum 3 credit hours)
ADVT 470 Advertising Campaigns (only if not taken as undergrad)
PBRL 470S Public Relations Campaigns (only if not taken as undergrad)
ADPR 590 Advertising and Public Relations Project
ADPR 592 Advertising and Public Relations Internship

Block 4B: Concept Application Courses (Maximum 3 credit hours)
ADVT 597 Advertising Independent Study
PBRL 597 Public Relations Independent Study

Block 5: ADPR Electives (3 credit hours)

ADPR Electives – Additional six credit hours from courses in blocks 1-4 may be used; ADPR/ADVT/PBRL 516 courses may also be used.

Block 6: General (6 credit hours)

General Electives – Additional six credit hours from courses in blocks 1-5 or any CCI graduate courses. ADPR/ADVT/PBRL 516 courses may also be used.

Non-Course Requirements (None)

Rationale: The concentration allows advertising and public relations undergraduate majors from the School of Advertising and Public Relations to earn an MS with one additional year of coursework. All of the content courses already exist. The concentration is designed to help students

gain a deeper understanding of their major field of study as well as in the other major within ADPR. It operates within the constraints of extended college resources; it also addresses strategic priorities of the university to increase graduate enrollment. Impact on other units: None. Financial impact: None. Additional documentation: No additional approvals are required for this change.

SCHOOL OF INFORMATION SCIENCES

+ ADD CERTIFICATE

Research Data Management

In the 2021-22 Graduate Catalog, add heading, text and requirements for new certificate, Research Data Management.

Research Data Management Graduate Certificate

The graduate certificate in Research Data Management is intended for students both currently and not enrolled in the University of Tennessee Knoxville.

Campus Code:
Knoxville
Distance Education

Graduate Certificate Type:
Stand-Alone
Add-On

The graduate certificate in Research Data Management will enable students to develop knowledge and skills about working with researchers to help manage their research data. Research data management (RDM) focuses on all stages of the data lifecycle, including data planning, collection, description, access, use, preservation, and reuse of research data. Information professionals work with researchers in a variety of settings to provide research data management expertise. RDM is essential as funding agencies, publishers and industry increasingly require data management plans, data deposition in trusted repositories, and data sharing. This 4-course, 12 credit hours graduate certificate in Research Data Management is beneficial to students already in a graduate program who want to supplement their courses with this specialization or to those who already have a graduate degree and want to learn more about research data management to enhance their careers.

Admissions Standards/Procedures:
Interested applicants must be currently admitted in a graduate degree program at UTK or can apply directly for the Research Data Management Certificate through the Graduate Admissions Office.

Academic Standards:
A minimum 3.50 graduate GPA must be earned in all certificate courses.

Credit Hours Required:
12 graduate credit hours.

Note: Students earning an additional graduate degree concurrently with the Research Data Management Certificate must complete at least 3 graduate credit hours in excess of the number of credit hours required for the graduate degree. For example, a student enrolled in both the MSIS degree (36 graduate credit hours) and the Research Data Management Certificate (12 graduate credit hours) would need to earn a total of 39 graduate credit hours to earn both credentials.

Required Courses:
INSC 563: Data Management (3 credit hours)
RDMC students must complete three graduate courses (9 credit hours) in addition to INSC 563.
At least one of these courses (3 credit hours) must come from both Category I. and Category II. below:

Category I. At least one, but not more than two, of the following three courses for a total of 3 OR 6 credit hours:
INSC 524 – Metadata (3 credit hours) (NOTE: requires INSC 512 as a prerequisite or permission of instructor)
INSC 545 – Scientific and Technical Communications (3 credit hours)
INSC 562 – Digital Curation (3 credit hours)

AND

Category II. At least one, but not more than two, of the following three courses for a total of 3 OR 6 credit hours:
INSC 516 – Geospatial Technologies (3 credit hours)
INSC 543 – Spatial Data Management (3 credit hours)
INSC 584 – Database Management Systems (3 credit hours)

INSC 592 – Data Analytics and Visualization (3 credit hours)

Note: These are the minimum requirements to complete the Research Data Management Certificate (12 graduate credit hours). Students may complete additional courses if they wish.

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Certificate is beneficial to students already in a graduate program who want to supplement their courses with this specialization or to those who already have a graduate degree and want to learn more about research data management to enhance their careers. Impact on other units: the certificate will present an opportunity for students from other disciplines to develop research data management skills concurrently with other graduate programs.

Financial Impact: could have positive impact by attracting certificate students interested in the subject matter but not in need of earning a full Master's or Doctoral degree. **Need CIP Code:**

COLLEGE OF EDUCATION, HEALTH, AND HUMAN SCIENCES

All Changes Effective Fall 2021

I. COURSE CHANGES

DEPARTMENT OF CHILD AND FAMILY STUDIES

(CFS) Child and Family Studies

ADD

CFS 522 Family Relationships and Interaction (3) Understanding family relationships through the life course, including reciprocal social interactions, applications of systems models, and contemporary research and clinical perspectives. Potential focus topics include couple interactions, parent-child relationships, and intersections between gender and other salient sociodemographic identities (e.g., race, sexual orientation) and family processes.
Repeatability: May be repeated. Maximum 6 hours.
Registration Restriction(s): Minimum student level – graduate.

Rationale: This new course is proposed to offer a family relationship class that can be adapted to focus on couple relationships, parent-child interactions, the intersection between gender and other salient sociodemographic identities (e.g., race, sexual orientation) and family processes, or other topics, to allow flexibility in our curriculum according to student cohort needs and faculty teaching resources. It also allows us to showcase unique expertise in our current faculty composition and to flexibly accommodate new trends in the field, e.g. dyadic relationships, biopsychosocial contexts. The program plan will be adapted so that students can take the class up to two times, with different focus topics. The class will be offered 1-2 times every two academic years and the specific class focus for a given semester will be decided, circulated, and advertised in the preceding semester.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. It will not increase, but potentially decrease the workload of existing faculty. Additional Documentation: This change does not require additional approval.

CFS 578 Human Development in Contemporary Society (3) Understanding how human development across the life course is shaped by contemporary societal contexts. Incorporates theory and research on diverse contextual and developmental aspects (e.g., biological, social) in contemporary society situations and educational/professional environments with implications for programs and policy. Focus topics may include typical/atypical child, adolescent, and/or adult development.
Repeatability: May be repeated. Maximum 6 hours.
Registration Restriction(s): Minimum student level – graduate.

Rationale: This new course is proposed to offer a human development class that can be adapted to different focus topics, to allow flexibility in our curriculum according to student cohort needs and faculty teaching resources. It also allows us to showcase unique expertise in our current faculty composition and to flexibly incorporate contemporary societal trends and conditions in childhood, adolescence, and adulthood. The program plan will be adapted so that students can take the class up to two times, with different focus topics. The class will be offered 1-2 times every two academic years and the specific class focus for a given semester will be decided, circulated, and advertised in the preceding semester. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. It will not increase, but potentially decrease the workload of existing faculty. Additional Documentation: This change does not require additional approval.

CFS 606 Advanced Methods (3) An array of advanced research methods is covered, with varying foci each semester. Potential focus topics include quantitative (e.g., longitudinal studies), qualitative (e.g., grounded theory), mixed-methods, dyadic, and observational research. Irrespective of the specific methodological focus, participating in this course will enable students to read and interpret studies, design and implement their own studies, plan and carry out their data analysis. Students will learn how to apply their new competencies to different research settings.
Repeatability: May be repeated. Maximum 9 hours.
(DE) Prerequisite: CFS 570 or equivalent.
Recommended Background: At least 3 credit hours of graduate-level methods.
Registration Restriction(s): Minimum student level – graduate.

Rationale: This new course is proposed to unite all existing CFS advanced methods classes, to allow more flexibility in our curriculum according to student cohort needs and faculty teaching resources. It also allows us to address gaps in campus-wide graduate-level methods courses and to flexibly accommodate novel methods training needs. The program plan will be adapted so that students can take the class up to three times. The class will be offered 1-2 times per academic year and the specific class focus for a given semester will be decided, circulated, and advertised in the preceding semester. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. It will not increase, but potentially decrease the workload of existing faculty. Additional Documentation: This change does not require additional approval.

DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

(EDAM) Educational Administration

ADD

EDAM 646 Personnel Administration (3) Personnel administration is essential to a school district as it connects with employees through the processes of recruiting, developing, and retaining the top talent needed to provide a quality education for K-12 students. In addition, in its oversight role, personnel administrators monitor compliance with federal and state personnel laws as well as regulations protecting employees' legal rights in matters of grievance, arbitration, and contract management. Will explore strategies and challenges associated with successful personnel administration in the educational setting.
Registration Restriction(s): Minimum student level – graduate.

Rationale: The course proposed is a part of the Doctor of Education (EdD) program the Educational Leadership and Policy Studies (ELPS) department. This course was listed in the course offerings when the EdD program was approved but it had not been submitted through the approval process. This change is not driven by CAEP standards. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. It will not increase, but potentially decrease the workload of existing faculty. Additional Documentation: This change does not require additional approval.

(HEAM) Higher Education Administration

ADD

HEAM 529 Policy Issues in Higher Education (3) Local, state and federal education policy in U.S. higher education. Theories and practicalities of the policy process, political actors, policy formulation, policy instruments and policy evaluation. Exploration of change and tension between key policy goals (access, affordability, accountability) in promoting economic and social opportunity. Examination of current policy debates and their arguments for how researchers, politicians, and the popular press use data and structure to shape policy agendas and evaluation, including critical analytic techniques.

Rationale: Following a curricular review, program faculty determined that this course will fill a curricular need in our program. Currently, students have taken this as a special topics course and we have determined that it should be a core course in the HEA MS degree. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

HEAM 544 Organization & Administration in Higher Education and Student Affairs (3) Examines the organization and administration of student affairs and higher education. Seeks to enhance students understanding of how student affairs/student life divisions are organized and their role in complementing an institution's overall mission and goals.

Rationale: Following a curricular review, program faculty determined that this course will fill a curricular need in our program. Currently, students have taken this as a special topics course and we have determined that it should be a core course in the CSP degree. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

HEAM 545 Critical Issues in Student Affairs (3) Designed to frame and analyze some of the most critical issues facing student affairs and higher education in the United States today. As a seminar, we analyze and critique issues that exist as a part of the profession, and establish informed practices to implement within the profession.

Rationale: Following a curricular review, program faculty determined that this course will fill a curricular need in our program. Currently, students have taken this as a special topics course and we have determined that it should be a core course in the CSP degree. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

HEAM 550 University Finance and Budgeting (3) Will Focus on data, finance, and budgeting for United States (US) higher education (HE) institutions. Will also focus on a practical understanding of the essential terms and concepts including: methods and sources for gathering HE financial data, critical moments in US history that have shaped how HE is funded, funding sources, the role of the federal and state government in financing HE, the costs of HE, how these costs impact affordability, accounting methods, budget types, and budgeting processes.

Rationale: Following a curricular review, program faculty determined that this course will fill a curricular need in our program. Currently, students have taken this as a special topics course and we have determined that it should be a core course in the HEA MS degree. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

HEAM 624 Students in Postsecondary Education (3) Designed to provide graduate students a general understanding of the diversity of college students currently enrolled in higher education in the United States. Areas of emphasis include student characteristics, college choice and enrollment patterns, institutional types and environments, student development theory, retention and persistence, and college student outcomes.
Registration Restriction(s): Minimum student level – graduate.

Rationale: Following a curricular review, program faculty determined that this course will fill a curricular need in our program. Currently, students have taken this as a special topics course. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

HEAM 636 Legal Aspects of Higher Education (3) Provides a general introduction to legal issues related to higher education and professional practice in higher education settings. In addition to the substance of related law, the course explores how the law is applied in rules, policies, and procedures, as well as how ethical standards and principles impact application of the law. Intended to support development of both substantive knowledge and practical skills for those individuals who either currently work in, and/or aspire to work in, higher education settings including post-secondary institutions, policy and research centers, and government agencies.
Registration Restriction(s): Minimum student level – graduate.

Rationale: Following a curricular review, program faculty determined that this course will fill a curricular need in our program. This course has been offered as a special topics course on a recurring basis. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TITLE AND DESCRIPTION

HEAM 650 Finance and Budgeting in Higher Education (3) An introduction to the concepts, theories, and practices of higher education finance and budget administration and research. Topics will include economics of education, sources of revenue, finance and budgeting models, relationships between budgetary and policy goals, and criteria for research design, conduct, and evaluation. Tensions between the economic, political and social environment, legal requirements, institutional priorities, strategic planning, and initiatives for equity, access, affordability and accountability will be analyzed.

Formerly: Fiscal Policy Issues in Higher Education (3) Revenue sources, appropriation process, budget procedures, cost analysis, and fiscal management in public and independent colleges and universities.
Registration Restriction(s): Minimum student level - graduate

Rationale: Following a curricular review, the faculty agreed to shift the focus of this course from policy aspects to administration. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

(COUN) Counselor Education

ADD

COUN 580 Essential Skills for Professional Counseling (3) Students develop counselor characteristics and therapeutic relationship skills necessary for professional counseling in school and clinical mental health settings. Includes considerations for in-person and technology-assisted distanced counseling.

Rationale: A parallel course, COUN 480, is offered as a combined undergraduate/graduate level course when taught by faculty and an undergraduate only course when taught by PhD students under close faculty supervision. Each year, some students take COUN 480 as undergraduates, then apply and gain admission to the MS in Counseling. When this happens, students are unable to repeat COUN 480 for graduate credit. This creates a conflict in which they do not have access to a graduate level essential skills course as required by state licensure law for counselors in clinical mental health settings and by our accrediting body, CACREP, for all MS in Counseling students. Faculty have provided a work-around by providing sets of independent studies titled, Advanced Counseling Skills, for students in this situation. This new course will further distinguish essential skills at the graduate level and will include differentiation for students who completed COUN 480 as undergraduates.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Existing faculty will teach the course; one section per year will be designated under this course number in lieu of COUN 480. Additional Documentation: This change does not require additional approval.

(EDPY) Educational Psychology

ADD

EDPY 580 Implementing and Sustaining Evidence-Based Practices in Schools (3) Explores how to provide systems-level support to educators to install and sustain evidence-based practices in schools. Topics will include best practices in implementation science, school centered program evaluation, data-based-problem solving, intervention intensification, and monitoring of fidelity in school settings. These topics will be explored within the context of integrated MTSS, including academics and behavior.

Rationale: After faculty curriculum review and a review of SACS data, it was determined that our students needed a systems-level class. School Psychologists often work in administrative positions or take on leadership within schools. It is important that they understand building and district-level initiatives and school-wide problem solving. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

(SCHP) School Psychology

REVISE CREDIT HOURS AND DESCRIPTION

SCHP 649 Advanced Internship in School Psychology (0-9) Supervised employment in program-approved school psychology internship sites

Formerly: (1-9). Supervised experience as school psychologist in unit-approved internship site for doctoral level students.

Rationale: This curriculum change was initiated by our doctoral students. After faculty consideration, it was determined that the final internship requirement could include a zero credit course. By doing so, we are modeling the internship course requirements of the UTK Clinical Psychology and Counseling Psychology programs. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES

(KNS) Kinesiology

DROP PRIMARY CROSS-LISTED COURSE

KNS 602 Research Seminar (1)
Cross-listed: (Same as Sport Studies 602.)

Rationale: Cross-listed with SPST 602, which is being dropped due to lack of intentions to teach this course. It has not been taught in over 5 years. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE REGISTRATION RESTRICTION(S) ON SECONDARY CROSS-LISTED COURSE

KNS 543 Women, Sport, and Culture (3)
Cross-listed: (See Sport Studies 543.)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor. Minimum Student Level – Graduate.

Formerly: (3) Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor.

Rationale: The registration restriction is to ensure that only graduate students register for the class, as undergraduate students have previously been able to register. KNS is in agreement with the course revision to SPST 543.

(RSM) Recreation and Sport Management

DROP

RSM 590 Sport Management Practicum (3)

Rationale: The class has not been offered in several semesters and there are no plans to offer the course. Change in credit hours in RSM 595 also means this course is no longer needed. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE DESCRIPTION, REMOVE COMMENT AND ADD REGISTRATION RESTRICTION

RSM 596 Therapeutic Recreation Internship (6) Supervised professional experience in Therapeutic Recreation/Recreational Therapy under the direct supervision of a CTRS (Certified Therapeutic Recreation Specialist). Sites and site supervisors must meet the *National Council for Therapeutic Recreation Certification* Internship Standards. Emphasis will be placed on the NCTRC Job Task Analysis.
Registration Restriction: Minimum GPA 3.00. Minimum student level – graduate.

Formerly: Therapeutic Recreation Internship (6). Full-time work experience at an approved site supervised by a CTRS (Certified Therapeutic Recreation Specialist). Emphasis on all the NCTRC Job Tasks.
Comment(s): Therapeutic Recreation site must meet the National Council for Therapeutic Recreation Certification (NCTC) standards. Students must have a minimum required GPA of 3.0 for enrollment in this course. Agency affiliation agreements must be submitted four months prior to the first day of the semester student is enrolled in internship. Affiliation agreement should be approved by legal counsel for UTK and Agency two months prior to the first day of the semester student is enrolled in internship.

Rationale: More accurate reflection of the purpose and requirements of the course. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TITLE AND DESCRIPTION

RSM 501 Scholarly Inquiry (3) Faculty supervised scholarly analysis

Formerly: Project (3). Culminating experience under the supervision of a faculty member.

Rationale: Provides a more accurate description of the course requirements and expectations. Impact on Other Units: None. The revision does not affect courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE CREDIT HOURS AND DESCRIPTION

RSM 595 Sport Management Internship (3 or 6) Supervised professional experience related to Recreation and Sport Management. Emphasis on managerial tasks and administrative procedures.

Formerly: (6). Full-time work experience requiring a minimum of 480 hours of clock time.

Rationale: More accurate reflection of the purpose and requirements of the course. Credit Hour change will allow the student to have a part time or full-time internship experience. This is an elective class with options to take either 3 or 6 hours with no repeatability. The different hours will not affect the total required hours of the program as it is an elective class. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. Change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

(SPST) Sport Studies

DROP SECONDARY CROSS-LISTED COURSE

SPST 602 Research Seminar (1)
Cross-listed: (See Kinesiology 602.)

Rationale: Cross-listed with KNS 602, which is being dropped due to lack of intentions to teach this course. It has not been taught in over 5 years. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE REGISTRATION RESTRICTION

SPST 504 History and Sociology of International Sports (3)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor, Minimum Student Level – Graduate.

Formerly:(3)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor.

Rationale: The registration restriction is to ensure that only graduate students register for the class as undergraduate students have previously been able to register. This will enable Banner to enforce the registration restriction. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. Change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

SPST 507 History of Sport in America (3)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor. Minimum Student Level – Graduate.

Formerly: (3)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor.

Rationale: The registration restriction is to ensure that only graduate students register for the class as undergraduate students have previously been able to register. This will enable Banner to enforce the registration restriction. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. Change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

SPST 515 Social Theories of Sport (3)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor. Minimum Student Level – Graduate.

Formerly: (3)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor.

Rationale: The registration restriction is to ensure that only graduate students register for the class as undergraduate students have previously been able to register. This will enable Banner to enforce the registration restriction. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. Change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval

SPST 542 Sociological Aspects of Sport (3)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor. Minimum Student Level – Graduate.

Formerly: (3)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor.

Rationale: The registration restriction is to ensure that only graduate students register for the class as undergraduate students have previously been able to register. This will enable Banner to enforce the registration restriction. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. Change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE REGISTRATION RESTRICTION(S) ON PRIMARY CROSS-LISTED COURSE

SPST 543 Women, Sport, and Culture (3)
Cross-listed: (Same as Kinesiology 543.)
Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor. Minimum Student Level – Graduate.

Formerly: (3) Registration Restriction(s): Must be majors within the Department of Kinesiology, Recreation, and Sport Studies or permission of instructor.

Rationale: The registration restriction is to ensure that only graduate students register for the class, as undergraduate students have previously been able to register. This will enable Banner to enforce the registration restriction. Grammatical changes to make course description more consistent with others in the program. Impact on Other Units: None. The proposed change does not require courses required by other programs. This course is cross-listed as KNS 543, and the Sport Management faculty agree with this cross-listing and catalog change. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

DEPARTMENT OF NUTRITION

(NUTR) Nutrition

ADD

NUTR 503 Community Nutrition Assessment (2) Examination of the socio-ecological model and nutrition-related protective and risk factors at each level of the model; community nutrition needs assessment, including defining nutrition-related services, gaps, and health disparities in priority populations.

NUTR 504 Community Nutrition Intervention and Evaluation (2) Conceptualization of organizational and community-level interventions; overview of policy, systems, and environmental interventions; development of a culturally appropriate implementation and evaluation plan for a population-focused nutrition intervention; development of grant writing skills.

Rationale: These course adds reflect the need to separate current course content in NUTR 524 (4 credits), into two, 2-credit, sequenced courses which will better serve students in Public Health Nutrition. NUTR 524 will be dropped (see below). This change supports SLO's 1 and 3 of the MS in Nutrition (Public Health Nutrition Concentration). The Nutrition faculty are supportive of this change.

Impact on Other Units: This change impacts Public Health, as it is a component of the dual MPH-MS/MS-MPH Program offered by Public Health and Nutrition. Public Health is supportive of this change, and both departments have put forth this change to the dual program (see Program Changes for both NUTR and PUBH in this narrative). No other units are impacted by this change. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

NUTR 507 Introduction to Theories of Health Behavior Change in Public Health Nutrition (3) Broad overview of behavior change theories most relevant to research and practice in public health nutrition. Taught from a socioecological perspective, application of theories will be discussed at multiple levels (e.g., individual, interpersonal, environmental and community).

Rationale: Regular curricular review identified need for a behavioral change theories course, specifically focused on research and practice applications in the field of public health nutrition. This proposed course will allow us to better address the needs of students in the Program in Public Health Nutrition and supports SLO's 1 and 3 of the MS in Nutrition (Public Health Nutrition Concentration). The Nutrition faculty are supportive of this course addition. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

DROP

NUTR 524 Public Health Nutrition: Community Assessment, Intervention, and Evaluation (4)

Rationale: Dropping this 4-credit course will make room for the NUTR 503 and 504 sequence added as part of the current proposal (2 credits each), which provide the same content as 524, but spread across 2 semesters. The Nutrition faculty are supportive of this course drop.

Impact on Other Units: This change impacts Public Health, as it is a component of the dual MPH-MS/MS-MPH Program offered by Public Health and Nutrition. Public Health is supportive of this change, and both departments have put forth this change to the dual program (see Program Changes for both NUTR and PUBH in this narrative). No other units are impacted by this change. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TITLE AND DESCRIPTION

NUTR 513 Community Nutrition Practicum (3) Case study, simulation and experiential practice in community nutrition; development of cultural awareness, knowledge, skills, and experience.

Formerly: Community Nutrition I Practicum (3) Case study, simulation and experiential practice in community nutrition; development of cultural awareness, knowledge, skills, and experience; work with instructor and preceptor(s) to conduct a community nutrition needs assessment; plan, deliver and evaluate a culturally appropriate group nutrition education session; use quality improvement methods to improve nutrition-related community programs, services, or projects.

Rationale: As part of regular curricular review by the faculty, we realized that not all students in NUTR 513 will take an additional Community Nutrition Practicum, so we propose removing the "I" from the title. In addition, as we refine the course offerings in our recently added *Clinical Nutrition and Dietetics Concentration,* we realized the course description did not allow for necessary flexibility. Shortening the course description increases our ability to be responsive to evolving accreditation standards and student needs.

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 will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

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

NUTR 514 Advanced Community Nutrition Practicum (1-3) Experiential practice in community nutrition at local public health and community nutrition agencies; development of cultural awareness, knowledge, skills, and experience; participate in policy development and advocacy activities; plan, implement, and evaluate a population-focused nutrition intervention, culminating in a presentation for faculty, preceptors, students, and community members.
Repeatability: May be repeated. Maximum 3 hours.
(DE) Corequisite NUTR 503 or Permission of Instructor.

Formerly: Community Nutrition II Practicum (3) Experiential practice in community nutrition at local public health and community nutrition agencies; development of cultural awareness, knowledge, skills, and experience; participate in policy development and advocacy activities; plan, implement, and evaluate a population-focused nutrition intervention, culminating in a poster presentation for faculty, preceptors, students, and community members.
(RE) Prerequisite(s): NUTR 524.
Comment(s): Open only to students in the Clinical Nutrition and Dietetics concentration.

Rationale: Similar to the revision to the NUTR 513 title, above, we propose removing the "II", as it implies this course is the second in a sequence, which it is not. Instead, we propose changing the title to include "Advanced", which, along with most of the other revisions, better reflects the level of student who will be taking this course. Revising the credit hours to allow variability, revising the course description (dropping "poster"), and dropping the comment re: which students can enroll in the course, provides greater flexibility in our concentrations that incorporate applied community experiences (Public Health Nutrition and Clinical Nutrition and Dietetics). Adding a corequisite, making the corequisite and prerequisite departmentally-enforced, and including instructor permission, increases scheduling flexibility and reflects the course adds and drops, above.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE CREDIT HOURS AND (RE)PREREQUISITE

NUTR 515 Field Study in Community Nutrition (6-12)
(RE) Prerequisite(s): 503 and 504.

Formerly:(3-12)
(RE) Prerequisite(s): 524.

Rationale: The increase in minimum credit hours, from 3 to 6, more accurately reflects the student experience in this 8-week, full-time applied practice experience and is necessary to more appropriately align it with other practicum courses in the Public Health Nutrition curriculum.
Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

DEPARTMENT OF PUBLIC HEALTH

(PUBH) Public Health

REVISE REGISTRATION RESTRICTION

PUBH 510 Environmental Health (3)
Registration Restriction(s): Minimum student level – graduate OR undergraduate students accepted to Public Health Minor – Five-Year BS or BA/MPH Program.

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

Rationale: Undergraduates accepted into the Public Health Minor – Five-Year BS or BA/MPH Program will take this MPH foundation course during their undergraduate senior year. It will count towards their Bachelor's degree and toward the MPH degree.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

PUBH 530 Biostatistics (3)
Registration Restriction(s): Minimum student level – graduate OR undergraduate students accepted to the Public Health Minor – Five-Year BS or BA/MPH Program; Public Health major (MPH); Nutrition major (MS), public health nutrition concentration; or Public Health major (DrPH), or consent of instructor.

Formerly: Registration Restriction(s): Public Health major (MPH); Nutrition major (MS), public heal nutrition concentration; or Public Health major (DrPH), or consent of instructor.

Rationale: Undergraduates accepted into the Public Health Minor – Five-Year BS or BA/MPH Program will take this MPH foundation course during their undergraduate senior year. It will count towards their Bachelor's degree and toward the MPH degree. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TO ADD REGISTRATION RESTRICTION

PUBH 520 Health Systems, Policy and Leadership (3)
Registration Restriction(s): Minimum student level – graduate OR undergraduate students accepted to the Public Health Minor – Five-Year BS or BA/MPH Program/Supporting Information.

Rationale: Undergraduates accepted into the Public Health Minor – Five-Year BS or BA/MPH Program will take this MPH foundation course during their undergraduate senior year. It will count towards their Bachelor's degree and toward the MPH degree.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TITLE AND DESCRIPTION

PUBH 587 Applied Practice Experience (3-6) Applied Practice Experience in an approved organization under supervision of a designated preceptor. Students must complete a total of 6 credit hours.

Formally: Internship.
Internship in an approved organization under supervision of a designated preceptor. Students must complete a total of 6 credit hours.

Rationale: Title change needed because our accrediting body (CEPH) has revised its curriculum. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget.

REVISE TO REMOVE (RE)PREREQUISITE ON SECONDARY CROSS-LISTED COURSE

PUBH 614 Nursing Preceptorship (1-3)
Cross-listed: See Nursing 614.

Formerly: (RE)Prerequisite(s): NURS 601.

DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

(ASL) American Sign Language

ADD

ASL 504 Clinical Experience in Teaching American Sign Language (3-9) Designed to provide preservice training for future teachers of the deaf and hard of hearing. Practical application of strategies and theory are provided via the classroom setting.
Grading Restriction: Satisfactory/No Credit or letter grade.
Repeatability: May be repeated. Maximum 9 hours.

Rationale: Teachers who are adding the ASL Education endorsement or completing the graduate certificate in ASL Education will take this course as a teaching practicum in ASL Education. Variable credit hours are needed because students with considerable teaching experience may need a shorter practicum of like 80 hours and someone else may need a full semester of practicum.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TO REMOVE COMMENT ON 400-LEVEL COURSE

ASL 421 History and Culture of the Deaf (3)

Formerly: Comment(s): Course is offered in summer only.

Rationale: Removing comment because ASL 421 is now offered in the spring and summer semesters. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

(EDDE) Education of Deaf / Hard of Hearing

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

EDDE 425 Foundations of Deaf Education (3)
(RE) Prerequisite(s): ENGL 102, ENGL 132, ENGL 290, or ENGL 298.

Rationale: Adding prerequisite courses are necessary because EDDE 425 was updated and approved as a writing course (WC) under the new VolCore status. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

(ELED) Elementary Education

ADD

ELED 522 Elementary Teaching Methods (3) This is the graduate elementary teaching methods course, and is inextricably linked to the teaching practices you are carrying out in your classroom. Focuses on planning for student instruction and evaluation and related issues including getting to know your students, selecting appropriate curriculum materials, looking at curriculum standards, and considering teacher evaluation expectations.

Rationale: We have added a graduate elementary teacher licensure pathway (job-embedded practitioner—JEP) that requires a graduate version of our elementary methods course, ELED 422, which is currently only listed for undergraduate credit. Since those enrolled in this course will, by design, be full-time teachers working toward teacher licensure, the graduate version of this course will include requirements beyond that of the undergraduate version of the course. Additionally, teacher shortages across the state and country, in conjunction with a directive from the Chancellor, have spurred us to add more licensure pathway options. As a result of adding a graduate job-embedded practitioner pathway for elementary education, we need to add a graduate version of the elementary teaching methods course, currently offered only for undergraduate credit (ELED 422).

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

(ETEC) Educational Technology

REVISE TITLE AND DESCRIPTION

ETEC 587 Learning with Technology in the School and Community (3) Explores learning with educational technologies in school and the community. Will consider learning at home, through online and social-media-based contexts, and in public spaces. Will examine how practices related to communication, assessment, and learning can be modified or transformed through the use of educational technologies. Will also examine strategies and techniques for the effective integration of technologies into teaching.

Formerly: Integrating Mobile Technologies into Teaching and Learning (3) The application of mobile devices including laptops, tablets and smartphones to enhance learning in K-12 settings. Students will examine the current research on the use of 1-1 technology and mobile applications in learning environments, consider classroom management issues, and examine strategies and techniques of effective integration.

Rationale: A title and description change is prompted by a need to increase student understanding of course content. We are also updating the course content as needed by changes in technology. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TITLE

ETEC 588 Computational Thinking Across the K-12 Curriculum (3)

Formerly: Technology Tools for STEM Educators (3)

Rationale: After offering the course this summer, we found that the previous title deterred students from licensure areas beyond STEM. We believe a title change that does not include STEM Educators to be more inclusive in nature. This decision was also made based on feedback from students and faculty that have previously taught the course. Impact on Other Units: None. The proposed change does not require courses

required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

(MEDU) Mathematics Education

REVISE TITLE AND DESCRIPTION

MEDU 581 Equity in STEM Education (3) Past, present and future issues influencing access, diversity, and inclusion in science, technology, engineering, and mathematics education, elementary through college. Theorizing equity in STEM teaching and learning, and implications for curriculum, instruction, and leadership.

Formerly: Mathematics Curriculum (3)
Past, present and future issues influencing mathematics curriculum in schools, elementary through college. Teacher's role in curriculum development and implementation. Rationales for curriculum decisions.

Rationale: We are revising the course to focus specifically on *equity issues* in mathematics curriculum. We are also expanding the course to attend to those equity issues in mathematics education beyond curricular considerations (e.g., instruction, policy). Finally, we are expanding the course to include other STEM disciplines, namely, science, technology/computer science, and engineering education. This curricular revision is necessary because we do not currently have a graduate level course that focuses specifically on equity issue in STEM education, but STEM education fields are increasingly attending to and recognizing the importance of equity issues related to access, diversity, and inclusion in STEM. Thus, we are making these revisions to stay up-to-date with the direction of STEM education and to provide this opportunity for all STEM education graduate students (not only mathematics education).

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

(SPED) Special Education

ADD

SPED 510 Field Experiences in Special Education: Mild/Moderate Disabilities (1-3) Designed to provide field experiences in teaching K-12 students with mild to moderate disabilities. Teacher candidates enrolled in the course will plan, implement, and evaluate instruction for K-12 students with mild to moderate disabilities.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): SPED 402.
(RE) Corequisite(s): SPED 516.
Registration Restriction(s): Minimum student level - graduate.

Rationale: Review by faculty members. We have several classes in our undergraduate program that are not available for graduate credit. Most years, we have one or two post-baccalaureate students who take our upper level courses along with an undergraduate cohort. We want to add graduate-level versions of field experience courses so they do not have to repeat SPED 506 (generic field experience course designed for out-of-program interns.). Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

SPED 512 Field Experiences in Special Education: Moderate/Severe Disabilities (1-3) Designed to provide field experiences in teaching K-12 students with moderate to severe disabilities. Teacher candidates enrolled in the course will plan, implement, and evaluate instruction for K-12 students with moderate to severe disabilities.
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s): SPED 402.
(RE) Corequisite(s): SPED 517.
Registration Restriction(s): Minimum student level - graduate.

Rationale: Review by faculty members. We have several classes in our undergraduate program that are not available for graduate credit. Most years, we have one or two post-baccalaureate students who take our upper level courses along with an undergraduate cohort. We want to add graduate-level versions of field experience courses so they do not have to repeat SPED 506 (generic field experience course designed for out-of-program interns.) Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

SPED 517 Foundations in Intellectual and Developmental Disabilities (3) Provides foundational knowledge of learning needs, service delivery models, and critical issues in the education of students with intellectual and developmental disabilities. Introduction to research-based, evidence-based, and high leverage practices for assessment and instruction of students with moderate to severe intellectual disability, developmental disabilities, and multiple disabilities.
(RE) Corequisite: SPED 402.
Registration Restriction(s): Minimum student level - graduate.

Rationale: Review by faculty members. We currently offer SPED 532 as a 6-hour class containing this content. We are splitting SPED 532 to parallel our Interventionist course sequence (SPED 515/516) and to better delineate between foundational content and methods content. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

SPED 518 Effective Instruction for Students with Moderate to Severe Intellectual and Developmental Disabilities (3)
Identifying and implementing best practices in assessment and instruction for students with moderate to severe intellectual disability and developmental disabilities that significantly impact learning. Understanding and applying high-leverage research-based and evidence-based practices including systematic instruction, curricular modifications, and data-based decision making.
(RE) Prerequisite(s): SPED 402 and SPED 517.
Registration Restriction(s): Minimum student level - graduate.

Rationale: Review by faculty members. We currently offer SPED 532 as a 6-hour class containing this content. We are splitting SPED 532 to parallel our Interventionist course sequence (SPED 515/516) and to better delineate between foundational content and methods content. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

SPED 520 Practical Teaching in Special Education (4) Designed to provide an in-depth field experience in teaching K-12 students with disabilities. Teacher candidates will plan, implement and evaluate instruction under the guidance of a mentoring teacher. Will include (a) planning, instruction, and assessment based on needs of students with disabilities, (b) implementation of special education high leverage practices, and (c) use of research-based strategies to engage students and maintain and facilitate appropriate behavior.
Repeatability: May be repeated. Maximum 8 hours.
RE) Prerequisite(s): SPED 402.
(RE) Corequisite(s): SPED 521.

Rationale: Review by faculty members. We have several classes in our undergraduate program that are not available for graduate credit. Most years, we have one or two post-baccalaureate students who take our upper level courses along with an undergraduate cohort. We want to add graduate-level versions of field experience courses so they do not have to repeat SPED 506 (generic field experience course designed for out-of-program interns.). Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

SPED 521 Special Education Practical Teaching Seminar (3) This course is taught in conjunction with SPED 520 (Practical teaching in Special Education). In this course, teacher candidates apply principles learned in prior coursework in authentic contexts (e.g., writing IEPs, lesson planning, conducting individual and group instruction, implementing high leverage practices and research-based instructional and behavioral strategies).
Repeatability: May be repeated. Maximum 6 hours.
(RE) Prerequisite(s) SPED 402.
(RE) Corequisite(s): SPED 520.

Rationale: Review by faculty members. We have several classes in our undergraduate program that are not available for graduate credit. Most years, we have one or two post-baccalaureate students who take our upper level courses along with an undergraduate cohort. We want to add graduate-level versions of field experience courses so they do not have to repeat SPED 506 (generic field experience course designed for out-of-program interns.) This is the seminar class that accompanies practical teaching. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget.

SPED 593 Special Education Student Teaching Seminar (1) Intensive teaching and teaching-related experiences with students who have disabilities in public schools.
(RE) Prerequisite(s): SPED 516 or SPED 518.
(RE) Corequisite(s): SPED 594.

Rationale: Review by faculty members based on direction from Dean McIntyre and Associate Dean Cihak to develop four-year licensure programs. We are submitting a proposal to the State in January to get this program approved. If approved, we will need a student teaching course and seminar. We have developed the showcase for this program; however, that showcase is set for VolCore so we plan to submit it next year. Our first step is adding the courses we will need to the catalog. This is the graduate version for post-bac students who attend classes with an undergraduate cohort. Impact on Other Units: None. The proposed change does not require courses required by other programs.

Financial Impact: Students in our current senior year complete field experiences in spring in SPED 422N and a seminar in SPED 496. Students in the 5-year program will continue completing these experiences. Seniors in the student teaching program will complete Student Teaching and the 1-hour seminar. All seniors will be combined for class one hour per week and supervisors will be the same regardless of program. Thus, this should not have any financial impact. This is the graduate version for post-bac students. Additional Documentation: This change does not require additional approval.

SPED 594 Student Teaching in Special Education (12) Intensive teaching and teaching-related experiences with students who have disabilities in public schools.
(RE) Prerequisite(s): SPED 516 or SPED 518.
(RE) Corequisite(s): SPED 593.

Rationale: Review by faculty members based on direction from Dean McIntyre and Associate Dean Cihak to develop four-year licensure programs. We are submitting a proposal to the State in January to get this program approved. If approved, we will need a student teaching course and seminar. We have developed the showcase for this program; however, that showcase is set for VolCore so we plan to submit it next year. Our first step is adding the courses we will need to the catalog. This is the graduate version for post-bac students who attend classes with an undergraduate cohort. Impact on Other Units: None. The proposed change does not require courses required by other programs.

Financial Impact: Students in our current senior year complete field experiences in spring in SPED 422N and a seminar in SPED 496. Students in the 5-year program will continue completing these experiences. Seniors in the student teaching program will complete Student Teaching and the 1-hour seminar. All seniors will be combined for class one hour per week and supervisors will be the same regardless of program. Thus, this should not have any financial impact. This is the graduate version for post-bac students who attend classes with an undergraduate cohort. Additional Documentation: This change does not require additional approval.

REVISE DESCRIPTION AND COMMENTS

SPED 515 Foundations in Learning Disabilities and Other Academic Difficulties (3) Provides foundational knowledge of learning needs, service delivery models, and critical issues in the education of students with learning disabilities, including dyslexia, and other academic difficulties. Introduction to research-based, evidence-based, and high leverage practices for assessment and instruction of students with diverse learning needs under a Response to Intervention framework.
Comment(s): Admission to graduate program or consent of instructor.

Formerly: Provides foundational knowledge of learning needs, service delivery models, and critical issues in the education of students with learning disabilities, and other academic difficulties. Introduction to evidence-based practices needed to help students with diverse learning needs under a Response to Intervention framework.
Comment(s): Admission to graduate program in special education or consent of instructor.

Rationale: Review by faculty members. Updated language to be reflective of course content. Removal of "in special education" to allow students in other programs to enroll in the course if working toward SPED licensure. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

SPED 516 Effective Instruction for Students with Learning Disabilities and Other Academic Difficulties (3) Determining and implementing best practices in assessment and instruction, both remediation and accommodation strategies, for students with learning disabilities, including dyslexia, and other academic difficulties. Understanding and applying high-leverage evidence-based practices, strategy-based instruction, assessment, and progress monitoring, and databased decision-making.
Comment(s): Admission to graduate program or consent of instructor.

Formerly: Determining and implementing best practices in instruction, both remediation and accommodation strategies, for students with learning disabilities, and other academic difficulties. Understanding and applying high-leverage evidence-based practices, strategy-based instruction, assessment, and progress monitoring, and databased decision-making.
Comment(s): Admission to graduate program in special education or consent of instructor.

Rationale: Review by faculty members. Updated language to be reflective of course content. Removal of "in special education" to allow students in other programs to enroll in the course if working toward SPED licensure. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

(SSCE) Social Science Education

REVISE TITLE

SSCE 532 Practicing Collaboration for Teaching Diverse Learners in Secondary Schools (3)

Formerly: SSCE 532 Teacher Collaboration in Social Studies (3)

Rationale: We are changing the course name to more accurately reflect the content of the course being taught, as the course is not limited to "social studies". We hope this will increase enrollment in the future and attract students from additional programs. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TITLE AND DESCRIPTION AND REMOVE RECOMMENDED BACKGROUND

SSCE 585 Teaching and Learning with Film (3) Selected strategies, trends, methods, materials, and legal issues for effectively incorporating film in the K-12 classroom. Selected topics include media literacy, film research, and making movies appropriate to educational settings.

Formerly: Teaching Secondary School Social Studies (3) Strategies, projects, materials, and programs in social studies.
Recommended Background: Undergraduate course in teaching social studies or consent of instructor.

Rationale: We are changing the course name to more accurately reflect the content of the course being taught, as the course is not limited to "social studies". We hope this will increase enrollment in the future and attract students from additional programs. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE TITLE AND DESCRIPTION

SSCE 599 Teaching and Learning in a Contemporary Secondary Classroom (3) Introduces, examines, and models the effective practice of teaching and learning with contemporary tools, resources, and strategies for secondary classrooms.

Formerly: Seminar in Social Studies Education (3) Research, trends, and issues in secondary social studies.

Rationale: We are changing the course name to more accurately reflect the content of the course being taught, as the course is not limited to "social studies". We hope this will increase enrollment in the future and attract students from additional programs. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

ADD NEW ACADEMIC DISCIPLINE AND COURSE

(STEM) Science, Technology, Engineering, and Math

ADD

STEM 599 An Introduction to Data Science Methods in Education (3) Intended to support graduate-level students to be able to apply data science methods to topics of teaching, learning, and educational systems. Introduces students to the data science software and programming language R. Course activities focusing on preparing and using complex data sources for analysis using the tidyverse suite of R packages. No pre-requisites or programming experience is required.

Rationale: Based on faculty discussion and feedback from students, we determined there was a strong need for an introduction to data science methods course for graduate students in our programs, as well as the department. This course will be open to all graduate students and will be included as part of our STEM leadership graduate certificate program.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

II. PROGRAM CHANGES

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELING

+ ADD CERTIFICATE

ADULT LEARNING IN PROFESSIONAL SETTINGS

In the 2021-22 Graduate Catalog, add heading, text and requirements for new certificate: Adult Learning in Professional Settings.

Adult Learning in Professional Settings
The graduate certificate in Adult Learning in Professional Settings is intended for new and currently admitted graduate students wishing to acquire knowledge and develop skills to plan, design, implement, and evaluate principles of adult learning in various postsecondary and professional settings such as healthcare, corporate, military, continuing education, continuing medical education, higher education, human resources, and governmental settings. As adults continuously engage in learning that lasts for one's lifetime and occurs in various social contexts, understanding how, why, what, and where adults learn is important for professionals. This graduate certificate will prepare learners to be able to apply and advance their knowledge in the education and training of adults in professional settings.

The graduate certificate in Adult Learning in Professional Settings is intended for new and currently admitted graduate students.

Campus Code
Knoxville
Distance Education

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
Applicants must hold or currently be pursuing a graduate degree.

Academic Standards
A minimum grade of B must be earned in all certificate courses

Credit Hours Required:
12 graduate credit hours

Required Courses
- EDPY 521 (3 credit hours)
- EDPY 523 (3 credit hours)
- EDPY 524 (3 credit hours)
- EDPY 525 (3 credit hours)

Students may request substitution for one of the required courses; requires approval from the certificate coordinator

Non-Course Requirements
- All courses must be completed within five years of admission to the certificate program.
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Most professional fields require supervisors to either engage in or oversee the education/training of adult learners. This graduate certificate will provide foundational knowledge to facilitate and engage in the planning, design, implementation, and evaluation processes of workplace education/training programs based on sound instructional design and a solid understanding of adult learning and human development in professional settings.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code:**

REVISE REQUIREMENTS – COUNSELING MAJOR, MS (CLINICAL MENTAL HEALTH COUNSELING CONCENTRATION)

In the 2021-2022 Graduate Catalog, under the Required Courses heading,

1. Under the first bullet, Requirements:
   Remove the first course COUN 480 and replace with course COUN 580.

2) Under the fourth bullet, Electives, dependent upon option and selected in consultation with major professor:
   At the Thesis bullet, revise the elective course hours from (6 credit hours) to (3 credit hours)

REVISE REQUIREMENTS – COUNSELING, MS (SCHOOL COUNSELING CONCENTRATION)

In the 2021-2022 Graduate Catalog, under the Required Courses heading,

1. Under the first bullet, Requirements:
   Remove the first course COUN 480 and replace with course COUN 580.

Rationale: Regarding licensure and accreditation requirements for clearly-identified graduate coursework in counseling skills, by dropping COUN 480 and adding COUN 580, the program will more clearly distinguish requirements of a graduate-level essential skills course while working within university policy that prohibits repeating a course for credit. In addition, when reviewing the graduate catalog, we noted an error in which the thesis option noted need for one, 6-credit hour elective (bringing program to 63 hours). This should be one, 3-credit hour elective. The edit is to bring catalog content into alignment with the requirements for a 60-hour program.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. One section per year will be designated under this course number in lieu of COUN 480. Additional Documentation: This change does not require additional approval.

REVISE REQUIREMENTS – SCHOOL PSYCHOLOGY MAJOR, PHD

In the 2021-2022 Graduate Catalog,

1. Remove current introductory text and replace with the following:

The School Psychology program offers graded, sequential, and hierarchical training in foundational coursework and applied practica in the areas of research, assessment, consultation, and intervention. The program prepares professionals who work collaboratively with educators, administrators, parents, and children to promote learning and development in general education students and students with special needs. Opportunities for students to meet these requirements will occur in the classroom and during field experiences. The school psychology faculty, along with current and previous students, practicum and internship supervisors, and various other groups have contributed to the development of the curricula.

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

The University of Tennessee PhD program is designed to provide graded, sequential, and hierarchical training across the following areas.
Professional school psychology.
Consultation and intervention.
Assessment.
Research and statistics.
Psychoeducational core.
Field experience and professional practice.

2. Under the Credit Hours Required heading, revise required hours from 116 to 121.
   - 121 required graduate credit hours

Formerly: 116 required graduate credit hours

3. Under the Required Courses heading, revise as shown below:
   - Required Courses (All courses are 3 credit hours, unless otherwise specified)
     - Foundational Courses (28 credit hours)
       - EDPY 601 (1 credit hour)

To the list of Foundational Courses – add course SPED 530 (there will now be 7 courses listed)

Formerly:
Required Courses
Foundational Courses (25 credit hours)
EDPY 601

4. Under the School Psychology Core Courses heading revise as follows:
   - School Psychology Core Courses (24 credit hours)

   To the list of Core Courses – add SCHP 547 (as the second course), add EDPY 580 as the next to last course.

Formerly:
School Psychology Core Courses (18 credit hours)

5. Under the Research Courses heading, revise the first course EDPY 655 to show (6 credit hours) beside the course.
   - EDPY 655 (6 credit hours)

Formerly: EDPY 655

6. Under the Practicum/Applied Field Work heading revise as shown below:
   - Practicum/Applied Field Work (24 credit hours)
     - SCHP 551
     - SCHP 552 (2 credit hours)
     - SCHP 542 (6 credit hours)
     - SCHP 651 (8 credit hours)
     - SCHP 546
     - SCHP 652 (2 credit hours)
     - SCHP 649 (0 credit hours)

Formerly:
Practicum/Applied Field Work (28 credit hours)
SCHP 542
SCHP 651
SCHP 546
SCHP 652
SCHP 649

7. Remove the heading: Additional Course Requirements and the bullet below the heading

Formerly:
Additional Course Requirements
SCHP 649 (3 credit hours) is taken while on internship. Students enroll in 1 credit in the fall, spring, and summer semesters.

8. Under the Non-Course Requirements heading, revise the second bullet to remove "3 credit hours" from course SCHP 649.
   - All students must complete a 2000 hour internship (SCHP 649) in the final year of their training.

Formerly: All students must complete a 2000 hour internship (SCHP 649– 3 credit hours) in the final year of their training.

Rationale: In anticipation of an accreditation review and after faculty curriculum review, these program changes will clean up language in the catalog to reflect course changes made in the last academic year. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

DEPARTMENT OF KINESIOLOGY, RECREATION, AND SPORT STUDIES

REVISE REQUIREMENTS – KINESIOLOGY MAJOR, MS (EXERCISE PHYSIOLOGY CONCENTRATION)

In the 2021-2022 Graduate Catalog, revise all three options (thesis, project and course only with comprehensive exam)

1. Under the Required Courses heading, revise as shown below:

   Required Courses (18 credit hours)
   - KNS 661 (3 credit hours

Formerly:
Required Courses (17 credit hours)
KNS 661 (2 credit hours)

2. At the Electives heading, reduce the credit hours from 7 to 6.

   Electives (6 credit hours) Must include at least one additional 3 credit hour Kinesiology course

Formerly: Electives (7 credit hours) Must include at least one additional 3 credit hour Kinesiology course

3. **For the Exercise Physiology concentration, Project Option**, at the Electives heading reduce hours from 10 to 9.

   Electives (9 credit hours) Must include at least one additional 3 credit hour Kinesiology course

Formerly: Electives (10 credit hours) Must include at least one additional 3 credit hour Kinesiology course

4. **For the Exercise Physiology concentration, Course Only with Comprehensive Exam Option**, at the Electives heading reduce hours from 13 to 12.

   Electives (12 credit hours) Must include at least one additional 3 credit hour Kinesiology course

Formerly: Electives (13 credit hours) Must include at least one additional 3 credit hour Kinesiology course

Rationale: Previously, we required our MS students in the Kinesiology concentration (Exercise Physiology specialization) to take the 1-credit KNS 661 seminar two times, we want to increase it from 2 credit hours to 3 credit hours. The underlying rationale is that this is a graduate seminar where we discuss how to critique research articles, work on abstracts for scientific meetings, have faculty and graduate student present their research, and discuss the scientific peer review process. These topics are essential for allowing our graduate students to learn about the research process.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE REQUIREMENTS – KINESIOLOGY MAJOR, MS (SPORT PSYCHOLOGY AND MOTOR BEHAVIOR) CONCENTRATION)

In the 2021-2022 Graduate Catalog, for both options - Thesis and Course Only with Comprehensive Exam

1. Under the Required Courses heading, revise required hours from 12 to 9, and delete course KNS 535 from list.

   Required Courses (9 credit hours)
   - KNS 533 (3 credit hours
   - KNS 534 (3 credit hours)
   - KNS 538 (3 credit hours)

Formerly:
Required Courses (12 credit hours)
KNS 533 (3 credit hours
KNS 534 (3 credit hours)
KNS 535 (3 credit hours)
KNS 538 (3 credit hours)

2. Under the heading, Additional Courses, revise as shown below:

- Additional Courses (6 credit hours) selected from the following
  - KNS 490 (must be taken for graduate credit)
  - KNS 536
  - KNS 541
  - KNS 543
  - KNS 544
  - KNS 545
  - KNS 633

Formerly:
Additional Course (3 credit hours) selected from the following
KNS 490 (must be taken for graduate credit)
KNS 536
KNS 543
KNS 544
KNS 545

Rationale: We are proposing are to drop KNS 535: Health and Exercise Psychology as a required course for the SPMB MS degree. KNS 535 is still offered by KNS faculty but is no longer a requirement and hasn't been an enforced requirement for the degree for many years. This change doesn't directly impact the number of credit hours required for completion of the SPMB MS degree. This curricular revision is needed because the Association for Applied Sport Psychology (AASP) no longer requires that students have specific knowledge in health and exercise psychology for the Certified Mental Performance Consultant (CMPC) certification exam. It was determined that this change was needed by the Sport Psychology and Motor Behavior faculty to be in line with our national certification standards and our current practice. This change is not driven by the SACs Assessment. In addition, we have added KNS 541: Special Topics to the list of potential courses that students can take.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

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

In the 2021-2022 Catalog, for both options (Thesis and Course Only without Comprehensive Exam) revise the bullet under the heading: Electives (6 credit hours) as shown below:

- **Electives (6 credit hours)**
  - These courses can be taken within the department.

Formerly:
Electives (6 credit hours)
These courses can be taken within the department. A total of three (3) credit hours may be earned in RSM 590 and six (6) credit hours in RSM 595 combined. Students cannot earn credit hours toward graduation in both.

Rationale: Dropping the RSM 590 course and revising RSM 595 render the second sentence included under Electives irrelevant, so we deleted it. RSM 590 has not been offered in more than 5 years. Revisions to credit hours and course description of RSM 595 allows student the option of an internship experience and more accurately reflects the course components. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

DEPARTMENT OF NUTRITION

REVISE REQUIREMENTS – NUTRITION MAJOR, MS – PUBLIC HEALTH NUTRITION CONCENTRATION – THESIS OPTION

In the 2021-2022 Catalog, revise as shown below:

1. Under the Credit Hours Required Heading, revise to increase the required credit hours from 37 to 43.

Credit Hours Required
43 graduate credit hours

Formerly: 37 graduate credit hours

2. Under the Required Courses Heading, remove current list and replace as shown below.

Required Courses

- Required Courses (28 credit hours)
  - NUTR 509 (1 credit hour)
  - NUTR 515 (6 credit hours)
  - NUTR 543 (3 credit hours)
  - NUTR 507 (3 credit hours)
  - NUTR 503 (2 credit hours)
  - NUTR 504 (2 credit hours)
  - NUTR 514 (2 credit hours)
  - NUTR 626 (3 credit hours)
  - At least 6 additional credits of graduate course work in Nutrition, NUTR (exclusive of thesis), as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.

Formerly:
Required Courses (22 credit hours)
NUTR 509 (1 credit hour)
NUTR 515 (3 credit hours)
NUTR 522 (2 credit hours)
NUTR 524 (4 credit hours)
NUTR 543 (3 credit hours)
NUTR 626 (3 credit hours)
At least 6 additional credits of graduate course work in Nutrition, NUTR (exclusive of thesis), as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.

Rationale: These changes reflect the course revisions proposed in this narrative, and better reflect the student experience each of these programs. Though we are dropping NUTR 522 (Nutrition Counseling) from the program's required courses, we are NOT dropping it from the catalog and the course remains available. Revising NUTR 514, allowing for variable credit, allows us to provide flexibility in practicum experience and increasing the minimum credit hours for NUTR 515 from 3 to 6 better reflects the student block field experience.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE REQUIREMENTS – NUTRITION MAJOR, MS – PUBLIC HEALTH NUTRITION CONCENTRATION – PROJECT OPTION

In the 2021-2022 Catalog, revise as shown below:

1. Under the Credit Hours Required Heading, revise to increase the required credit hours from 37 to 40.

Credit Hours Required
40 graduate credit hours

Formerly: 37 graduate credit hours

2. Under the Required Courses Heading, remove current list and replace as shown below.

Required Courses

- Required Courses (28 credit hours)
  - NUTR 509 (1 credit hour)
  - NUTR 515 (6 credit hours)
  - NUTR 543 (3 credit hours)
  - NUTR 507 (3 credit hours)
  - NUTR 503 (2 credit hours)
  - NUTR 504 (2 credit hours)
  - NUTR 514 (2 credit hours)
  - NUTR 626 (3 credit hours)
  - At least 6 additional credits of graduate course work in Nutrition, NUTR (exclusive of thesis), as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.

Formerly:
Required Courses (22 credit hours)
NUTR 509 (1 credit hour)
NUTR 515 (3 credit hours)
NUTR 522 (2 credit hours)
NUTR 524 (4 credit hours)
NUTR 543 (3 credit hours)

NUTR 626 (3 credit hours)
At least 3 additional credits of graduate course work in Nutrition, NUTR (exclusive of thesis), as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.

3. Under the Required Courses Heading, remove the third bullet.

Formerly:
Social/Behavioral Science or Education Electives (3 credit hours) as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program

Rationale: These changes reflect the course revisions proposed in this narrative, and better reflect the student experience each of these programs. Though we are dropping NUTR 522 (Nutrition Counseling) from the program's required courses, we are NOT dropping it from the catalog and the course remains available. Revising NUTR 514, allowing for variable credit, allows us to provide flexibility in practicum experience and increasing the minimum credit hours for NUTR 515 from 3 to 6 better reflects the student block field experience. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget.

REVISE REQUIREMENTS – NUTRITION MAJOR, MS (CLINICAL NUTRITION AND DIETETICS CONCENTRATION, COURSE ONLY WITHOUT COMPREHENSIVE EXAM)

In the 2021-2022 Catalog, revise as shown below:

1. Under the Credit Hours Required Heading, revise to reduce the required credit hours from 31 to 30.

Credit Hours Required
30 graduate credit hours

Formerly: 31 graduate credit hours

2. Under the Required Courses Heading, remove current list and replace as shown below.

Required Courses
- NUTR 513 (3 credit hours)
- NUTR 514 (2 credit hours)
- NUTR 516 (4 credit hours)
- NUTR 520 (3 credit hours)
- NUTR 503 (2 credit hours)
- NUTR 504 (2 credit hours)
- NUTR 525 (2 credit hours)
- NUTR 526 (3 credit hours)
- NUTR 527 (3 credit hours)
- NUTR 530 (3 credit hours)
- AGNR 480 (3 credit hours)
- A required culminating experience is included with the NUTR 520 course.

Formerly:
Required Courses
NUTR 513 (3 credit hours)
NUTR 514 (3 credit hours)
NUTR 516 (4 credit hours)
NUTR 520 (3 credit hours)
NUTR 524 (4 credit hours)
NUTR 525 (2 credit hours)
NUTR 526 (3 credit hours)
NUTR 527 (3 credit hours)
NUTR 530 (3 credit hours)
AGNR 480 (3 credit hours)
A required culminating experience is included with the NUTR 520 course.

Rationale: These changes reflect the course revisions proposed in this narrative, and better reflect the student experience in each of these programs. Though we are dropping NUTR 522 (Nutrition Counseling) from the program's required courses, we are NOT dropping it from the catalog and the course remains available. Revising NUTR 514, allowing for variable credit, results in our ability to reduce the CND Concentration by one credit hour. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE DUAL MS-MPH PROGRAM TO INCLUDE THE EPIDEMIOLOGY CONCENTRATION AS AN OPTION FOR THE PUBLIC HEALTH MAJOR, MPH (COURSE ONLY WITH COMPREHENSIE EXAM OPTION)

In the 2021-22 Graduate Catalog, for the Dual MS-MPH Program, revise to include the Epidemiology concentration as an option for the Public Health Major, MPH (Course Only with Comprehensive Exam)

Revise under each heading, as shown below.

Dual MS-MPH Program, Nutrition - Public Health

Concentrations (Required) and Options

- Nutrition — Public Health Nutrition concentration
  - Thesis
  - Project
- Public Health — Community Health Education concentration; Epidemiology concentration; or Health Policy and Management concentration
  - Course Only with Comprehensive Exam

REVISE DUAL MS-MPH PROGRAM – NUTRITION MAJOR FOR PUBLIC HEALTH NUTRITION CONCENTRATION (FOR THE THESIS OPTION)

Nutrition—Public Health Nutrition Concentration with a Thesis Option and Public Health— Community Health Education, Epidemiology, or Health Policy and Management Concentrations with Course Only with Comprehensive Exam Option

REVISE DUAL MS-MPH PROGRAM TO INCREASE DUAL PROGRAM CREDIT HOURS FROM 57 TO 63

In the 2021-22 Graduate Catalog, revise as shown below.

1. Under the Credit Hours Required, revise dual program credit hours from 57 to 63 and edit program as follows:

Credit Hours Required

63 graduate credit hours, which includes MPH Foundation and Concentration courses and required courses for the MS (Public Health Nutrition Concentration-thesis option). A dual degree candidate must satisfy the requirements for both the Master of Science (Nutrition Major with a Public Health Nutrition Concentration) and the Master of Public Health degree, as well as the requirements for the dual program.

Formerly:
57 graduate credit hours (60 credit hours, thesis option), which includes core MPH courses and required MS courses. A dual degree candidate must satisfy the requirements for both the Master of Science (Nutrition Major with a Public Health Nutrition Concentration) and the Master of Public Health degree, as well as the requirements for the dual program.

2. Under the Required Courses Heading, remove current list and replace with the following:

Required Courses

- Required Courses for Nutrition (Public Health Nutrition Concentration-thesis option) (43 credit hours)
  - NUTR 500 (Thesis; 6 credit hours)
  - NUTR 503 (2 credit hours)
  - NUTR 504 (2 credit hours)
  - NUTR 507 (3 credit hours)
  - NUTR 509 (1 credit hour) *
  - NUTR 515 (6 credit hours)
  - NUTR 514 (2 credit hours)
  - NUTR 543 (3 credit hours)
  - NUTR 626 (3 credit hours)
  - At least 6 additional credit hours of graduate course work in Nutrition, NUTR (exclusive of thesis), as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program
  - PUBH 520 (3 credit hours) *
  - PUBH 530 (3 credit hours) *
  - PUBH 540 (3 credit hours) *

*These courses (10 credit hours) count as part of the 20 total credit hours of Foundation Courses for the MPH.

Formerly:
Required Core MPH Courses for the Dual Degree (20 credit hours)
PUBH 509 (1 credit hour)
PUBH 510 (3 credit hours)
PUBH 520 (3 credit hours)

PUBH 530 (3 credit hours)
PUBH 537 (3 credit hours)
PUBH 540 (3 credit hours)
PUBH 552 (3 credit hours)
NUTR 509 (1 credit hour)

3. Under the Additional Course Requirements heading, remove current text and bullets and replace as shown below.

Additional Course Requirements

- **Additional Required Foundation MPH Courses for the Dual Degree (10 credit hours)**
  - PUBH 509 (1 credit hour)
  - PUBH 510 (3 credit hours)
  - PUBH 537 (3 credit hours)
  - PUBH 552 (3 credit hours)

- **Required MPH Concentration Courses (10 credit hours)**
  - Community Health Education — Course Only with Comprehensive Exam
  - Epidemiology — Course Only with Comprehensive Exam
  - Health Policy and Management — Course Only with Comprehensive Exam

Additional Course Requirements

- NUTR 515 (6 credit hours) counts for both the block field experience requirement of the MS degree and the applied practice experience requirement of the MPH degree.
- 6 NUTR credit hours, from the required courses in Public Health Nutrition, excluding NUTR 509 and NUTR 515, count for electives for the MPH.
- Students should review the Graduate Student Handbook in Nutrition and the Public Health Graduate Student Handbook, as well as work with their departmental advisors to ensure completion of additional course work specific to their selected Public Health concentration.

Formerly:
Additional Course Requirements
NUTR 500 (6 credit hours)
For MS thesis students, a maximum of 14 graduate credit hours from the following MS courses will be counted toward the MPH program:
Up to 9 credit hours of NUTR 524 (4 credit hours) and NUTR 515 (3-12 credit hours)
NUTR 509 (1 credit hour)
NUTR 543 (3 credit hours)
NUTR 626 (3 credit hours)
For MS thesis students, 9 graduate credit hours from the following MPH courses will be counted toward the MS:
PUBH 520 (3 credit hours)
PUBH 530 (3 credit hours)
PUBH 540 (3 credit hours)
Students should review the **Graduate Nutrition Handbook** and the **Public Health Graduate Student Handbook,** as well as work with their departmental advisors to ensure completion of additional course work specific to their selected Public Health concentration.

4. Under the Non-Course Requirements heading, remove current text and replace as shown below.

Non-Course Requirements

- Completion of a research project is required.
- A proposal hearing is required prior to beginning the research project.
- An oral comprehensive examination is required upon completion of the thesis
- A single block field experience (or public health applied practice experience) with a service learning project and poster presentation are required of all students.
- Dual-degree students who withdraw from the program before completion of the requirements for both degrees will not receive credit towards the MS or MPH for courses taken in the other program, except as such courses qualify for credit without regard to the dual program.

Formerly:
A single block field experience (or public health internship) with a service learning project and poster presentation are required of all students. Dual-degree students who withdraw from the program before completion of the requirements for both degrees will not receive credit towards the MS or MPH for courses taken in the other program, except as such courses qualify for credit without regard to the dual program.

Rationale: These changes to the Dual MS-MPH Program, thesis option, reflect course changes for the Department of Nutrition on this agenda (adding, dropping, and revising courses), as well as housekeeping changes, such as reorganizing requirements for each degree in a way that aligns better with the new catalog format. In addition, we are adding the Epidemiology concentration to the list of available MPH concentration areas and revising language changed by Public Health (i.e., "Core" has changed to "Foundation"; "internship" is now referred to as "applied practice experience.

Impact on Other Units: Because this change is being made to the Dual Program offered by Nutrition (MS-MPH) and Public Health (MPH-MS), these departments have submitted this revision in duplicate on this agenda. Faculty in both departments support this revision. The addition does

not change, drop, or alter courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: Please see corresponding agenda item from PUBH.

REVISE DUAL MS-MPH PROGRAM – NUTRITION MAJOR FOR PUBLIC HEALTH NUTRITION CONCENTRATION (FOR THE PROJECT OPTION)

Nutrition—Public Health Nutrition Concentration with a Project Option and Public Health— Community Health Education, Epidemiology, or Health Policy and Management Concentrations with Course Only with Comprehensive Exam Option

REVISE DUAL MS-MPH PROGRAM TO INCREASE DUAL PROGRAM CREDIT HOURS FROM 57 TO 60

In the 2021-22 Graduate Catalog, revise as shown below.

1. Under the Credit Hours Required, revise dual program credit hours from 57 to 60 and edit program as follows:

Credit Hours Required

60 graduate credit hours, which includes MPH Foundation and Concentration courses and required courses for the MS (Public Health Nutrition Concentration project option). A dual degree candidate must satisfy the requirements for both the Master of Science (Nutrition Major with a Public Health Nutrition Concentration) and the Master of Public Health degree.

Formerly:
57 graduate credit hours (depending on Public health concentration of interest), which includes core MPH courses and required MS courses. A dual degree candidate must satisfy the requirements for both the Master of Science (public health nutrition concentration) and the Master of Public Health degree.

2. Under the Required Courses Heading, remove current list and replace with the following:

Required Courses

- Required Courses for Nutrition (Public Health Nutrition Concentration-project option); 40 credit hours
  - NUTR 503 (2 credit hours)
  - NUTR 504 (2 credit hours)
  - NUTR 507 (3 credit hours)
  - NUTR 509 (1 credit hour) *
  - NUTR 515 (6 credit hours)
  - NUTR 514 (2 credit hours)
  - NUTR 519 (3 credit hours)
  - NUTR 543 (3 credit hours)
  - NUTR 626 (3 credit hours)
  - At least 6 additional credit hours of graduate course work in Nutrition, NUTR, as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.
  - PUBH 520 (3 credit hours) *
  - PUBH 530 (3 credit hours) *
  - PUBH 540 (3 credit hours) *

*These courses (10 credit hours) count as part of the 20 total credit hours of Foundation Courses for the MPH.

Formerly:
Required Core MPH Courses for the Dual Degree (20 credit hours)
PUBH 509 (1 credit hour)
PUBH 510 (3 credit hours)
PUBH 520 (3 credit hours)
PUBH 530 (3 credit hours)
PUBH 537 (3 credit hours)
PUBH 540 (3 credit hours)
PUBH 552 (3 credit hours)
NUTR 509 (1 credit hour)

3. Under the Additional Course Requirements heading, remove current text and bullets and replace as shown below.

Additional Course Requirements

- **Additional Required Foundation MPH Courses for the Dual Degree (10 credit hours)**
  - PUBH 509 (1 credit hour)
  - PUBH 510 (3 credit hours)
  - PUBH 537 (3 credit hours)
  - PUBH 552 (3 credit hours)

- **Required MPH Concentration Courses (10 credit hours)**
  - Community Health Education — Course Only with Comprehensive Exam
  - Epidemiology — Course Only with Comprehensive Exam
  - Health Policy and Management — Course Only with Comprehensive Exam

Additional Course Requirements

- NUTR 515 (6 credit hours) counts for both the block field experience requirement of the MS degree and the applied practice experience requirement of the MPH degree.
- 6 NUTR credit hours, from the required courses in Public Health Nutrition, excluding NUTR 509 and NUTR 515, count for electives for the MPH.
- Students should review the Graduate Student Handbook in Nutrition and the Public Health Graduate Student Handbook, as well as work with their departmental advisors to ensure completion of additional course work specific to their selected Public Health concentration.

Formerly:
Additional Course Requirements
A dual degree candidate must satisfy the requirements for his/her MPH concentration (13 additional credit hours).
For MS/Project students, 12 graduate credit hours from the following MS courses to be counted toward the MPH program:
A maximum of 10 credit hours from
NUTR 524 (4 credit hours)
NUTR 515 (3-12 credit hours)
NUTR 519 (3 credit hours)
NUTR 509 (1 credit hour)
NUTR 626 (3 credit hours)
For MS/Project students, 9 graduate credit hours from the following MPH courses will be counted toward the MS:
PUBH 520 (3 credit hours)
PUBH 530 (3 credit hours)
PUBH 540 (3 credit hours)
Students should review the **Graduate Nutrition Handbook** and the **Public Health Graduate Student Handbook**, as well as work with their departmental advisors to ensure completion of additional coursework specific to their selected Public Health concentration.

4. Under the Non-Course Requirements heading, revise first bullet as shown below.

Non-Course Requirements

- A single block field experience (or public health applied practice experience) and poster presentation are required of all students. MS/project students also complete an analytical field paper focused on their block field experience. This analytical field paper incorporates public health nutrition and the student's public health concentration.

Formerly: A single block field experience (or public health internship) and poster presentation are required of all students. MS/project students also complete an analytical field paper focused on their block field experience. This analytical field paper incorporates public health nutrition and the student's public health concentration.

Rationale: These changes to the Dual MS-MPH Program, thesis option, reflect course changes for the Department of Nutrition on this agenda (adding, dropping, and revising courses), as well as housekeeping changes, such as reorganizing requirements for each degree in a way that aligns better with the new catalog format. In addition, we are adding the Epidemiology concentration to the list of available MPH concentration areas and revising language changed by Public Health (i.e., "Core" has changed to "Foundation"; "internship" is now referred to as "applied practice experience.

Impact on Other Units: Because this change is being made to the Dual Program offered by Nutrition (MS-MPH) and Public Health (MPH-MS), these departments have submitted this revision in duplicate on this agenda. Faculty in both departments support this revision. The addition does not change, drop, or alter courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: Please see corresponding agenda item from PUBH.

DEPARTMENT OF PUBLIC HEALTH

► **DROP DUAL PROGRAM – DUAL MPH-JD PROGRAM, PUBLIC HEALTH - LAW**

In the 2021-2022 Graduate Catalog, drop the dual Doctor of Jurisprudence / Master of Public Health (JD/MPH) program and remove all description, text and reference throughout the catalog.

Rationale: The JD-MPH dual degree has been offered since 2013. Only one student has completed the degree. It is not a viable program to maintain. Currently, there are no students in the program. Impact on Other Units: None. Courses were taught by current faculty in both the Department of Public Health and the College of Law and contribute to remaining degrees. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: Communication from College of Law. The Dean of the Graduate School is aware of this request.

REVISE PUBLIC HEALTH MAJOR, MPH, CAMPUS CODE TO ADD DISTANCE EDUCATION AS AN OPTION

In the 2021-2022 Graduate Catalog, revise the campus code to add Distance Education as an option for each concentration except for the Epidemiology concentration (excludes Epidemiology for the DE option).

Campus Code
Knoxville Campus
Distance Education (excludes Epidemiology concentration)

Formerly:
Knoxville Campus

REVISE PROGRAM DESCRIPTION – PUBLIC HEALTH MAJOR, MPH

In the 2021-2022 Graduate Catalog, revise the introductory program paragraph as follows:

Graduate study with a major in public health leads to the Master of Public Health (MPH). Preparation for professional practice in improving community health emphasizes a population perspective, service-learning and application opportunities through rigorous applied practice experience. The MPH degree is offered on-campus and by Distance Education online for the Community Health Education concentration, the Health Policy and Management concentration and the Veterinary Public Health concentration.

Campus Code:
Knoxville Campus
Distance Education (excludes Epidemiology concentration)

Formerly:
Graduate study with a major in public health leads to the Master of Public Health (MPH). Preparation for professional practice in improving community health emphasizes a population perspective, service-learning and application opportunities through rigorous internships.

Rationale: Offering a Distance Education MPH has been under consideration for some time. The current pandemic has heightened the awareness, importance and value of public health and associated professionals. The time is right to add an online option to our program. Our concentrations align with a growing job market. The US Department of Labor projects the field of Community Health Education will grow by 13% (much faster than average) between 2019 and 2029, expects Medical and Health Services managers to grow by 32% between 2019 and 2029 and the field of Epidemiology is projected to have a 5% growth rate. Veterinary medicine including Veterinary Public Health is also projected to grow at a faster than average rate. An online MPH would offer the working professional who cannot cease to work the opportunity to acquire their degree for promotion, retention or advancing their career in a different direction. This is particularly meaningful for the public health workforce in the state of Tennessee who often express this desire at conferences and through other professional channels. They cannot leave their position but want the degree and have the educational benefits to pay for it. As the land-grant institution, we should be making this degree available to the workforce.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial impact: New faculty lines (2) in support of the Distance Education online program are anticipated. Additional Documentation: Attachment from VPH.

REVISE ADMISSION REQUIREMENTS (TO REMOVE GRE SCORES) – PUBLIC HEALTH MAJOR, MPH

In the 2021-2022 Graduate Catalog, under the Admissions Standards heading revise first paragraph as follows:

An online application must be submitted to the Office of Graduate Admissions. A departmental application (MPH data form), a statement of the applicant's educational and career goals, and three rating forms are required. Admission to the University of Tennessee Graduate School is also required for admission to the MPH program. Preferential consideration for admission to degree status shall be given to those with a minimum undergraduate grade point average of 3.00 and with at least one year of professional experience in a health-related occupation. As a restricted program, non-degree admission requires program director recommendation.

Formerly:
An online application must be submitted to the Office of Graduate Admissions. A departmental application (MPH data form), a statement of the applicant's educational and career goals, Graduate Record Examination scores, and three rating forms are required. Admission to the University of Tennessee Graduate School is also required for admission to the MPH program. Preferential consideration for admission to degree status shall be given to those with a minimum undergraduate grade point average of 3.00 and with at least one year of professional experience in a health-related occupation. As a restricted program, non-degree admission requires program director recommendation.

Rationale: The requirement of the GRE has been under consideration by the public health faculty for some time. We note the elimination of the GRE by peer institutions (UNC, UAB, George Washington University, University of South Florida, University of Oklahoma and ETSU). A review of enrolled students GRE scores did not correlate with successful completion of the program. There is also concern that GRE may limit potential diversity of the student body due to the burden placed upon students for taking the exam (cost, travel, access) (Career-related Policy Non-disciplinary doi:10.1126/science.caredit.aay2093). See attached background information. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: The decision to eliminate the GRE from MPH applications was approved by the MPH Academic Program Committee on September 25, 2020 and received full faculty approval on September 30, 2020.

REVISE PROGRAM REQUIREMENTS – PUBLIC HEALTH MAJOR, MPH

In the 2021-2022 Graduate Catalog, replace all instances of the word "internship" with "applied practice experience" in the description of the Master of Public Health (MPH) program as shown below:

Under the Community Health Education Concentration - Course Only with Comprehensive Exam,

1. Under the Required Courses heading, revise the third bullet:

    - Applied practice experience (6 credit hours)

Formerly: Internship (6 credit hours)

2. Under the Non-Course Requirements heading, revise the first and second bullet as shown below:

    - The MPH is a non-thesis program requiring completion of 42 credit hours of graduate course work including six weeks of applied practice experience (may be completed on full- or part-time basis).
    - The applied practice experience provides an experience with an affiliated health agency or organization offering one or more health programs.

Formerly:
The MPH is a non-thesis program requiring completion of 42 credit hours of graduate course work including nine weeks of internship (may be completed on full- or part-time basis).
The internship provides an experience with an affiliated health agency or organization offering one or more health programs.

Under the Epidemiology Concentration — Course Only with Comprehensive Exam

1. Under the Required Courses heading, revise the fourth bullet:

    - Applied practice experience (6 credit hours)

Formerly: Internship (6 credit hours)

2. Under the Non-Course Requirements heading, revise the first and second bullet as shown below:

    - The MPH is a course-only with comprehensive exam program requiring completion of 42 credit hours of graduate course work including six weeks of applied practice experience (may be completed on full- or part-time basis).
    - The applied practice experience provides an experience with an affiliated health agency or organization offering one or more health programs.

Formerly:
The MPH is a course-only with comprehensive exam program requiring completion of 42 credit hours of graduate course work including nine weeks of internship (may be completed on full- or part-time basis).
The internship provides an experience with an affiliated health agency or organization offering one or more health programs.

Under the Health Policy and Management Concentration — Course Only with Comprehensive Exam

1. Under the Required Courses heading, revise the third bullet:

    - Applied practice experience (6 credit hours)

Formerly: Internship (6 credit hours)

2. Under the Non-Course Requirements heading, revise the first and second bullet as shown below:

    - The MPH is a course-only with comprehensive exam program requiring completion of 42 credit hours of graduate course work including six weeks of applied practice experience (may be completed on full- or part-time basis).
    - The applied practice experience provides an experience with an affiliated health agency or organization offering one or more health programs.

Formerly:
The MPH is a course-only with comprehensive exam program requiring completion of 42 credit hours of graduate course work including nine weeks of internship (may be completed on full- or part-time basis).
The internship provides an experience with an affiliated health agency or organization offering one or more health programs.

Under the Veterinary Public Health Concentration — Course Only with Comprehensive Exam

1. Under the Required Courses heading, revise the third bullet:

    - Applied practice experience (6 credit hours)

Formerly: Internship (6 credit hours)

2. Under the Non-Course Requirements heading, revise the first and second bullet as shown below:

    - The MPH is a course-only with comprehensive exam program requiring completion of 42 credit hours of graduate course work including six weeks of applied practice experience (may be completed on full- or part-time basis).
    - The applied practice experience provides an experience with an affiliated health agency or organization offering one or more health programs.

Formerly:
The MPH is a course-only with comprehensive exam program requiring completion of 42 credit hours of graduate course work including nine weeks of internship (may be completed on full- or part-time basis).
The internship provides an experience with an affiliated health agency or organization offering one or more health programs.

Rationale. This change replaces all instances of the word "internship" with "applied practice experience". Impact on Other Units: None. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

REVISE DUAL MPH-MS PROGRAM TO INCLUDE THE EPIDEMIOLOGY CONCENTRATION AS AN OPTION FOR THE PUBLIC HEALTH MAJOR, MPH (COURSE ONLY WITH COMPREHENSIVE EXAM OPTION)

In the 2021-22 Graduate Catalog, for the Dual MPH-MS Program, revise to include the Epidemiology concentration as an option for the Public Health Major, MPH (Course Only with Comprehensive Exam)

Revise under each heading, to add the Epidemiology concentration for the Public Health Major, as shown below.

Concentrations (Required) and Options

- Public Health — Community Health Education concentration, Epidemiology concentration, or Health Policy and Management concentration
    - Course Only with Comprehensive Exam
- Nutrition — Public Health Nutrition concentration
    - Thesis
    - Project

REVISE DUAL MPH-MS PROGRAM – NUTRITION MAJOR FOR PUBLIC HEALTH NUTRITION CONCENTRATION (FOR THE THESIS OPTION)

Public Health — Community Health Education concentration, Epidemiology concentration, or Health Policy and Management concentrations with Course Only with Comprehensive Exam Option and Nutrition – Public Health Nutrition concentration with a Thesis Option

REVISE DUAL MPH-MS PROGRAM TO INCREASE DUAL PROGRAM CREDIT HOURS FROM 57 TO 63

In the 2021-22 Graduate Catalog, revise as shown below.

1. Under the Credit Hours Required, revise dual program credit hours from 57 to 63 and edit program as follows:

Credit Hours Required

63 graduate credit hours, which includes MPH Foundation and Concentration courses and required courses for the MS (Public Health Nutrition Concentration-thesis option). A dual degree candidate must satisfy the requirements for both the Master of Science (Nutrition Major with a Public Health Nutrition Concentration) and the Master of Public Health degree, as well as the requirements for the dual program.

Formerly:
57 graduate credit hours (60 credit hours, thesis option), which includes core MPH courses and required MS courses. A dual degree candidate must satisfy the requirements for both the Master of Science (Nutrition Major with a Public Health Nutrition Concentration) and the Master of Public Health degree, as well as the requirements for the dual program.

2. Under the Required Courses Heading, remove current list and replace with the following:

Required Courses

- **Required Foundation MPH Courses for the Dual Degree (20 Credit hours)**
  - PUBH 509 (1 credit hour)
  - PUBH 510 (3 credit hours)
  - PUBH 520 (3 credit hours)*
  - PUBH 530 (3 credit hours)*
  - PUBH 537 (3 credit hours)
  - PUBH 540 (3 credit hours)*
  - PUBH 552 (3 credit hours)
  - NUTR 509 (1 credit hour)*

*These courses (10 credit hours) count as part of the 43 total credit hours of MS (Public Health Nutrition concentration – thesis option) degree requirements.

- **Required MPH Concentration Courses (10 credit hours)**
  - Community Health Education* — Course Only with Comprehensive Exam
  - Epidemiology — Course Only with Comprehensive Exam
  - Health Policy and Management* — Course Only with Comprehensive Exam

Formerly: Required Core MPH Courses for the Dual degree (20 credit hours)

- **Additional Required Courses for Nutrition (Public Health Nutrition Concentration-thesis option) (33 credit hours)**
  - NUTR 500 (Thesis; 6 credit hours)
  - NUTR 503 (2 credit hours)
  - NUTR 504 (2 credit hours)
  - NUTR 507 (3 credit hours)
  - NUTR 515 (6 credit hours)
  - NUTR 514 (2 credit hours)
  - NUTR 543 (3 credit hours)
  - NUTR 626 (3 credit hours)
  - At least 6 additional credit hours of graduate course work in Nutrition, NUTR (exclusive of thesis), as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.

3. Under the Additional Course Requirements heading, remove current text and bullets and replace as shown below.

Additional Course Requirements

- NUTR 515 (6 credit hours) counts for both the block field experience requirement of the MS degree and the applied practice experience requirement of the MPH degree.
- 6 NUTR credit hours, from the required courses in Public Health Nutrition, excluding NUTR 509 and NUTR 515, count for electives for the MPH.
- Students should review the Graduate Student Handbook in Nutrition and the Public Health Graduate Student Handbook, as well as work with their departmental advisors to ensure completion of additional course work specific to their selected Public Health concentration.

Formerly:
Additional Course Requirements
NUTR 500 (6 credit hours)
For MS thesis students, a maximum of 14 graduate credit hours from the following MS courses will be counted toward the MPH program:
Up to 9 credit hours of NUTR 524 (4 credit hours) and NUTR 515 (3-12 credit hours)
NUTR 509 (1 credit hour)
NUTR 543 (3 credit hours)
NUTR 626 (3 credit hours)
For MS thesis students, 9 graduate credit hours from the following MPH courses will be counted toward the MS:
PUBH 520 (3 credit hours)
PUBH 530 (3 credit hours)
PUBH 540 (3 credit hours)
Students should review the **Graduate Nutrition Handbook** and the **Public Health Graduate Student Handbook,** as well as work with their departmental advisors to ensure completion of additional course work specific to their selected Public Health concentration.

4. Under the Non-Course Requirements heading, remove current text and replace as shown below.

Non-Course Requirements

- Completion of a research project is required.
- A proposal hearing is required prior to beginning the research project.
- An oral comprehensive examination is required upon completion of the thesis.

- A single block field experience (or public health applied practice experience) with a service learning project and poster presentation are required of all students.
- Dual-degree students who withdraw from the program before completion of the requirements for both degrees will not receive credit towards the MS or MPH for courses taken in the other program, except as such courses qualify for credit without regard to the dual program.

Formerly:
A single block field experience (or public health internship) with a service learning project and poster presentation are required of all students. Dual-degree students who withdraw from the program before completion of the requirements for both degrees will not receive credit towards the MS or MPH for courses taken in the other program, except as such courses qualify for credit without regard to the dual program.

Rationale: These changes to the Dual MS-MPH Program, thesis option, reflect course changes for the Department of Nutrition on this agenda (adding, dropping, and revising courses), as well as housekeeping changes, such as reorganizing requirements for each degree in a way that aligns better with the new catalog format. In addition, we are adding the Epidemiology concentration to the list of available MPH concentration areas and revising language changed by Public Health (i.e., "Core" has changed to "Foundation"; "internship" is now referred to as "applied practice experience.

Impact on Other Units: Because revisions are being made to the Dual Program offered by Nutrition (MS-MPH) and Public Health (MPH-MS), both departments submitted parallel revisions on this agenda. Faculty in both departments support the revisions. The addition does not change, drop, or alter courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: Please see corresponding agenda item from PUBH.

REVISE DUAL MPH-MS PROGRAM – NUTRITION MAJOR FOR PUBLIC HEALTH NUTRITION CONCENTRATION (FOR THE PROJECT OPTION)

Public Health — Community Health Education, Epidemiology, or Health Policy and Management Concentrations with Course Only with Comprehensive Exam Option and Nutrition—Public Health Nutrition Concentration with a Project Option

REVISE DUAL MPH-MS PROGRAM TO INCREASE DUAL PROGRAM CREDIT HOURS FROM 57 TO 60

In the 2021-22 Graduate Catalog, revise as shown below.

1. Under the Credit Hours Required, revise dual program credit hours from 57 to 60 and edit program as follows:

Credit Hours Required

60 graduate credit hours, which includes MPH Foundation and Concentration courses and required courses for the MS (Public Health Nutrition Concentration project option). A dual degree candidate must satisfy the requirements for both the Master of Science (Nutrition Major with a Public Health Nutrition Concentration) and the Master of Public Health degree.

Formerly:
57 graduate credit hours (depending on Public health concentration of interest), which includes core MPH courses and required MS courses. A dual degree candidate must satisfy the requirements for both the Master of Science (public health nutrition concentration) and the Master of Public Health degree.

2. Under the Required Courses Heading, remove current list and replace with the following:

Required Courses

- Required Foundation MPH Courses for the Dual degree (20 credit hours)
  - PUBH 509 (1 credit hour)
  - PUBH 510 (3 credit hours)
  - PUBH 520 (3 credit hours)*
  - PUBH 530 (3 credit hours)*
  - PUBH 537 (3 credit hours)
  - PUBH 540 (3 credit hours)*
  - PUBH 552 (3 credit hours)
  - NUTR 509 (1 credit hour)*

*These courses (10 credit hours) count as part of the 20 total credit hours of Foundation Courses for the MPH.

Formerly:
Required Core MPH Courses for the Dual Degree (20 credit hours)
PUBH 509 (1 credit hour)
PUBH 510 (3 credit hours)
PUBH 520 (3 credit hours)
PUBH 530 (3 credit hours)
PUBH 537 (3 credit hours)
PUBH 540 (3 credit hours)
PUBH 552 (3 credit hours)
NUTR 509 (1 credit hour)

3. Under the Additional Course Requirements heading, remove current text and bullets and replace as shown below.

Additional Course Requirements

- **Additional Required courses for Nutrition (Public Health Nutrition concentration – project option (30 credit hours)**
  - NUTR 503 (2 credit hours)
  - NUTR 504 (2 credit hours)
  - NUTR 507 (3 credit hours)
  - NUTR 515 (6 credit hours)
  - NUTR 514 (2 credit hours)
  - NUTR 519 (3 credit hours)
  - NUTR 543 (3 credit hours)
  - NUTR 626 (3 credit hours)
  - At least 6 additional credit hours of graduate course work in Nutrition (NUTR), as identified by faculty advisor and approved by the Director of the Public Health Nutrition Graduate Program.

- **Required MPH Concentration Courses (10 credit hours)**
  - Community Health Education — Course Only with Comprehensive Exam
  - Epidemiology — Course Only with Comprehensive Exam
  - Health Policy and Management — Course Only with Comprehensive Exam

Additional Course Requirements

- NUTR 515 (6 credit hours) counts for both the block field experience requirement of the MS degree and the applied practice experience requirement of the MPH degree.
- 6 NUTR credit hours, from the required courses in Public Health Nutrition, excluding NUTR 509 and NUTR 515, count for electives for the MPH.
- Students should review the Graduate Student Handbook in Nutrition and the Public Health Graduate Student Handbook, as well as work with their departmental advisors to ensure completion of additional course work specific to their selected Public Health concentration.

Formerly:
Additional Course Requirements
A dual degree candidate must satisfy the requirements for his/her MPH concentration (13 additional credit hours).
For MS/Project students, 12 graduate credit hours from the following MS courses to be counted toward the MPH program:
A maximum of 10 credit hours from
NUTR 524 (4 credit hours)
NUTR 515 (3-12 credit hours)
NUTR 519 (3 credit hours)
NUTR 509 (1 credit hour)
NUTR 626 (3 credit hours)
For MS/Project students, 9 graduate credit hours from the following MPH courses will be counted toward the MS:
PUBH 520 (3 credit hours)
PUBH 530 (3 credit hours)
PUBH 540 (3 credit hours)
Students should review the **Graduate Nutrition Handbook** and the **Public Health Graduate Student Handbook,** as well as work with their departmental advisors to ensure completion of additional coursework specific to their selected Public Health concentration.

4. Under the Non-Course Requirements heading, revise first bullet as shown below.

Non-Course Requirements

- A single block field experience (or public health applied practice experience) and poster presentation are required of all students. MS/project students also complete an analytical field paper focused on their block field experience. This analytical field paper incorporates public health nutrition and the student's public health concentration.

Formerly: A single block field experience (or public health internship) and poster presentation are required of all students. MS/project students also complete an analytical field paper focused on their block field experience. This analytical field paper incorporates public health nutrition and the student's public health concentration.

Rationale: These changes to the Dual MS-MPH Program, thesis option, reflect course changes for the Department of Nutrition on this agenda (adding, dropping, and revising courses), as well as housekeeping changes, such as reorganizing requirements for each degree in a way that aligns better with the new catalog format. In addition, we are adding the Epidemiology concentration to the list of available MPH concentration areas and revising language changed by Public Health (i.e., "Core" has changed to "Foundation"; "internship" is now referred to as "applied practice experience.

Impact on Other Units: Because revisions are being made to the Dual Program offered by Nutrition (MS-MPH) and Public Health (MPH-MS), both departments submitted parallel revisions on this agenda. Faculty in both departments support the revisions. The addition does not change, drop, or alter courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: Please see corresponding agenda item from PUBH

DEPARTMENT OF THEORY AND PRACTICE IN TEACHER EDUCATION

+ ADD CERTIFICATE

Art Education (K-12)

In the 2021-2022 Graduate Catalog, add Art Education (K-12) Graduate Certificate and requirements as follows:

The graduate certificate in Art Education (K-12) is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of art to K-12 learners from a range of backgrounds. A graduate certificate in Art Education is appropriate for K-12 teachers endorsed in areas outside of Art Education, K-12 teachers endorsed in Art Education at the undergraduate level, non-endorsed professionals whose work interfaces significantly with K-12/art education (e.g., museum, public-service agency), and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement in Art Education for teachers licensed in other areas in the state of Tennessee, pending transcript review*, passing appropriate licensure exams and recommendation of the faculty advisor.*

Campus Code

Distance Education
Knoxville Campus

Graduate Certificate Type

Stand-Alone
Add-On

Admissions Standards/Procedures

- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Art Education K-12 Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards

- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required

12 graduate credit hours

Required Courses

- TPTE 540
- ARED 401
- ARED 530
- ARED 540

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code. .13.1399.**

✚ **ADD CERTIFICATE**

American Sign Language Education

In the 2021-2022 Graduate Catalog, add American Sign Language Education Graduate Certificate and requirements as follows:

The graduate certificate in American Sign Language Education serves two purposes. First, it is for persons interested in teaching ASL at the postsecondary level. The coursework is aligned with what is required by the American Sign Language Teachers Association (ASLTA) for certification. Students take 9 required graduate credit hours (ASL 421, 422, 435) and choose one elective for a minimum of 12 graduate credit hours.

Second, the graduate certificate is for those who would like to add an ASL Education PreK-12 endorsement to an existing TN license. Persons would take all required graduate courses (ASL 421, 422, 435) and all graduate elective courses (ASL 455, 504, 545) for a minimum of 18 credit hours.

Campus Code

Distance Education
Knoxville Campus

Graduate Certificate Type

Stand-Alone
Add-On

Admissions Standards/Procedures

- Applicants can be currently admitted to a degree program at UTK or can apply solely for the ASL Education Certificate through the Graduate Admissions Office.
- Applicants must demonstrate an advanced or higher level on the Sign Language Proficiency Inventory (SLPI) or a 3+ or higher on the American Sign Language Proficiency Interview (ASLPI).
- Students must be admitted to the certificate program prior to completing six graduate credit hours toward the certificate.

Academic Standards

- Students must maintain a 3.00 graduate grade point average (GPA) once in the program and complete the requirements of the certificate to be awarded the graduate certificate.

Credit Hours Required

12-18 graduate credit hours
  - 12 graduate credit hours to meet American Sign Language Teachers Association (ASLTA) requirements.
  - 18 graduate credit hours to add an ASL Education PreK-12 endorsement to an existing TN teaching license.

Required Courses

- ASL 421
- ASL 422
- ASL 435
- Elective (3)
  - ASL 455 (3)
  - ASL 545 (3)
  - ASL 504 (3-9)

Non-Course Requirements

- For students earning a graduate degree concurrently with the ASL Education graduate certificate, at least three (3) credit hours for the certificate must be earned outside of the requirements of the degree.
- For those students who are concurrently enrolled in a Master's or doctorate program, the graduate certificate will be awarded the same semester as the degree. Certificates will be awarded at the normal times when degrees are awarded.
- For independent, stand-alone graduate certificates (those when a student is not concurrently enrolled in a Master or doctorate program), the certificate is awarded upon completion of required courses and submission of application for graduation.
- Persons adding the ASL Education PreK-12 endorsement to an existing TN license must complete all required and elective courses, including ASL 421, 422, 435, 455, 504, and 545.
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Driven by demand for courses to obtain American Sign Language Teachers Association professional certification and at the request of Office of School Based Experiences (OSBE) and Assoc Dean of Bailey Graduate School of Education (David Cihak) for add-on TN teacher licensure K-12 for ASL Education.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code 13.1399** .

✚ **ADD CERTIFICATE**

Education of the Deaf and Hard of Hearing (Prek-12)

In the 2021-2022 Graduate Catalog, add Education of the Deaf and Hard of Hearing (PreK-12) Graduate Certificate and requirements as follows:

The graduate certificate in Education of the Deaf and Hard of Hearing PreK-12 is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of PreK-12 students with a range of exceptionalities and from a range of backgrounds. A graduate certificate in Education of the Deaf and Hard of Hearing PreK-12 is appropriate for PreK-12 teachers endorsed in areas outside of exceptional education, PreK-12 teachers endorsed in an area of exceptional education at the undergraduate level, administrators and supervisors aspiring to lead schools or serve in roles supporting special student populations, non-endorsed professionals whose work (e.g., museum, public-service agency) interfaces significantly with PreK-12 education, and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement in Education of the Deaf and Hard of Hearing PreK-12 for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams and approval of the faculty advisor. *Endorsement in Education of the Deaf and Hard of Hearing requires proficiency in American Sign Language at the Intermediate Plus level.

Campus Code

Distance Education
Knoxville Campus

Graduate Certificate Type

Stand-Alone
Add-On

Admissions Standards/Procedures

- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Education of the Deaf and Hard of Hearing PreK-12 Graduate Certificate through the Graduate Admissions Office.
- All 15 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards

- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required

15 graduate credit hours

Required Courses

- EDDE 415
- EDDE 416
- EDDE 419
- EDDE 528
- EDDE 529

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** **13.1399** .

✚ **ADD CERTIFICATE**

Elementary Education

In the 2021-2022 Graduate Catalog, add Elementary Education Graduate Certificate and requirements as follows:

The graduate certificate in Elementary Education is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of elementary age learners from a range of backgrounds. A graduate certificate in Elementary Education is appropriate for K-12 teachers endorsed in areas outside of Elementary Education, K-12 teachers endorsed in Elementary Education at the undergraduate level, administrators and supervisors aspiring to lead schools at the elementary level, non-endorsed professionals whose work (e.g., museum, public-service agency) interfaces significantly with K-12 education, and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement in Elementary Education for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams, and recommendation of the faculty advisor.

Campus Code

Distance Education
Knoxville Campus

Graduate Certificate Type

Stand-Alone
Add-On

Admissions Standards/Procedures

- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Elementary Education Graduate Certificate through the Graduate Admissions Office.
- All 15 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards

- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required

15 graduate credit hours

Required Courses

- REED 530
- MEDU 530
- SSCE 521
- SCED 531
- Elective (3 credit hours)
  - REED 528
  - REED 529
  - REED 537

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** 13.1399 ..

✚ **ADD CERTIFICATE**

English as a Second Language (Prek-12)

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

English as a Second Language (PreK-12) Graduate Certificate
The graduate certificate in English as a Second Language PreK-12 is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of K-12 students who are acquiring a second language and from a range of backgrounds and cultures. A graduate certificate in English as a Second Language PreK-12 is appropriate for PreK-12 teachers endorsed in areas outside of English as a Second Language PreK-12 teachers endorsed in an area of second language education at the undergraduate level, administrators and supervisors aspiring to lead schools or serve in roles supporting students' second language acquisition, non-endorsed professionals whose work (e.g., museum, public-service agency) interfaces significantly with PreK-12 education, and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement in English as a Second Language Education for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams and recommendation of the faculty advisor.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the English as a Second Language PreK-12 Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
- WLEL 489
- WLEL 466
- WLEL 586
- WLEL 556

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** 13.1399 ..

+ ADD CERTIFICATE

Educational Technology

In the 2021-2022 Graduate Catalog, add Educational Technology Graduate Certificate and requirements as follows:

This graduate certificate in educational technology is available to any graduate students enrolled at the university. The certificate is intended for currently admitted graduate students wishing to develop a specialization in educational technology to work with students in a variety of capacities. The certificate objectives include:

- Provide students with the expertise and skill to integrate technology into their own teaching.
- Assist students in designing technology-enhanced learning experience for their students.
- Integrate theory with project-based courses in instructional design, e-learning, and emerging trends.
- Develop applicable skills and knowledge in multi device learning, digital collaboration, mobile and cloud technologies, simulation- and game-based learning.
- Prepare students to effectively lead technology-rich learning environments including mobile learning, blended learning, selecting tools, media integration, and standards-based course design.
- Model effective use of current technologies in diverse learning environments.
- Gain a deep understanding of the role of technology in schools.
- Lead change efforts in schools and school districts to improve student achievement.

Campus Code

Distance Education
Knoxville Campus

Graduate Certificate Type

Stand-Alone
Add-On

Admissions Standards/Procedures

- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Educational Technology Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards

- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required

12 graduate credit hours

Required Courses

- ETEC 586 (3 hours)
- At least two of the following (6 hours)
  - ETEC 587
  - ETEC 588
  - ETEC 589
- At least one of the following (3 hours)
  - IT 570
  - IT 573
  - IT 578
  - EDAM 552
  - EDPY 404/504
  - TPTE 540
  - TPTE 595

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: With a recent need for virtual learning platforms and pedagogy in our K12 classrooms, this 12-hour graduate certificate in educational technology is intended to support currently admitted graduate students' development of the knowledge and skills needed to effectively integrate existing and emerging technologies into their classrooms and other academic environments. Graduate students currently enrolled in many of the graduate programs on our campus are actively seeking methods to use technology as a means to create meaningful and engaging lessons for their future and current students. A certificate in educational technology will offer students a way to bundle the courses they are already taking so that they can present their learned skills to future employers. This certificate will also further prepare students to be able to apply a technology focus to the work they do in their various fields of study.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: Needs code from Graduate School. Contacted Catherine Cox who said they will add a code after this goes through the CRC approval process. Requires DGS approval and SACSCOC approval. VPR approval not required since less than 24 credit hours are required.
Need CIP Code 13.1399 .

+ ADD CERTIFICATE

Gifted Education (Prek-12)

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

Gifted Education (PreK-12) Graduate Certificate
The graduate certificate in Gifted Education PreK-12 is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of PreK-12 students with a range of exceptionalities and from a range of backgrounds. A graduate certificate in Gifted Education PreK-12 is appropriate for PreK-12 teachers endorsed in areas outside of exceptional education, PreK-12 teachers endorsed in an area of exceptional education at the undergraduate level, administrators and supervisors aspiring to lead schools or serve in roles supporting special student populations, non-endorsed professionals whose work (e.g., museum, public-service agency) interfaces significantly with PreK-12 education, and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement in Gifted Education PreK-12 for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams and approval of the faculty advisor.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Gifted Education PreK-12 Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
- SPED 574
- SPED 575
- TPTE 540
- ELED 524

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** 13.1399 ..

✚ **ADD CERTIFICATE**

Literacy Specialist

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

Literacy Specialist Graduate Certificate
The Literacy Specialist graduate certificate is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused literacy instruction of K-12 students from a range of backgrounds. Coursework in the Literacy Specialist graduate certificate is aligned with standards of both the International Literacy Association and the International Dyslexia Association. The Literacy Specialist graduate certificate is appropriate for all K-12 teachers, school administrators and supervisors, non-endorsed professionals whose work interfaces significantly with K-12 education (e.g., museum, public-service agency), and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement as a Literacy Specialist for teachers licensed in the state of Tennessee, pending transcript review*, passing appropriate licensure exams, recommendation of the faculty advisor and three years' teaching experience. *Students seeking this certificate must have completed a minimum of one reading or literacy instruction course and one special education course.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Literacy Specialist Graduate Certificate through the Graduate Admissions Office.
- All 15 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
15 graduate credit hours

Required Courses
- REED 529
- REED 537
- REED 540
- SPED 516
- REED 605

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** 13.1399 ..

+ ADD CERTIFICATE

STEM Leadership

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

STEM Leadership Graduate Certificate
The STEM Leadership Graduate Certificate is designed for graduate students interested in advancing their knowledge in the fields of STEM (Science, Technology, Engineering, and Mathematics) and Teacher Leadership. The certificate objectives include:

- Develop leadership capacity to lead reform efforts in STEM programming within schools or districts.
- Develop capacity to identify of problems of practice in STEM within school or a district and develop solutions to these problems through evidence-based research findings.
- Develop capacity to lead STEM education reform efforts in schools and school districts to improve teacher practice, student achievement and interest in STEM.
- Develop pedagogical content knowledge in relevant STEM disciplines, tailored to students' interest.
- Develop capacity to design, implement and evaluate a teacher professional development project.
- Acquire a robust knowledge of data science and statistical skills through project-based learning.
- Develop grant writing skills through an applied capstone project.
- Develop capacity to design, lead and evaluate online professional development programs in STEM.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures

- Applicants can be currently admitted to a degree program at UTK or can apply solely for the STEM Leadership Certificate in STEM through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards

- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
A total of 4 courses and a capstone project are required for the certificate. The STEM Leadership Certificate program students will take the following three required courses.

- ETEC 589 Technology, Leadership, and Learning,
- MEDU 581 Equity in STEM Education
- TPTE 540 Improvement of Instruction-Capstone Course

And one of the following courses as elective based on students' interest:

- TPTE 595 An Introduction to Data Science Methods in Education.
- EDEM 552 Leadership for Change
- EF 501 Education Theory for Research and Practice in Engineering.
- ETEC 588 STEM Teaching Tools

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: With the introduction of the new science standards-the Next Generation Science Standards (NGSS), there has been an increasing pressure to integrate engineering concepts and computational thinking skills in school curriculum and this has created the need for leadership to lead STEM efforts in school districts in a coordinated fashion. Yet, most school districts lack STEM specific leadership talent. The goal of the STEM Teacher Leadership Graduate Certificate is to help educators who are in leadership positions and those aspiring to become a STEM leader to strengthen their leadership knowledge and skills in STEM so they can lead reform efforts within their schools and /or districts or informal STEM settings. The coursework is designed to promote candidates' in-depth understanding of current standards and instructional practices, focus on development of leadership skills through data-driven project-based learning and data science tools and techniques. Program participants will earn the certificate by taking 12 credit hours of coursework (4 courses).

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** 13.1399 ..

✚ **ADD CERTIFICATE**

Secondary English Education

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

Secondary English Education Graduate Certificate
The graduate certificate in Secondary English Education is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of secondary English education. Coursework in this certificate is designed to lead to an additional endorsement in secondary English education for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams and approval of the faculty advisor.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Secondary English Education Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
- ENED 460
- ENED 508
- ENED 509
- REED 461

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** 13.1399 ..

✚ **ADD CERTIFICATE**

Secondary Mathematics Education

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

Secondary Mathematics Education Graduate Certificate
The graduate certificate in Secondary Mathematics Education is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of secondary mathematics education. Coursework in this certificate is designed to lead to an additional endorsement in secondary mathematics education for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams, and approval of the faculty advisor.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Secondary Mathematics Education Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
- MEDU 485
- TPTE 540
- Electives (6 credit hours) (Choose 2 of the following)
  - MEDU 523
  - MEDU 583
  - MEDU 445
  - MEDU 446

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** 13.1399 ..

✚ **ADD CERTIFICATE**

Secondary Science Education

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

Secondary Science Education Graduate Certificate
The graduate certificate in Secondary Science Education is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of secondary science education. Coursework in this certificate is designed to lead to an additional endorsement in secondary mathematics education for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams, and approval of the faculty advisor.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Secondary Science Education Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 gradute credit hours

Required Courses
- SCED 496
- TPTE 540
- Electives (6 graduate credit hours) (Choose 2 of the following)
  - SCED 565
  - SCED 550
  - SCED 572
  - SCED 445
  - SCED 446

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** **13.1399** ..

✚ **ADD CERTIFICATE**

Secondary Social Science Education

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

Secondary Social Science Education Graduate Certificate
The graduate certificate in Secondary Social Science Education is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of secondary social science education. Coursework in this certificate is designed to lead to an additional endorsement in secondary social science education for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams, and approval of the faculty advisor.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Secondary Social Science Education Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
- SSCE 532
- TPTE 540
- SSCE 599
- SSCE 585

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** **13.1399** ..

✚ **ADD CERTIFICATE**

Special Education Comprehensive K-12

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

Special Education Comprehensive K-12 Graduate Certificate
The graduate certificate in Special Education Comprehensive K-12 is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of K-12 students with a range of exceptionalities and from a range of backgrounds. A graduate certificate in Special Education Comprehensive K-12 is appropriate for K-12 teachers endorsed in areas outside of exceptional education, K-12 teachers endorsed in an area of exceptional education at the undergraduate level, administrators and supervisors aspiring to lead schools or serve in roles supporting special student populations, non-endorsed professionals whose work (e.g., museum, public-service agency) interfaces significantly with K-12 education, and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement in Special Education Comprehensive K-12 for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams and approval of the faculty advisor.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Special Education Comprehensive K-12 Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
- SPED 517
- SPED 518
- SPED 559
- SPED 590

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** **13.1399** ..

✚ **ADD CERTIFICATE**

Special Education Interventionist K-8 & 6-12

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

Special Education Interventionist K-8 & 6-12 Graduate Certificate
The graduate certificate in Special Education Interventionist K-8 & 6-12 is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of K-12 students with a range of exceptionalities and from a range of backgrounds. A graduate certificate in Special Education Interventionist K-8 & 6-12 is appropriate for K-12 teachers endorsed in areas outside of exceptional education, K-12 teachers endorsed in an area of exceptional education at the undergraduate level, administrators and supervisors aspiring to lead schools or serve in roles supporting special student populations, non-endorsed professionals whose work (e.g., museum, public-service agency) interfaces significantly with K-12 education, and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement in Special Education Interventionist K-8 & 6-12 for teachers licensed in other areas in the state of Tennessee, pending transcript review, passing appropriate licensure exams and approval of the faculty advisor.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the Special Education Interventionist K-8 & 6-12 Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
- SPED 515
- SPED 516
- SPED 542
- SPED 553

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** **13.1399** ..

✚ **ADD CERTIFICATE**

World Languages (PreK-12)

In the 2021-2022 Graduate Catalog, add heading, text and requirements as follows:

World Languages (PreK-12) Graduate Certificate
The graduate certificate in World Languages PreK-12 is intended for those seeking to develop a knowledge and skill base that undergirds effective, equity focused teaching of PreK-12 students who are acquiring a second language and from a range of backgrounds and cultures. A graduate certificate in World Languages PreK-12 is appropriate for PreK-12 teachers endorsed in areas outside of World Languages PreK-12, teachers endorsed in an area of world languages at the undergraduate level, administrators and supervisors aspiring to lead schools or serve in roles supporting students' world languages acquisition, non-endorsed professionals whose work (e.g., museum, public-service agency) interfaces significantly with PreK-12 education, and those interested in home schooling. Coursework in this certificate is designed to lead to an additional endorsement in World Languages for teachers licensed in other areas in the state of Tennessee, pending transcript review*, passing appropriate licensure exams and recommendation of the faculty advisor. *For World Languages Education, proficiency in French, German, Latin, Russian or Spanish is required, as well as an undergraduate major or 24 credit hours in any of the above referenced languages.

Campus Code
Distance Education
Knoxville Campus

Graduate Certificate Type
Stand-Alone
Add-On

Admissions Standards/Procedures
- Applicants can be currently admitted to a degree program at UTK or can apply solely for the World Languages PreK-12 Graduate Certificate through the Graduate Admissions Office.
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.

Academic Standards
- Students must maintain a 3.50 graduate GPA in all certificate courses in the program and complete the requirements within five years of applying for a certificate.

Credit Hours Required
12 graduate credit hours

Required Courses
- WLEL 445
- WLEL 455
- WLEL 475
- WLEL 550

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Due to national and state shortages in K-12 teachers, especially in high need areas such as mathematics, science, English as a second language and special education, there is a need to make educator preparation more accessible. Further, school leaders and administrators are often faced with administering programs outside their areas of experience. In addition, a growing number of professionals work outside K-12 education, e.g., in museums and non-profit public service agencies that have an education-focused mission. This graduate certificate provides knowledge and skills needed to provide equity focused K-12 instruction. Further, for teachers endorsed in the state of Tennessee, the coursework is designed to lead to an additional endorsement.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval. **Need CIP Code** 13.1399 ..

✚ **DROP CERTIFICATE**

Cultural Studies in Education

Rationale: We believe the name of this certificate is outdated. We are dropping the certificate: Cultural Studies in Education. We are establishing a new graduate certificate titled: Social Justice Education.

✚ **ADD CERTIFICATE**

Social Justice Education

In the 2021-2022 Graduate Catalog, add heading, text, and requirements for new certificate as follows:

Social Justice Education Graduate Certificate
The graduate certificate in Social Justice Education is intended for those seeking to develop skills necessary when working with diverse populations, especially targeted, minority populations, in ways that promote diversity, equity, and inclusion. Students currently enrolled in many of the graduate programs on our campus are seeking to understand their different fields of study through a social justice lens. A certificate in social justice education will offer students a way to bundle the courses they are already taking so that they can present to future employers their skills in a way that is easily recognized.

Campus Code
Knoxville Campus

Graduate Certificate Type
Stand-Alone (earned terminal degree required)
Add-On

Admissions Standards/Procedures
Certificate candidates must currently be admitted to a graduate program at the university or hold a terminal degree and be admitted to the graduate school in the certificate.

Academic Standards
A 3.50 graduate GPA must be earned in all certificate courses.

Credit Hours Required
12 graduate credit hours

Required Courses
CSE 591
CSE 550
CSE 592
CSE 645

Non-Course Requirements
- All 12 credit hours of graduate coursework must be completed at the University of Tennessee within five years of applying for a certificate.
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: We are establishing a new certificate and specifying the required courses to better reflect the times in which we find ourselves living. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. **CIP Code** 13.1399 ..

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

Applied Behavior Analysis

In the 2021-22 Graduate Catalog, add heading, text, and requirements for new concentration.

The Teacher Education, EdS; Applied Behavior Analysis (ABA) Concentration is designed to prepare practitioners to use behavior-analytic techniques and treatment approaches to prevent and reduce problem behaviors and to increase appropriate behaviors and skills targeted to improve overall quality of life. The ABA Concentration coursework is comprised of courses in Special Education and School Psychology programs. Content in this program of studies is primarily focused on treatment approaches for children and adults with learning or behavioral difficulties and their teachers and caregivers. Completion of the Teacher Education major, for the EdS degree; ABA Concentration requires a total of 30 graduate credit hours.

Admission to the Teacher Education, EdS; ABA Concentration requires a Master's degree. Admission will be based on applicant GRE scores, grade point average at all collegiate levels, written goal statement, example of professional writing, background check clearance, professional references, admission board interview, and professional reference.

Required Courses

- Core (6 graduate credit hours). Must complete the following courses:
  - SPED 555 (3)*
  - EDPY 517 (3)*

- Concentration Specialist Area (12 credit hours). Must complete the following courses:
  - EDPY 515 (3)*
  - SPED 530 (3)*
  - SPED 501 (3)*
  - In consultation with advisor, select one of the following courses:
    - EDPY 505 (3)*
    - SPED 603 (3)*

- Option Requirements (6 credit hours). May choose a thesis or non-thesis option
  - TPTE 518 (6) Thesis Research
  - TPTE 503 (6) Problems in Lieu of Thesis (6)

- Related Studies (6 credit hours). Must complete the following course:
  - EDPY 636 (3)*
  - In consultation with advisor, select from the following courses and/or other relevant graduate-level course(s) approved by advisor.
    - EDPY 510 (3)
    - EDPY 516 (3)
    - SCHP 690 (3)
    - SPED 553 (3)
    - SPED 556 (3)
    - SPED 557 (3)

- Total 30 graduate credit hours.

*Note: To complete the coursework required for board certification in Behavior Analysis, students must complete EDPY 515, EDPY 517, EDPY 636, SPED 555, SPED 530, SPED 501, and either EDPY 505 or SPED 603. An international certifying board specifies and updates additional requirements (e.g., completing supervised internship experience, completing exam) for board certification, which are outside of coursework included in the Teacher Education, EdS, ABA concentration.

Rationale: We are requesting to add a new Applied Behavior Analysis (ABA) Concentration to our department's existing Teacher Education, EdS degree. The ABA Concentration is specifically designed to meet coursework requirements of our Behavior Analyst Certification Board Verified Course Sequence. The increased demand regionally and nationally for Board Certified Behavior Analysts (BCBA) supports the need for the proposed ABA Concentration. The ABA Concentration will be an option for students who are interested in applied behavior analysis or working with children and adults with disabilities—but are not necessarily interested in becoming a licensed special education teacher or already hold a teaching license. This new EdS concentration will appeal to students who already hold a Master's degree and want to complete the courses required to sit for the BCBA exam and earn an advanced degree.

Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget. Additional Documentation: This change does not require additional approval.

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

Art Education

In the 2021-22 Graduate Catalog, under the headings "Concentrations" and "Concentration Specialist Area" add/include the new Art Education concentration. Under the Concentrations heading, add/include the new Applied Behavior Analysis to the concentrations list.

Concentrations
- Applied Behavior Analysis
- Art Education
- Educational Technology
- Elementary Education
- English Education
- Literacy Education
- Mathematics Education
- Practitioner
- Science Education

Social Science Education
Special Education
Teaching and Learning
World Language/ESL Education

Rationale: Local art teachers, particularly local art mentor teachers, have expressed an interest in furthering their education through an Ed.S. or doctoral degree. Art education faculty, through these conversations with art mentor teachers and in informally assessing the educational status of Knox County teachers in general, many of whom have graduated with a Master of Science in Teacher Education (Art Education Professional Internship) from the University of Tennessee without pursuing any additional subsequent degrees; have determined a need for an art education concentration of the existing Ed.S. (Teacher Education Major).

Impact on Other Units: The impact on other units would be minimal. The only impact would be that enrollment in these courses might be slightly higher as Ed.S. (art education concentration) students enroll in them. As we do not anticipate large numbers of students enrolling in this concentration, we do not expect the impact to these courses would be significant. Financial Impact: We do not expect this change will have a direct financial impact on the department or college budget. We do expect this change might increase enrollment in art education, which would positively impact the budget. This change does not require additional approval.

REVISE TEACHER EDUCATION MAJOR, MS – PRACTITIONER CONCENTRATION TO ADD SPECIALIZATIONS

Practitioner Concentration
Elementary Education specialization
English Education specialization
Middle Grades Math Education specialization
Middle Grades Science Education specialization
Social Science Education specialization

In the 2021-22 Graduate Catalog, add the specializations and the associated specialization courses as shown below.

Practitioner Concentration — Course Only without Comprehensive Exams

- Specialization courses
  - Elementary Education
    - TPTE 593
    - REED 530
    - SSCE 521
    - SCED 531
    - MEDU 530
  - English Education
    - ENED 460
    - ENED 459
    - REED 461
    - ENED 508
    - ENED 509
  - Middle Grades Math Education
    - MEDU 445
    - MEDU 446
    - MEDU 543
    - SPED 552
    - REED 543
  - Middle Grades Science Education
    - SCED 445
    - SCED 446
    - SCED 543
    - SPED 552
    - REED 543
  - Social Science Education
    - SSCE 532
    - SSCE 543
    - SSCE 585
    - SSCE 599
    - TPTE 574

Rationale: We are adding elementary education, English education, and social science education as a specialization under the MS in Teacher Education, Practitioner Concentration. A Job-Embedded Practitioner (JEP) teacher licensure pathway has been approved by the state for elementary, English, and social science education. These programs are designed to respond to the increasing needs of teachers in public schools, as well as allowing us to recruit students across the state of Tennessee. Impact on Other Units: None. The proposed change does not require courses required by other programs. Financial Impact: None. This change will not require additional resources nor affect the department or college budget.

TICKLE COLLEGE OF ENGINEERING

All Changes Effective Fall 2021.

I. COURSE CHANGES

DEPARTMENT OF CHEMICAL AND BIOMOLECULAR ENGINEERING

(CBE) Chemical and Biomolecular Engineering

ADD

CBE 552 Polymers and 3D Printing Applications (2-3) Introduction to polymer materials, 3D Printing, and their applications. A review of topics in polymer science and engineering followed by an introduction to 3D Printing. An important consideration on the technology, applications, and ecosystem of 3D printing. Students are required to write a review article on the topic of 3D printing and participate in a 3D printing demonstration when available.
Repeatability: May be repeated. Maximum 6 hours.
Credit Restriction: Students cannot receive credit for both CBE 452 and CBE 552.
Recommended Background: Introductory courses in materials or chemistry of materials.

Rationale: This is an elective course that adds needed breadth to current departmental course offerings, including a laboratory component, in an area of interest to current graduate students. Impact on other units: None. Financial impact: None.

REVISE DESCRIPTION AND ADD CREDIT RESTRICTION

CBE 506 Advanced Engineering Mathematics (3) Mathematical methods for chemical & biomolecular engineering and related disciplines. Topics include abstract vector spaces, eigenvalue problems, solution techniques for ordinary and partial differential equations, Sturm-Liouville theory and generalized Fourier series, integral transforms, Green's functions, stability analysis, and perturbation theory.
Credit Restriction: Students cannot receive credit for both CBE 408 and CBE 506.

Formerly: Formulation and solution of problems in chemical engineering and materials areas, ordinary and partial differential equations; types of ODE, PDE and solution techniques; transform methods; conformal mapping; variational methods; introduction to numerical methods.

Rationale: Course content has been recently updated to reflect current student educational needs. Impact on other units: None. Financial impact: None.

REVISE TO ADD RECOMMENDED BACKGROUND ON PRIMARY CROSS-LISTED COURSE

+CBE 576 Applied Microbiology and Bioengineering (3)
Cross-listed: (Same as Biosystems Engineering 576; Environmental Engineering 576; Microbiology 576.)
Recommended Background: Familiarity with basic calculus and simple ordinary differential equations.

Rationale: Course is cross-listed: Same as Biosystems Engineering 576 and Environmental Engineering 576, and outside engineering (MICR) and occasionally attracts students that might not have typical engineering math skills. The change clarifies the requirement for the ability to perform some calculations. Impact on other units: None. Financial impact: None.

DEPARTMENT OF CIVIL AND ENVIRONMENTAL ENGINEERING

(CE) Civil Engineering

ADD

CE 533 Foundation Engineering (3) Laboratory and in situ exploration methods to characterize soil and rock properties for engineering design, bearing capacity of soils, types of shallow foundation systems, geotechnical design of spread footings and mat foundation subjected to concentric and eccentric loading, shallow foundation settlements in clays and sands, Rankine lateral earth pressure theory, types of earth retaining wall systems, stability of concrete retaining walls, introduction on types of deep foundation systems, axial capacity of single pile.
Credit Restriction: students may not receive credit for both CE430/CE437 and CE533.
Comment(s): For registration: Prerequisite of CE 331 (or equivalent) or consent of instructor.

Rationale: CE430 is listed as a concentration elective and many of 5 years BS-MS students do not take it during their BS degree. Also, some of graduate students have not taken the course during their undergraduate studies. Foundation engineering is critical for most civil engineering projects and the proposed changes will enable students to take the course for graduate credit. It is a pre-requisite for CE535 with many graduate students express interest in taking CE535 and end up missing the chance due not taking CE430. Impact on other units: None. Financial impact: None.

ADD AS A SECONDARY CROSS-LISTED COURSE

CE 585 Introduction to Fire Protection Engineering (3) The application of fire protection engineering principles to the safe design, wiring, and construction of buildings and infrastructure. Topics include safety and performance-based design, fire dynamics, fire hazard and risk analysis, national electrical codes, public fire service operations, detection and alarm systems, and transportation fire safety.
Cross listed: (See: Electrical and Computer Engineering (ECE) 563.)
Registration Permission: Consent of Instructor.

Rationale: The course is of interest to many civil engineering students and adding the course will address a need area for some of CE students. Impact on other units: It will give more exposure to Graduate Certificate Program in Fire Protection Engineering (FPE). Financial impact: None.

REVISE PRIMARY COURSE TO DROP (RE) PREREQUISITE(S) AND ADD (DE) PREREQUISITE(S); ADD TWO SECONDARY CROSS-LISTED COURSES

+CE 661 Nonlinear Finite Element Methods (3) Theory and practice of nonlinear finite element methods focused on solid mechanics applications. Treatment of geometric nonlinear kinematics and inelastic material response. Development of linearized expressions for use in the Newton-Raphson algorithm. Programming of element and material subroutines.
Cross listed: (Same as: Mechanical Engineering 660 and Aerospace Engineering 660)
(DE) Prerequisite(s): CE 560 or equivalent; CE 538 or CE 561, or consent of instructor.

Formerly:(RE) Prerequisite(s): 560 or equivalent; CE 538 or CE 561.

Rationale: The course is of interest to many mechanical engineering students. Impact on other units: Many MABE students will benefit from taking the course. Financial impact: None.

(ENVE) Environmental Engineering

REVISE TO ADD RECOMMENDED BACKGROUND ON SECONDARY CROSS-LISTED COURSE

+ENVE 576 Applied Microbiology and Bioengineering (3)
Cross-listed: (See Chemical and Biomolecular Engineering 576.)
Recommended Background: Familiarity with basic calculus and simple ordinary differential equations.
CBE is Primary.

Rationale: Chemical Engineering 576 crosslisted with Biosystems Engineering 576 and outside engineering (MICR 576) and occasionally attracts students that might not have typical engineering math skills. The change clarifies the requirement for the ability to perform some calculations. Impact on other units: None. Financial impact: None.

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

(COSC) Computer Science

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

COSC 422 Applied Machine Learning (3) Will focus on understanding key machine learning (ML) concepts and an overview of ML techniques for practical applications. Introduces important ML approaches and learning methods in modeling and prediction of complex systems. Specific topics include issues with data acquisition and preprocessing, training, classification and prediction, modeling tools, and postprocessing and evaluation.
(RE) Prerequisites: COSC 111; MATH 251 or MATH 257; MATH 241; and ECE 313 or ECE317 or MATH 323.
Comment(s): Prior knowledge may satisfy prerequisites with consent of instructor.

Rationale: Machine learning (ML) technologies are revolutionizing many aspects of our daily life and ML potentially can solve important problems of great importance. Several units across campus have indicated the necessity of this class being offered to non-EECS majors as electives. Impact on other units: Addresses a need expressed from other engineering departments and across campus. Potential technical electives to other engineering disciplines. Financial Impact: None.

ADD

COSC 523 Artificial Intelligence (3) Theoretical and applied aspects of artificial intelligence. Course topics include problem solving and search, knowledge representation and reasoning, decision-making under uncertainty, machine learning, and multi-agent systems.
Recommended Background: Programming, data structures and algorithms, linear algebra, probability theory.

Rationale: Artificial intelligence has advanced rapidly in the recent decade and has been an essential component in computer science. Most computer science programs across the nation offer artificial intelligence in their curriculum. In recent years, the department has hired several new faculty in the area of machine learning and artificial intelligence. Impact on other units: None. Financial Impact: None.

COSC 561 Compilers and Runtime Systems (3) Topics in compilers and runtime systems, including: static and dynamic program analysis, performance measurement and characterization, compiler optimization, high-level language virtual machines, instruction set emulation, JIT compilation, explicit vs. automated memory management, and garbage collection.
Recommended background: Introductory coursework in computer architecture, operating systems, and compilers.

Rationale: There is a need for the graduate catalog to include a course covering topics in compilers and runtime systems. Some course content overlaps with a previously taught COSC 594: Special Topics course, which will no longer be offered. Some course content overlaps with COSC 560: Software Systems, which is being dropped from the catalog. There are currently two full time faculty who can rotate as instructors for the course. Impact on other units: None. Financial impact: None.

COSC 562 Operating Systems: Design and Implementation (3) Operating system structures, virtual memory, interrupts, exceptions, system calls, processes. Focuses on design and implementation of advanced concepts in file systems, memory management, mass storage devices, process management, and other operating system-related topics.
Recommended background: Undergraduate coursework in operating systems.

Rationale: There is a need for an advanced operating systems course in the catalog. This course has been previously taught for three semesters as a COSC 594: Special Topics course, with maximum enrollment of 17 graduate students. Some course content overlaps with COSC 560: Software Systems, which is being dropped from the catalog. There are currently two full time faculty who can rotate as instructors for the course. Impact on other units: None. Financial impact: None.

DROP

COSC 521 Computational Cognitive Neuroscience (3)

Rationale: The primary instructor of this course has left the university. This course is not expected to be offered going forward. Impact on other units: none. Financial impact: none.

COSC 560 Software Systems (3)

Rationale: Software systems is too broad to be covered in a single graduate level course. The course content is better covered over multiple, separate courses. With the addition of COSC 561 and COSC 562, it is no longer necessary to offer COSC 560. Impact on other units: None. Financial impact: None.

REVISE TITLE, DESCRIPTION, AND RECOMMENDED BACKGROUND

COSC 526 Data Mining and Analytics (3) Provides a practical introduction to big data mining and analytics, blending theory and practice. Over the course of the semester, students will become familiar with modern data science methods, gain comfort with the tools of the trade, explore real-world data sets, and leverage the power of high performance and cloud resources to extract insights from data. Upon completing the course, students will learn how to create reproducible and explanatory data science workflows, how to implement a modern MapReduce, and how to implement parallel clustering methods. Students will also study strategies for overcoming the common imperfections in real-world datasets, and apply their new skills to extract insights from a high-dimensional dataset.
Recommended Background: Python Programming.

Formerly:
COSC 526 Data Mining (3) Will focus on understanding the statistical structure of large-scale (big) datasets using machine learning (ML) algorithms. We will cover the basics of ML and study their scalable versions for implementation within distributed computing frameworks. We will pursue ML techniques such as matrix factorization, convex optimization, dimensionality reduction, clustering, classification, graph analytics and deep learning, among others. We will emphasize algorithmic development for big data mining in three different, but general scenarios: (1) when available memory is extremely large; (2) when available memory is small, but can be distributed across a cluster (e.g., cloud-like environments); and (3) when the available memory is small and data has to be analyzed "in-situ" or "online" (e.g., streaming environments). The course will be project driven with source material from a variety of real-world applications. Students will be expected to design, implement and test their ML solutions.
Recommended Background: Machine Learning.

Rationale: Data mining has advanced rapidly in the recent decade, requiring new topics to be added and less important ones to be removed. Moreover, specific material from Machine Learning is not required, and so it has been eliminated as a recommended background. Impact on other units: None. Financial Impact: None. This is a low impact change as it simply changes topics covered in the course to reflect new developments in this field.

REVISE TITLE

COSC 650 Advanced Topics in Artificial Intelligence and Machine Learning (1-6)

Formerly: Advanced Topics in Pattern/Image Analysis (1-6)

Rationale: The new course title allows for courses in areas of artificial intelligence and machine learning other than pattern/image analysis. This change aligns COSC 650 with the Artificial Intelligence and Machine Learning graduate certificate that is being added this year. Impact on other units: None. Financial impact: None.

(ECE) Electrical and Computer Engineering

ADD

ECE 634 Fundamentals of Semiconductors: Physics and Materials Properties (3) An advanced interdisciplinary course that helps to prepare students for ECE 635 Advanced Semiconductor Devices, although not considered a prerequisite. It welcomes graduate students from other departments, such as Physics, MSE, and Chemistry, for whom this course is to bridge the gap between frontier research in advanced materials and applications in the semiconductor industry as well as in nanoelectronics research.
Registration Restriction: Minimum student level – graduate.

Rationale: As Moore's law approaches its end, student interest in courses on emerging electronic materials and devices has increased in recent several years. After ECE 635 Advanced Semiconductor Devices was listed as a regular course, it enrolled 20 EECS and MSE students. In ECE 635, it takes a large portion of the time to prepare the students on the physics and materials properties of semiconductors, limiting the time spent on device topics. This issue calls for a separate course on the materials topics. This course, Fundamentals of Semiconductors, was taught in as ECE 692 Special Topics in Spring 2020 with enrollment of 12. There are currently three faculty that can rotate as instructors for the course. Impact on other units: None. Financial impact: None.

REVISE DESCRIPTION

ECE 504 Random Process Theory for Engineers (3) Theoretical and applied aspects of probability and random process. Course topics include measure and probability, stationary process, Poisson process, Gaussian process and Brownian motion, Markov process, renewal process, and empirical process and concentration. Students will also learn how theory can be applied to various application domains, including sampling complexity in machine learning, queuing in network, linear prediction, pricing in futures market, Markov decision process, and reinforcement learning.

Formerly:
ECE 504 Random Process Theory for Engineers (3) Probability and random variables as approached by set theory. Statistical averages and transformations of random variables. Random processes, stationarity, correlation functions and temporal analysis, power spectrum and spectral analysis as applied to response of systems to random signals.

Rationale: Description is revised to reflect new developments in the field and include more modern topics related to random process. More application-driven studies will also facilitate the learning of theory. Impact on other units: None. Financial Impact: None.

REVISE TITLE

ECE 512 Robust Control Design (3)

Formerly: Multivariable Linear Control Systems Design (3)

Rationale: The new title is a better description of course content. Impact on other units: None. Financial impact: None.

REVISE TITLE AND DESCRIPTION

ECE 551 System on Chip Design (3) Provides background and hands-on experience with top-down VLSI design flows where custom design techniques are married with HDL synthesis to produce complex digital systems. Topics covered include HDL coding techniques for system-on-chip (SOC) design, standard cell library development and use, synthesis techniques, algorithms for placement and routing, floorplanning, FPGA-based design and prototyping, timing analysis, and power-aware design techniques. Students will gain experience applying top-down VLSI design techniques in the implementation of SOCs, FPGA-based prototypes and advanced microprocessors.

Formerly: Digital System Design I (3) Design considerations for combinational and sequential circuits. Iterative networks. Fault diagnostics of logic circuits.

Rationale: Title needs revision, in part because we no longer offer "Digital System Design II." Also, "System on Chip Design" uses more up to date terminology and speaks specifically to how the course has been taught in recent years. The description is also updated to reflect newer terminology and how the course has been taught recently. Impact on other units: None. Financial impact: None.

REVISE TO ADD RECOMMENDED BACKGROUND

ECE 555 Embedded Systems (3)
Recommended Background: Introductory coursework in microcontroller interfaces.

Rationale: This course is co-taught with ECE 455. The recommended background is being updated to reflect similar changes to the prerequisites for ECE 455. Impact on other units: None. Financial impact: None.

REVISE TO CREATE AS A CROSS-LISTED COURSE AND TO ADD THE SECONDARY CROSS LISTED COURSES

+ECE 563 Introduction to Fire Protection Engineering (3)
Cross-listed: (Same as Civil Engineering 585, Nuclear Engineering 584).

Rationale: This course is of interest to various disciplines (Civil Engineering, Nuclear Engineering). Impact on other units: none. Financial Impact: none.

REVISE TITLES AND DESCRIPTIONS

ECE 643 Learning and Decision Theory (3) Statistical Decision Theory, Hypothesis Testing; Sequential Detection; Classification, Empirical Risk Minimization, PAC Learning Framework PAC Learnable Classes, VC Dimension.

Formerly: Detection and Estimation Theory (3) Detection theory; coding theory; system identification. Signals with unknown parameters; optimal filter synthesis; adaptive systems; sequential detection; suboptimal detection.

Rationale: Title and description are revised to reflect new developments in the field and include more modern topics related to learning and decision theory. Impact on other units: None. Financial Impact: None.

ECE 644 Classical and Quantum Information Theory (3) Notions and Properties of Shannon and Von Neumann Entropy, Divergence Measures, Inequalities involving Shannon and Von Neumann Entropy, Classical Source compression (Shannon Limit) and Quantum Source compression (Schumacher Limit). Capacity of classical channel (Mutual Information). Capacity of Classical-Quantum Channel (Holevo-Schumacher-Westmoreland Limit)

Formerly: Coding and Information Theory (3) Structure of algebraic and probabilistic codes; linear codes, convolutional codes, error-correcting codes, decoding methods. Identification schemes: deterministic, stochastic, and hierarchical methods.

Rationale: Title and description are revised to reflect new developments in the field of information theory and include more modern topics related to quantum theory. Impact on other units: None. Financial Impact: None.

REVISE DESCRIPTION AND (RE) PREREQUISITES

ECE 683 Electric Drive System Control and Converter Design (3) Design of three-phase power converters. Control design, semiconductor device selection, passive components design and selection, loss calculation, thermal design, protection, and auxiliary circuits. Interface issues with source and load. Harmonic and EMI filters. Introduction to high-density converter design using wide bandgap semiconductor devices. Electric drive system control design.
(RE) Prerequisite(s): ECE 481 equivalent or consent of instructor.

Formerly: Design of three-phase power converters. Control design, semiconductor device selection, passive components design and selection, loss calculation, thermal design, protection, and auxiliary circuits. Interface issues with source and load. Harmonic and EMI filters. Drive system design.
(RE) Prerequisite(s): ECE 583 or consent of instructor.

Rationale: Course content and prerequisite have been updated to reflect how the course is currently taught and student requirements. Impact on other units: None. Financial impact: None.

DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

(IE) Industrial Engineering

ADD

IE 544 Manufacturing Systems Modeling and Analysis (3) Introduces the classical modeling and analysis methods for modern manufacturing systems. The main topics of this course will cover a broad range of concepts, including modeling of manufacturing systems; performance analysis of manufacturing systems; production planning and scheduling; and modeling, monitoring, diagnosis, and quality control of manufacturing processes.

Rationale: This course will be a valuable addition to Tickle college graduate courses, especially Engineering Management (EM) students. Many EM students are either already working or interested in working in manufacturing area. Impact on other units: None. Financial Impact: None, there is enough faculty to cover this course.

I**E 566 Optimization for Big Data (3)** An introduction to modern optimization theories and algorithms for big data applications, including structure of large-scale optimization problems, algorithms for smooth and non-smooth problems, and computational efficacy of algorithms.

Rationale: This course will prepare students to apply optimization techniques and algorithms to big data for making better decisions. Impact on other units: None. Financial Impact: None, there is enough faculty to cover this course.

DEPARTMENT OF MECHANICAL, AEROSPACE, AND BIOMEDICAL ENGINEERING

(AE) Aerospace Engineering

ADD AS PRIMARY CROSS-LISTED COURSES

+AE 516 Data Measurement and Analysis (3) Various tools and techniques used in the analysis of random data. Data classification; statistics and probability; spectral and correlation functions; data acquisition fundamentals; input-output system models; and an introduction to modern data analysis procedures.
Cross listed: (Same as: Mechanical Engineering 516.)
(DE) Prerequisite(s): Undergrad degree in engineering. Consent of instructor.
Recommended Background: Logic-based programming knowledge (preferably within MATLAB) and some laboratory research.

Rationale: Course is of interest to many ME and AE students. Impact on other units: None. Financial impact: None.

+ AE 537 Computer Methods in Dynamics of Continua (3) Classification of hyperbolic, parabolic, and elliptic partial differential equations (PDEs), types of PDE nonlinearity, method of characteristics, systems of conservation laws, shocks and rarefaction waves; Riemann solutions for linear hyperbolic PDEs; Dynamic solutions for Finite Difference (FD), Finite Volume (FV), and Finite Element Method (FEM); Modal analysis; Time marching schemes: explicit vs. implicit, single- vs. multi-stage, multi-step and sub-cycling, high order schemes; Stability, convergence, and consistency; Physical and numerical dispersion; von Neumann dispersion and dissipation analysis; Adaptivity in space (and time).
Cross listed: (Same as: Mechanical Engineering 537.)
(DE) Prerequisite(s): Undergraduate level numerical methods and differential equations, or consent of instructor.
Recommended Background: Numerical analysis and differential equations.

Rationale: The course is of interest to many mechanical, and aerospace engineering students. Impact on other units: None. Financial impact: None.

+AE 579 Micro/Nano ElectroMechanical Systems/Sensors (MEMS/NEMS) (3) Scaling law, lithography, wet etching, dry etching, physical vapor deposition, chemical vapor deposition, electrochemical deposition, electrostatic/piezoelectric/thermal/tactile sensing and actuation.
Cross listed: (Same as: Mechanical Engineering 579 and Biomedical Engineering 579.)
(DE) Prerequisite(s): Undergrad level Engineering Mechanics, Fluid Mechanics, Heat Transfer.

Rationale: The course is of interest to many mechanical, aerospace, and biomedical engineering students. Impact on other units: None. Financial impact: None.

+AE 617 Discontinuous Galerkin Finite Element Methods (3) Comparison and conventional and discontinuous Galerkin (DG) methods; Interior penalty method; Concept of numerical flux; DG formulation of elliptic PDEs: Weighted residual statement and overview of numerical fluxes; Relation between DG and interior penalty methods; Parabolic PDEs: DG formulation and keys to the stability of the method, numerical fluxes; Hyperbolic PDEs: Systems of conservation laws and Rankine-Hugoniot jump conditions; Riemann solutions and numerical fluxes for linear and nonlinear hyperbolic PDEs; Transmitting boundary conditions; Spacetime discontinuous Galerkin methods; Object-oriented design and implementation for DG methods.
Cross listed: (Same as: Mechanical Engineering 617.)
(DE) Prerequisite(s): Numerical analysis, differential equations, and finite element analysis, or consent of instructor.
Recommended Background: Numerical analysis, differential equations, and finite element analysis.
Registration Restriction: Minimum student level – graduate.

Rationale: Course is of interest to many mechanical, and aerospace engineering students. Impact on other units: None. Financial impact: None.

ADD AS SECONDARY CROSS-LISTED COURSE

+AE 660 Nonlinear Finite Element Methods (3) Theory and practice of nonlinear finite element methods focused on solid mechanics applications. Treatment of geometric nonlinear kinematics and inelastic material response. Development of linearized expressions for use in the Newton-Raphson algorithm. Programming of element and material subroutines.
Cross listed: (See Civil Engineering 661.)
(DE) Prerequisite(s): CE 560 or equivalent; CE 538 or CE 561, or consent of instructor.
Registration Restriction: Minimum student level – graduate.

Rationale: Course is of interest to many mechanical engineering students. Impact on other units: Many MABE students will benefit from taking the course. Financial impact: None.

(BME) Biomedical Engineering

ADD AS SECONDARY CROSS-LISTED COURSE

+BME 579 Micro/Nano ElectroMechanical Systems/Sensors (MEMS/NEMS) (3) Scaling law, lithography, wet etching, dry etching, physical vapor deposition, chemical vapor deposition, electrochemical deposition, electrostatic/piezoelectric/thermal/tactile sensing and actuation
Cross listed: (See: Aerospace Engineering 579.)
(DE) Prerequisite(s): Undergrad level Engineering Mechanics, Fluid Mechanics, Heat Transfer.

Rationale: The course is of interest to many mechanical, aerospace, and biomedical engineering students. Impact on other units: None. Financial impact: None.

(ME) Mechanical Engineering

ADD AS SECONDARY CROSS-LISTED COURSES

+ME 516 Data Measurement and Analysis (3) Various tools and techniques used in the analysis of random data. Data classification; statistics and probability; spectral and correlation functions; data acquisition fundamentals; input-output system models; and an introduction to modern data analysis procedures.
Cross listed: (See: Aerospace Engineering 516.)
(DE) Prerequisite(s): Undergrad degree in engineering. Consent of instructor.
Recommended Background: Logic-based programming knowledge (preferably within MATLAB) and some laboratory research.

Rationale: The course is of interest to many mechanical and aerospace engineering students. Impact on other units: None. Financial impact: None.

+ME 537 Computer Methods in Dynamics of Continua (3) Classification of hyperbolic, parabolic, and elliptic partial differential equations (PDEs), types of PDE nonlinearity, method of characteristics, systems of conservation laws, shocks and rarefaction waves; Riemann solutions for linear hyperbolic PDEs; Dynamic solutions for Finite Difference (FD), Finite Volume (FV), and Finite Element Method (FEM); Modal analysis; Time marching schemes: explicit vs. implicit, single- vs. multi-stage, multi-step and sub-cycling, high order schemes; Stability, convergence, and consistency; Physical and numerical dispersion; von Neumann dispersion and dissipation analysis; Adaptivity in space (and time).
Cross listed: (See: Aerospace Engineering 537.)
(DE) Prerequisite(s): Undergraduate level numerical methods and differential equations, or consent of instructor.
Recommended Background: Numerical analysis and differential equations.

Rationale: The course is of interest to many mechanical, and aerospace engineering students. Impact on other units: None. Financial impact: None.

+ME 579 Micro/Nano ElectroMechanical Systems/Sensors (MEMS/NEMS) (3) Scaling law, lithography, wet etching, dry etching, physical vapor deposition, chemical vapor deposition, electrochemical deposition, electrostatic/piezoelectric/thermal/tactile sensing and actuation.
Cross listed: (See: Aerospace Engineering 579.)
(DE) Prerequisite(s): Undergrad level Engineering Mechanics, Fluid Mechanics, Heat Transfer.

Rationale: The course is of interest to many mechanical, aerospace, and biomedical engineering students. Impact on other units: None. Financial impact: None.

+ME 617 Discontinuous Galerkin Finite Element Methods (3) Comparison and conventional and discontinuous Galerkin (DG) methods; Interior penalty method; Concept of numerical flux; DG formulation of elliptic PDEs: Weighted residual statement and overview of numerical fluxes; Relation between DG and interior penalty methods; Parabolic PDEs: DG formulation and keys to the stability of the method, numerical fluxes; Hyperbolic PDEs: Systems of conservation laws and Rankine-Hugoniot jump conditions; Riemann solutions and numerical fluxes for linear and nonlinear hyperbolic PDEs; Transmitting boundary conditions; Spacetime discontinuous Galerkin methods; Object-oriented design and implementation for DG methods.
Cross listed: (See: Aerospace Engineering 617.)
(DE) Prerequisite(s): Numerical analysis, differential equations, and finite element analysis, or consent of instructor.
Recommended Background: Numerical analysis, differential equations, and finite element analysis.
Registration Restriction: Minimum student level – graduate.

Rationale: Course is of interest to many ME and AE students. Impact on other units: None. Financial impact: None.

ADD AS SECONDARY CROSS-LISTED COURSE

+ME 660 Nonlinear Finite Element Methods (3) Theory and practice of nonlinear finite element methods focused on solid mechanics applications. Treatment of geometric nonlinear kinematics and inelastic material response. Development of linearized expressions for use in the Newton-Raphson algorithm. Programming of element and material subroutines.
Cross listed: (See Civil Engineering 661.)
(DE) Prerequisite(s): Civil Engineering 560 or equivalent; Civil Engineering 538 or Civil Engineering 561, or consent of instructor.
Registration Restriction: Minimum student level – graduate.

Rationale: The course is of interest to many mechanical engineering students. Impact on other units: Many MABE students will benefit from taking the course. Financial impact: None.

DEPARTMENT OF NUCLEAR ENGINEERING

(NE) Nuclear Engineering

ADD

NE 518 Radioisotope Power Systems (3) A technical overview of the underlying physics, thermal conversion, materials properties, component and fuel design, launch safety and flight qualification of radioisotope power systems.
(DE) Prerequisite: Nuclear Engineering 517 or permission of instructor.

Rationale: This course has been taught as special topics and very well received. Material is very timely for new opportunities emerging in outer space exploration. Impact on other units: none. Financial Impact: none.

NE 618 Nuclear Reactors for Space Exploration (3) Addresses the development and use of nuclear reactors for power and propulsion in space or at non-terrestrial sites. Relevant topics include space nuclear systems and missions, space reactor design fundamentals, key material characteristics and properties, existing and emerging reactor/engine concepts, and methods and models for design analysis, modeling, and experimental validation.
Registration Restriction(s): Minimum student level – graduate.

Rationale: This course has been taught as special topics and was very well received. Material is very timely for new opportunities emerging in outer space exploration. Impact on other units: none. Financial Impact: none.

ADD AS A SECONDARY CROSSLISTED COURSE

+NE 584 Introduction to Fire Protection Engineering (3) The application of fire protection engineering principles to the safe design, wiring, and construction of buildings and infrastructure. Topics include safety and performance-based design, fire dynamics, fire hazard and risk analysis, national electrical codes, public fire service operations, detection and alarm systems, and transportation fire safety.
Cross-listed: (See Electrical and Computer Engineering 563.)
Registration Permission: Consent of Instructor.

Rationale: This course is an important component of safety engineering and is being added as an elective into our MS and PhD Concentrations in Nuclear Safety. Impact on other units: none. Financial Impact: none.

DROP

NE 511 Transport Processes in Nuclear Engineering (3)

Rationale: This course is has not been taught for several years and responsible instructor retired. Impact on other units: none. Financial Impact: none.

NE 572 Nuclear System Design II (3)

Rationale: This course has not been taught for several years and prerequisite NE 570 was already dropped, so they should have been removed together. Impact on other units: none. Financial Impact: none.

PROGRAM CHANGES

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

~~**DROP CONCENTRATION – COMPUTER SCIENCE MAJOR, MS**~~ ***RESCIND PROPOSAL (PER DEPT)***

~~**Intelligent Systems and Machine Learning**~~

~~In the 2021-22 Graduate Catalog, drop heading for the Intelligent Systems and Machine Learning concentration~~

~~**ADD CONCENTRATION – COMPUTER SCIENCE MAJOR, MS**~~ ***RESCIND PROPOSAL (PER DEPT)***

~~**Artificial Intelligence and Machine Learning**~~

~~In the 2021-22 Graduate Catalog, add heading and options for the Artificial Intelligence and Machine Learning concentration:~~

~~Artificial Intelligence and Machine Learning — Thesis, Project, Course Only without Comprehensive Exams~~

~~Rationale: This change adds a concentration that aligns with the Artificial Intelligence and Machine Learning graduate certificate that is being added this year. Impact on other units: None. Financial impact: None.~~

REVISE REQUIREMENTS – COMPUTER SCIENCE MAJOR, MS

In the 2021-22 Graduate Catalog, under the Required Courses heading, revise as follows:

1) Revise Project Option as shown below:

Required Courses

- Option Specific Courses:
  - Project Option: COSC 501 (3 credit hours), a minimum grade of B.

2) Revise 5th bullet as shown below:
   - Complete COSC 530, either COSC 540, COSC 561, or COSC 562, and either COSC 580 or COSC 581

Formerly:
Project Option: COSC 501 (3 credit hours), a minimum grade of B. This course will be administered by the student's master's committee.

Complete COSC 530, COSC 560, and either COSC 580 or COSC 581

Rationale: Master's committees typically do not administer COSC 501, but only meet to assess proposed or completed projects. The first change aligns the text in the catalog with current practice. Impact on other units: None. Financial impact: None.

Additionally, the subject of COSC 560 (Software Systems) is too broad for a single graduate level course, and COSC 560 is being replaced with COSC 561 and COSC 562. The topics covered in COSC 540 are also related. Successful completion of any one of COSC 540, COSC 561, and COSC 562 fulfills the requirement for MS students. Impact on other units: None. Financial impact: None.

~~3) Under the Non-Course Requirements heading,~~ **Proposal rescinded – see above**.

~~Remove dropped concentration: Intelligent Systems and Machine Learning~~

~~Add new concentration: Artificial Intelligence and Machine Learning~~

Rationale: The first change adds a concentration that aligns with the Artificial Intelligence and Machine Learning graduate certificate that is being added this year. Impact on other units: None. Financial impact: None.

4) Under the Non-Course Requirements heading, for the Project Option bullet, revise as follows:

- A written final report and/or oral presentation, as determined by the advisor and approved by the committee.

Formerly: Project Option: A written final report or oral presentation may be required as determined by the advisor.

Rationale: the previous requirement for the Project Option allows that an advisor may not require either a written report or oral presentation. The change to the Project Options clarifies that either a written report or oral presentation (or both) is required. The specific requirement is determined by the advisor and approved by the committee. Impact on other units: None. Financial impact: None.

REVISE CAMPUS CODE FOR COMPUTER SCIENCE MAJOR, MS, TO ADD DISTANCE EDUCATION OPTION

In the 2021-22 Graduate Catalog, revise Campus Code to add the Distance Education Option

Campus Code
Knoxville Campus
Distance Education – all concentrations, Course Only without Comprehensive Exams

Formerly:
Campus Code
Knoxville Campus

Rationale: State economic development efforts are limited by skilled workers in computer science. Significant opportunities to impact state economy identified by state, campus, and Noodle (online partner for UTK). DE MS in CS identified as high priority for campus due to demand and economic impact. Skilled computer workers are lacking for state and region. Impact on other units: None. Financial impact: Development costs of DE versions of courses and operational costs will be paid by EECS (potentially with loan from Provost's office). No impact to other units.

~~**DROP CONCENTRATION – COMPUTER SCIENCE MAJOR, PHD**~~ ***RESCIND PROPOSAL (PER DEPT)***

~~**Intelligent Systems and Machine Learning**~~

~~**ADD CONCENTRATION – COMPUTER SCIENCE MAJOR, PHD**~~ ***RESCIND PROPOSAL (PER DEPT)***

~~**Artificial Intelligence and Machine Learning**~~

~~In the 2021-22 Graduate Catalog, for the Computer Science Major, PhD – edit to drop and add concentration.~~

~~Rationale: This change adds a concentration to align with the Artificial Intelligence and Machine Learning graduate certificate that is being added this year. Impact on other units: None. Financial impact: None.~~

REVISE REQUIREMENTS – COMPUTER SCIENCE MAJOR, PHD

In the 2021-22 Graduate Catalog,

1) Under the Required Courses heading, revise as follows:

Required Courses
- For all students, the graduate course credit hours must additionally satisfy
  - Complete COSC 530, either COSC 540, COSC 561, or COSC 562, and either COSC 580 or COSC 581 passed with a grade of at least a B, are required for the degree

Formerly:
For all students, the graduate course credit hours must additionally satisfy
Complete COSC 530, COSC 560 and either COSC 580 or COSC 581 passed with a grade of at least a B, are required for the degree

Rationale: The subject of COSC 560 (Software Systems) is too broad for a single graduate level course, and COSC 560 is being replaced with COSC 561 and COSC 562. The topics covered in COSC 540 are also related. Successful completion of any one of COSC 540, COSC 561, and COSC 562 fulfills the requirement for PhD students. Impact on other units: None. Financial impact: None.

~~2) Under the Non-Course Requirements heading,~~ **Proposal rescinded – see above**.

~~Remove dropped concentration: Intelligent Systems and Machine Learning~~

~~Add new concentration: Artificial Intelligence and Machine Learning~~

Rationale: This change adds a concentration that aligns with the Artificial Intelligence and Machine Learning graduate certificate that is being added this year. Impact on other units: None. Financial impact: None.

REVISE COMPUTER SCIENCE MINOR

In the 2021-22 Graduate Catalog, under the Required Courses heading revise 1st bullet as shown below:

Required Courses

- Two of the following core courses: COSC 530, COSC 540, COSC 561, COSC 562, COSC 580, or COSC 581

Formerly: Two of the four core-courses: COSC 530, COSC 560, COSC 580, COSC 581

Rationale: This change updates the CS Minor with options for COSC 540, COSC 561, and COSC 562 because COSC 560 is being removed from the catalog. Impact on other units: None. Financial impact: None.

~~**ADD CONCENTRATION – COMPUTER ENGINEERING MAJOR, MS**~~ ***RESCIND PROPOSAL (PER DEPT)***

~~**Artificial Intelligence and Machine Learning**~~

~~In the 2021-22 Graduate Catalog, add new concentration:~~

~~Concentrations (Optional) and Options Available~~

- ~~Artificial Intelligence and Machine Learning — Thesis, Project, Course Work Only without Comprehensive Exams~~

~~Rationale: This change adds a concentration that aligns with the Artificial Intelligence and Machine Learning graduate certificate that is being added this year. Impact on other units: None. Financial impact: None.~~

REVISE COMPUTER ENGINEERING MAJOR, MS

In the 2021-22 Graduate Catalog,

1) Under the Required Courses heading, Option Specific Courses; revise Project Option bullet as shown below:

Required Courses

- Option Specific Courses:
  - Project Option: ECE 501 (3 credit hours), with a minimum grade of B.

Formerly:
Option Specific Courses:
Project Option: ECE 501 (3 credit hours), with a minimum grade of B. This course will be administered by the student's master's committee

Rationale: Master's committees typically do not administer ECE 501, but only meet to assess proposed or completed projects. This change aligns the text in the catalog with current practice. Impact on other units: None. Financial impact: None.

~~2) Under the Non-Course Requirements heading,~~ **Proposal rescinded – see above**.

~~Add new concentration: Artificial Intelligence and Machine Learning~~

Rationale: The first change adds a concentration that aligns with the Artificial Intelligence and Machine Learning graduate certificate that is being added this year. Impact on other units: None. Financial impact: None.

And

At the Project Option bullet, revise as shown below:

- Project Option: A written final report and/or oral presentation, as determined by the advisor and approved by the committee.

Formerly:
Project Option: A written final report or oral presentation may be required as determined by the advisor

Additionally, the previous requirement for the Project Option allows that an advisor may not require either a written report or oral presentation. The change to the Project Option requirement clarifies that either a written report or oral presentation (or both) is required. The specific requirement is determined by the advisor and approved by the committee. Also, corrected some typos (capitalize a in the thesis option, add a period). Impact on other units: None. Financial impact: None.

~~**ADD CONCENTRATION – COMPUTER ENGINEERING MAJOR, PHD**~~ **RESCIND PROPOSAL (PER DEPT)**

~~**Artificial Intelligence and Machine Learning**~~

~~In the 2021-22 Graduate Catalog, add new concentration under the Concentrations heading and under the Non-Course Requirements heading.~~

~~Rationale: This change adds a concentration that aligns with the Artificial Intelligence and Machine Learning graduate certificate that is being added this year. Impact on other units: None. Financial impact: None.~~

REVISE ELECTRICAL ENGINEERING MAJOR, MS

In the 2021-22 Graduate Catalog, revise the following:

1) under the Required Courses heading, Option Specific Courses; revise Project Option bullet as shown below

Required Courses

Option Specific Courses:

- Project Option: ECE 501 (3 credit hours), with a minimum grade of B.

Formerly:
Project Option: ECE 501 (3 credit hours), with a minimum grade of B. This course will be administered by the student's master's committee.

Rationale: Master's committees typically do not administer ECE 501, but only meet to assess proposed or completed projects. This change aligns the text in the catalog with current practice. Impact on other units: None. Financial impact: None.

2) Under the Non-Course Requirements heading, for the Project Option bullet, revise as shown below:

Non-Course Requirements

- Project Option: A written final report and/or oral presentation, as determined by the advisor and approved by the committee.

Formerly:
Project Option: A written final report or oral presentation may be required as determined by the advisor.

Rationale: The previous requirement for the Project Option allows that an advisor may not require either a written report or oral presentation. This change clarifies that either a written report or oral presentation (or both) is required for the project option. The specific requirement is determined by the advisor and approved by the committee Also, corrected a typo (added a period for the Thesis Option). Impact on other units: None. Financial impact: None.

+ ADD GRADUATE CERTIFICATE

Artificial Intelligence and Machine Learning (AI & ML)

In the 2021-22 Graduate Catalog, add heading, text and requirements for the "Artificial Intelligence and Machine Learning Graduate Certificate" as shown below. Certificate will be offered Distance Education and Knoxville Campus.

Artificial Intelligence and Machine Learning (AI & ML) Graduate Certificate

Description
The Artificial Intelligence and Machine Learning Graduate Certificate is offered by the Department of Electrical Engineering and Computer Science. The applicants are expected to have a Bachelor's degree in a computing or related field with an undergraduate GPA of 3.0 or better. Recommended background knowledge includes Programming, Linear Algebra, and Probability Theory. Applicants lacking a programming background are encouraged to take COSC 505 before commencing the certificate. Applicants may be admitted to the certificate or complete the certificate as part of an MS or PhD.

The certificate will help you build a strong foundation in core components of artificial intelligence and machine learning, and prepare for industry or academic positions as a leader in the field. The certificate consists of a minimum of 15 hours with a minimum grade of B in each course. The requirements are as follows:

Campus Code
Knoxville Campus
Distance Education

Graduate Certificate Type
Stand-Alone
Add-on

Admissions Standards/Procedures
Applicants must meet the minimum admission requirements and be admitted to the University of Tennessee, Knoxville, Graduate School.

Credit Hours Required
A minimum of 15 graduate credit hours is required for the certificate.

Required courses (6 credit hours):
COSC 522 Machine Learning
COSC 523 Artificial Intelligence

Technical Concentration (9 credit hours): At least three courses selected from the following:
COSC 525 Deep Learning
COSC 526 Data Mining
COSC 529 Autonomous Mobile Robots
COSC 545 Fundamentals of Digital Archaeology
COSC 557 Visualization
COSC 594 Special Topics in Artificial Intelligence and Machine Learning
COSC 650 Advanced Topics in Artificial Intelligence and Machine Learning
ECE 517 Reinforcement Learning
ECE 574 Computer Vision
ECE 599 Special Topics in Artificial Intelligence and Machine Learning
IE 522 Optimization Methods in Industrial Engineering
IE 565 Applied Data Science
NE / IE 579 Empirical Models for Monitoring and Diagnostics

Supplemental Courses: Useful background knowledge, but not counted towards this certificate:
COSC 594/690: Special Topics/Advanced Topics: Graph Algorithms/Theory
ECE 504: Random Process Theory for Engineers
ECE 611: Convex Optimization
ECE 612: Discrete Optimization
ECE 616: Nonlinear Programming
ECE 619: Application of Constrained Optimization
ECE 644: Classical and Quantum Information Theory
Math 571: Numerical Mathematics I
STAT 563: Probability and Mathematical Statistics
STAT 625: Bayesian Modeling and Computations

Recommended Background: Programming (COSC 102, COSC 111, or COSC 505), Linear algebra (e.g., MATH 251 or MATH 257 with a grade of C or better), probability theory (e.g., ECE 313 or ECE317 or MATH 323 with a grade of C or better).

Non-Course Requirements
- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: As every industry is adopting some sort of technology related to machine learning and AI, it is estimated that by 2022 there will be about 133 million jobs in fields related to data, artificial intelligence and machine learning. There is no better time to begin pursuing a career in AI and ML. The certificate will help us prepare our students for industry and academic positions in the field. Impact on other units: None. Financial impact: None, as all courses in the certificate are already regularly taught. **Need CIP Code**

DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING

+ ADD GRADUATE CERTIFICATE

Data Driven Decision-Making

In the 2021-22 Graduate Catalog, add heading, text and requirements for the Data Driven Decision-Making Graduate Certificate" as shown below. Certificate will be offered Distance Education and Knoxville Campus.

Data-Driven Decision-Making Graduate Certificate
Data analytics involves the development and application of statistical and quantitative analysis methods and the construction of explanatory and predictive models to drive the decision-making process. Students completing the certificate will have a basic foundation of critical tools to extract useful information from big data, as well as for modeling, simulation, optimization and decision analysis in order to support efficient data-driven decision making.

Campus Code
Knoxville Campus
Distance Education

Graduate Certificate Type
Stand-Alone
Add-on

Admissions Standards/Procedures
Applicants must meet the minimum admission requirements and be admitted to the University of Tennessee, Knoxville, Graduate School.

Credit Hours Required
A minimum of 12 graduate credit hours (4 courses) is required for the certificate:
IE 565 Applied Data Science
IE 566 Optimization for Big Data

Two elective courses from the following:
BME 529 Application of Linear Algebra in Engineering Systems
CBE 529 Application of Linear Algebra in Engineering Systems
CE 529 Application of Linear Algebra in Engineering Systems
COSC 422 Applied Machine Learning
COSC 526 Data Mining
COSC 522 Machine Learning
COSC 525 Deep Learning
COSC 554 Markov Chains in Computer Science
ECE 529 Application of Linear Algebra in Engineering Systems
ECE 571 Pattern Recognition
ECE 611 Convex Optimization
ECE 612 Discrete Optimization
ECE 616 Nonlinear Programming
IE 522 Optimization Methods in Industrial Engineering
IE 529 Application of Linear Algebra in Engineering Systems
IE 579 Empirical Modelling and Diagnostics
IE 602 Nonlinear Optimization
IE 603 Advanced Design and Analysis of Experiments
IE 604 Network Flow Optimization
IE 607 Stochastic Processes
IE 608 Advanced Optimization via Simulation
IE 609 Stochastic Programming
IE 610 Heuristics in Optimization
IE 611 Integer Programming
ME 529 Application of Linear Algebra in Engineering Systems
ME 570 Numerical Methods for Engineers
ME 671 Advanced Topics in Applied Artificial Intelligence
MSE 529 Application of Linear Algebra in Engineering Systems
MSE 510 Mathematical and Numerical Problem-Solving Skills for Materials Scientists and Engineers
NE 529 Application of Linear Algebra in Engineering Systems
NE 671 Advanced Topics in Applied Artificial Intelligence
NE 579 Empirical Modelling and Diagnostics

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale: Working professionals in engineering or management roles need enhanced skills to transform data into insights useful for decision making. This certificate will provide a flexible option without requiring completion of a graduate degree. It builds on existing distance education programs in the Industrial and Systems Engineering Department and the Tickle College of Engineering. The program is designed primarily for part-time students but will be available for on-campus students. With proper course selection, it is possible to complete the certificate through distance education.

Impact on other units: Some. Most of the non-IE courses require pre-requisites that would limit enrollment to students already in those programs. However, it is possible a student could register for one or two courses in a department thereby increasing the teaching load, which will be minimum. Financial impact: None. One new course is proposed, other courses listed are currently taught. **Need CIP Code**

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING

REVISE REQUIREMENTS - MATERIALS SCIENCE AND ENGINEERING MAJOR, PHD

In the 2021-2022 Graduate Catalog, under the Required Courses heading, remove all current text and replace with the following:

Required Courses

- A minimum 36 graduate course credit hours are required
  - Completion of all four of the "core" graduate curriculum courses: MSE 511, MSE 512, MSE 513, and MSE 514 (total 12 credit hours)
  - At least 6 credit hours of 600-level courses taken at UT are required
  - Up to 6 credit hours of MSE 503, Graduate Seminar in Materials Science and Engineering, may be counted toward the graduate course credit hours requirement
  - A minimum of 24 graduate course credit hours must be MSE courses taken at UT
  - MSE 600 (minimum of 24 credit hours is required)
  - A maximum of 24 graduate course credit hours earned at another institute may be used to satisfy the total (72) credit hour requirement for the PhD degree in MSE at UT (non-UT graduate course credit hours must be approved by the PhD committee and may not include thesis credit hours earned at another institute)

Formerly:
Required Courses
For students proceeding directly to the PhD from baccalaureate degree,
A minimum 36 graduate course credit hours
At least 6 credit hours of 600-level MSE courses
Completion of MSE 511, MSE 512, MSE 513, and MSE 514
Up to 6 credit hours of MSE 503, Graduate Seminar in Materials Science and Engineering, may be counted toward the graduate course work
A minimum of 24 of the graduate course credit hours must be in MSE courses
MSE 600 (24 credit hours minimum)

For students having a thesis-based master's degree in materials science and engineering or a related field as approved by the PhD committee, a minimum of 48 graduate credit hours is required and must include:
12 credit hours of graduate course work where the combined thesis and PhD graduate course work must satisfy the following requirements:
at least 6 credit hours of 600-level courses in the department;
completion of MSE 511, MSE 512, MSE 513, and MSE 514;
up to 6 credit hours of MSE 503 may be counted toward the graduate course work;
a minimum of 24 of the graduate course credit hours must be in MSE courses.
MSE 600 (a minimum of 24 credit hours)
The MSE 500 credit hours earned in the thesis masters do not count towards the 72 credit hour PhD requirement.

For students having a non-thesis master's degree in materials science and engineering or polymer engineering, or a related field as approved by the PhD committee, a minimum of 42 graduate credit hours is required for a total (MS + PhD) of at least 72 graduate credit hours. The 42 credit hours must include 6 credit hours of graduate course work where the combined non-thesis and PhD graduate course work must satisfy the following requirements:
at least 6 credit hours of 600-level courses in the department;
completion of MSE 511, MSE 512, MSE 513, and MSE 514;
Up to 6 credit hours of MSE 503 may be counted toward the graduate course work;
A minimum of 24 of the graduate course credit hours must be MSE courses
MSE 600 (minimum of 24 credit hours)

Rationale for Proposed Changes:
The current MSE – PhD Required Courses statement has been problematic for many years now. The requirements are awkward and confusing and difficult for both students and faculty to understand. Additionally, the requirements, particularly as they relate to "transferring" credits from another institute, are difficult for the department to implement, manage, and enforce.

The proposed requirements eliminate the various categories of situations in the current requirements (namely, students proceeding directly to the PhD from a baccalaureate degree; students having a thesis-based master's degree in materials science and engineering or a related field; and students having a non-thesis master's degree in materials science and engineering or polymer engineering, or a related field). This will simplify management of the MSE course requirements. Most importantly, the new verbiage is consistent with the requirements of the university so far as Academic Policies are concerned and are consistent with the requirements of the Graduate School regarding PhD programs and PhD degrees. No longer will there be the additional requirements imposed by the MSE department on PhD candidates in the department.

The proposed requirements are more flexible, in an uncertain time when we need more flexibility. The new verbiage works for students transferring from an MS degree program at another institute as well as students transferring from a PhD program at another institute. Most importantly, the verbiage does NOT require that the student be conferred an MS degree at another institute (this complies with Graduate School requirements).

The proposed requirements are easy for anyone (students and faculty) to understand. MSE should be able to readily implement, manage and enforce the new requirements. Impact on other units: None. Financial impact: none.

REVISE REQUIREMENTS - MATERIALS SCIENCE AND ENGINEERING MAJOR, MS

In the 2021-2022 Graduate Catalog, under the Required Courses heading, remove current text and replace with the following:

Required Courses

- Thesis Option
  - A minimum 24 graduate course credit hours are required as shown below:
    - Complete three of the following four MSE courses: MSE 511, MSE 512, MSE 513, and MSE 514 (total 9 credit hours)
    - 15 additional course credit hours in MSE or related areas are required (selected in consultation with the thesis advisor)
      - Up to 3 credit hours of MSE 503, Graduate Seminar in Materials Science and Engineering, may be counted toward the graduate course credit hours requirement
  - MSE 500 (minimum of 6 credit hours are required)
  - A maximum of 14 graduate course credit hours earned at another institute may be used to satisfy the total (30) credit hour requirement for the MS degree in MSE at UT (non-UT graduate course credit hours must be approved by the MS committee and may not include thesis credit hours earned at another institute). The university requires that a majority of the total credit hours (30) required for a master's degree must be taken at UT (16 minimum). Transferred courses must have been completed within a six-year period prior to receipt of the UT MS degree. Transferred course credit hours may not have already been used to earn an MS degree at another institute.

- Project Option
  - A minimum 27 graduate course credit hours are required as shown below:
    - Complete three of the following four MSE courses: MSE 511, MSE 512, MSE 513, and MSE 514 (total 9 credit hours)
    - 18 additional course credit hours in MSE or related areas are required (selected in consultation with the student's advisor)
  - MSE 580 (3 credit hours are required). Satisfactory completion of MSE 580, as the culminating experience, requires passage of a technical oral presentation (with an option for an additional written requirement), as proctored by the student's advisor and committee. Students are not required to take a comprehensive exam as part of the degree requirements.
  - A maximum of 14 graduate course credit hours earned at another institute may be used to satisfy the total (30) credit hour requirement for the MS degree in MSE at UT (non-UT graduate course credit hours must be approved by the MS committee and may not include thesis credit hours earned at another institute). The university requires that a majority of the total credit hours (30) required for a master's degree must be taken at UT (16 minimum). Transferred courses must have been completed within a six-year period prior to receipt of the UT MS degree. Transferred course credit hours may not have already been used to earn an MS degree at another institute.

Formerly:
Required Courses
Thesis Option
MSE 500 (minimum of 6 credit hours)
Complete three of the following four MSE courses: MSE 511, MSE 512, MSE 513, and MSE 514 (total 9 credit hours)
Up to an additional 15 credit hours in related areas selected in consultation with the advisor.

Project Option
MSE 580 (3 credit hours)
At least 18 credit hours must be in the department and include three of the following four MSE courses: MSE 511, MSE 512, MSE 513, and MSE 514
Up to 12 credit hours may be in related areas selected in consultation with the advisor.
Satisfactory completion of MSE 580, as the culminating experience, requires passage of a technical oral presentation (with an option for an additional written requirement), as proctored by the student's advisor and committee. Students are not required to take a comprehensive exam as part of the degree requirement

Rationale for Proposed Changes:
1. The main rationale for the proposed changes to the MSE – MS Required Courses verbiage, is similar to the rationale for the changes to the PhD Required Courses verbiage described earlier. Also, this will be the first time that MSE acknowledges in the Graduate Catalog that students may transfer credits from another graduate program (this has come up recently and we discovered problems with our department policies).

2. The proposed requirements are more flexible, in an uncertain time when we need more flexibility. The new verbiage works for students transferring from an MS degree program at another institute as well as students transferring from a PhD program at another institute. Most importantly, the verbiage does NOT require that the student be conferred an MS degree at another institute (this complies with Graduate School requirements).

3. The proposed requirements are easy for anyone (students and faculty) to understand. MSE should be able to readily implement, manage and enforce the new requirements.
Impact on other units: None. Financial impact: none.

DEPARTMENT OF NUCLEAR ENGINEERING

REVISE REQUIREMENTS, NUCLEAR ENGINEERING MAJOR, MS

In the 2021-2022 Graduate Catalog, under the Required Courses heading, revise first bullet under the Thesis and Project Option as shown below:

Required Courses

- Thesis and Project Options
  - 15 credit hours of graduate courses in nuclear engineering (NE) which must include at least two of the following courses – NE 521 or NE 522, NE 540, NE 542, NE 551, NE 563, NE 571, NE 573, NE585, NE586.

Formerly:
15 credit hours of graduate courses in nuclear engineering (NE) which must include at least two of the following courses – NE 511, NE 521 or NE 522, NE 540, NE 542, NE 551, NE 563, NE 571.

Rationale: NE 511 is listed in course changes to be dropped. Courses in the nuclear safety concentration being added to enhance options for students. Impact on other units: none. Financial Impact: none.

REVISE REQUIREMENTS - NUCLEAR ENGINEERING MAJOR, MS, NUCLEAR SAFETY CONCENTRATION

In the 2021-2022 Graduate Catalog, revise elective courses for the Nuclear Safety concentration as shown below:

Nuclear Safety concentration:

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
NE 584 Introduction to Fire Protection Engineering

Formerly:
Two electives from the list below:
NE 483
NE 542
NE 543
NE 573
NE 582

Rationale: NE 584 has been added as a cross listed course with ECE 563. This course is directly relevant to our nuclear safety concentration so it is being added as an available elective. Impact on other units: none. Financial Impact: none.

REVISE REQUIREMENTS - NUCLEAR ENGINEERING MAJOR, PHD, NUCLEAR SAFETY CONCENTRATION

In the 2021-2022 Graduate Catalog, revise elective courses for the Nuclear Safety concentration as shown below:

Concentration in Nuclear Safety:

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
NE 584 Introduction to Fire Protection Engineering

Formerly:
Two electives from the list below:
NE 483
NE 542
NE 543
NE 573
NE 582

Rationale: NE 584 has been added as a cross listed course with ECE 563. This course is directly relevant to our nuclear safety concentration so it is being added as an available elective. Impact on other units: none. Financial Impact: none.

REVISE NUCLEAR ENGINEERING DEPARTMENT GENERAL STATEMENT, SECOND PARAGRAPH

In the 2021-2022 Graduate Catalog, revise the second paragraph of the department text as shown below:

All entering students pursuing a MS or PhD in NE must have, as a minimum, competency in mathematics through ordinary differential equations. Admitted applicants will be advised of any prerequisite undergraduate courses that may be required for their graduate studies. In addition, students without a BS in nuclear engineering, or the equivalent, must take NE 433, NE 470 both of which may be taken for graduate credit. However, students in the radiological engineering concentration will take NE 551 in place of NE 433. Students electing the radiological engineering concentration must take NE 550, NE 551, NE 552 and NE 490 in their course of study. The department head is the contact for all interested students, both those with nuclear engineering degrees and those from other disciplines.

Formerly:
All entering students must have, as a minimum, competency in mathematics through ordinary differential equations. Admitted applicants will be advised of any prerequisite undergraduate courses that may be required for their graduate studies. In addition, students without a BS in nuclear engineering, or the equivalent, must take NE 433, NE 470 both of which may be taken for graduate credit. However, students in the radiological engineering concentration will take NE 551 in place of NE 433. Students electing the radiological engineering concentration must take NE 550, NE 551, NE 552 and NE 490 in their course of study. The department head is the contact for all interested students, both those with nuclear engineering degrees and those from other disciplines.

Rationale: The original statement is changed as students pursuing our graduate certificate in Medical Physics or the MS in Medical Physics won't have to take courses like NE 470 (reactor physics) which are not needed for their path. Impact on other units: none. Financial Impact: none.

COLLEGE OF LAW

All changes effective Fall 2021

I. COURSE CHANGES

REVISE TITLE

Law 816 Civil Procedure I (In Practice) (3)

Formerly: Civil Procedure I (Experiential) (3)

Rationale: Law school accreditation standards have been amended to give the word "experiential" a meaning distinct from how it was used in this course title. That accreditation standard change has caused confusion for students about whether they receive "experiential" credit for the class. This change in course title will eliminate that confusion.

Law 817 Torts I (In Practice) (3)

Formerly Law 817 Torts I (Experiential) (3)

Rationale: Law school accreditation standards have been amended to give the word "experiential" a meaning distinct from how it was used in this course title. That accreditation standard change has caused confusion for students about whether they receive "experiential" credit for the class. This change in course title will eliminate that confusion.

Law 890 European Union Law (3)

Formerly Law 890 European Union Law: Rights (3)

Rationale: Better reflects the content of the course

II. PROGRAM CHANGES

REVISE PROGRAM TEXT: LAW MAJOR, JD

In the 2021-22 Graduate Catalog, revise program text as shown below.

1. Under the "Required Courses" heading, revise the names of LAW 816 and LAW 817 to the new names listed above (Civil Procedure I (Experiential) will become Civil Procedure I (In Practice) and Tort I (Experiential) will become Tort I (In Practice).

2. Under the "Additional Course Requirements" heading
   - At the 3rd bullet (One Perspective course), add the following to the list of courses that satisfy the requirement: LAW 848, LAW 863.

3. At the 5th bullet (One Planning and Drafting experience), delete course LAW 821 from the list of courses.

4. At the 6th bullet: "Experiential courses (for students entering Fall 2016 or after)"
   i. Revise phrase to delete only the parenthetical "(for students entering Fall 2016 or after)"

Rationale: all students currently enrolled in or that will in the future be enrolled in the College of Law entered prior to Fall 2016, so it is no longer necessary to make a distinction)

   ii. Add LAW 819, LAW 828, LAW 961 to the list of courses that satisfy the requirement.

5. At the 7th bullet: "One Professional Skills course (for students entering prior to Fall 2016),"
   Delete the bullet and text and delete the 2 bullets below it to include all the courses.

Rationale: This requirement no longer applies to any students enrolled in the College of Law)

6. At the Advocacy and Dispute Resolution Concentration, under the Required Courses heading:
   i. At the 2nd bullet, Third Year (one of the following
      This section should be listed after the section titled "During the second and third year. . . "
   ii. The section title should be deleted and replaced with "During the Third Year, the student must complete a six-credit capstone experience that can be satisfied with the following:

iii. Add the following to the list of courses: LAW 908*, LAW 911, LAW 946, LAW 950, LAW 951,* LAW 982**
- * when taken during the same semester with another three-credit clinic or course aimed at preparing the student for advocacy practice, subject to the student receiving approval from the Director.
- **subject to the student receiving approval from the Director.

Delete the following from the list of courses: LAW 907

iv. In the subsection titled During the Second and Third Year. . . "
ADD the following to the list of courses: LAW 906, LAW 992
DELETE the following from the list of courses: LAW 946

7. At the Business Transactions Concentration, under the Required Courses heading:
   i. Revise the 9th bullet as follows:
      - There four capstone courses for the concentration, LAW 833, LAW 937, LAW 978, and LAW 982. Each is offered as instructors are available. The Estate Planning Seminar has additional prerequisites. Semester in Residence is subject to the student receiving approval from the Director.

Formerly: There are three capstone courses for the concentration, LAW 833, LAW 937, and LAW 978, offered as instructors are available. The Estate Planning Seminar has additional prerequisites.

► **ADD DUAL DEGREE PROGRAM – DUAL JD-MSSW (LAW / SOCIAL WORK)**

Doctor of Jurisprudence / Master of Science in Social Work

In the 2021-22 Graduate Catalog, add heading and text for Dual JD-MSSW Program

DUAL JD-MSSW PROGRAM
The College of Social Work and The College of Law offer a combined program of study in graduate level social work and law to students who seek to earn both a Master of Science in Social Work (MSSW) degree and Juris Doctor (JD) degree. This interdisciplinary program offers individuals interested in social work and law the opportunity to obtain graduate degrees in both programs in four academic years, rather than the five years needed if pursued separately.

The program consists of an integrated curriculum specifically designed for those who are interested in acquiring the knowledge and skills pertinent to both disciplines. The goal of the program is to prepare future professionals who are competent in both disciplines. The areas of work in which both fields play significant roles are often complex and require expertise in counseling, administration, and policy-making, beyond the underlying substantive knowledge. The program stresses an interdisciplinary approach, which values collaboration and communication skills.

The dual degree program is challenging but rewarding. A dual degree student in social work and law studies the skills and material of both disciplines and enters field placements, summer internships, and eventually the workplace with a unique skill set of valuable practice experiences. Alumni of the dual degree program in social work and law at The University of Tennessee will go on to work in a variety of settings in law and social work. Some alumni will choose to practice law, while others will find employment as social workers, program directors, and therapists.

Students must apply separately for admission to the two colleges. Once admitted to both colleges, applicants will be selected for participation in the program by a special admissions committee consisting of representatives from both colleges.

Campus Code
Knoxville Campus

Admissions Standards/Procedures
- Applicants for the JD-MSSW program must make separate application to, and be competitively and independently accepted by, each of the following:
  - the College of Law for the JD degree,
  - the Office of Graduate Admissions and the College of Social Work for the MSSW degree, and
  - the Dual Program Committee.
- Students who have been accepted by both colleges may apply for approval to pursue the dual program any time prior to or after matriculation in either or both colleges.
  - Such approval will be granted, provided that dual program studies are started prior to entry into the last 28 credit hours of JD course work and prior to the third semester of the MSSW program.
- Students interested in entering the dual degree program should submit a letter of application to the Dual Degree Program Committee. Upon receipt of the application, the Dual Degree Program Committee will determine eligibility and assign students to advisors who will be responsible for course approval and supervision of the student's progress through the dual program.
- Enrollment in the program will ordinarily be capped at 10 entering students per year.

Academic Standards

- The College of Law will award up to nine credit hours for MSSW courses, as approved by the JD advisor, that materially contribute to the dual degree student's study of law and career goals. Any such course cannot primarily address substantive law. The student must earn a B grade or higher in any such course.
- The College of Social Work will award up to nine credit hours for JD courses that have been approved by the student's advisors and in which the student has earned a 2.30 or C+ grade or higher.
- A dual program candidate must satisfy the graduation requirements of each college.
- Students withdrawing from the dual program before completion of both degrees will not receive credit toward graduation from either college for courses in the other college, except as such courses qualify for credit without regard to the dual program.

Credit Hours Required

- 131 credit hours
  - 89 credit hours of the JD including nine credit hours from the MSSW, for 80 credit hours.
  - 60 credit hours of the MSSW including nine credit hours from the JD, for 51 credit hours.

Required Courses

- Law: See the requirements for the Doctor of Jurisprudence.
- Social Work: See the requirements for the Master of Science in Social Work.

Concentrations

Social Work (Required)

Evidence-Based Interpersonal Practice (EBIP) — Course Only with Comprehensive Exams
Organizational Leadership —Course Only with Comprehensive Exams

Non-Course Requirements

- Students may not enroll in MSSW course work while completing the first year of the law curriculum and, except as indicated or approved, may not enroll in JD course work while completing the first year of the social work curriculum.
- During the first year in the JD program, students register through the College of Law. During the first year in the MSSW program, students register as graduate students. After the first two years, any term in which students take law courses or a mixture of law and graduate courses, they are classified and registered as law students. If taking only graduate courses, they are classified and registered as graduate students.

Program Curriculum:

- Year I: Students may begin their studies in either the JD or the MSSW program, but may not enroll in MSSW course work while completing the first year of the law curriculum and may not enroll in JD course work while completing the first year of the social work curriculum.
- Year II: For a student who begins course work in the College of Law, Year II of the program is undertaken largely in the College of Social Work and consists largely of the traditional first year MSSW curriculum. For a student who begins course work in the College of Social Work, Year II of the program is undertaken at the College of Law and consists of the traditional first year JD curriculum.
- Years III and IV: Years III and IV consist of courses taken at both colleges.
- Field Practicum - Social work practicums are required in Years II and III. The Year III practicum for students in this program allows students to study under professionals in both fields. The Year III practicum involves enrollment in (a) a six-credit hour course as part of the College of Law's Legal Clinic (excluding the Business Law Clinic), (b) the College of Law's six-credit hour Public Defender Externship, or (c) a six-credit hour field placement that is approved by the appropriate representatives at both colleges.

► **ADD DUAL DEGREE PROGRAM – DUAL MLS-MSSW (LAW / SOCIAL WORK)**

Master of Legal Studies / Master of Science in Social Work

In the 2021-22 Graduate Catalog, add heading and text for Dual MLS-MSSW Program

DUAL MLS-MSSW PROGRAM

The College of Social Work and The College of Law offer a combined program of study in graduate level social work and legal studies to students who seek to earn both a Master of Science in Social Work (MSSW) and a Master of Legal Studies (MLS). This interdisciplinary program offers individuals interested in social work and law the opportunity to obtain graduate degrees in both programs in two academic years (including summers), rather than the three years needed if pursued separately.

The program consists of an integrated curriculum specifically designed for those who are interested in acquiring the knowledge and skills pertinent to both disciplines. The MSSW program seeks to prepare its graduates to make demonstrable improvements in the quality of life of at-risk and vulnerable populations of individuals, families, groups, organizations, communities, the state of Tennessee, the nation, and internationally. The MLS program is designed for professionals whose fields intersect with the law and who would benefit from legal studies but do not wish to pursue the JD or practice law.

The program stresses an interdisciplinary approach, which values collaboration and communication skills. Alumni of the dual degree program in social work and legal studies at The University of Tennessee will go on to work in a variety of settings, including as social workers, program directors, and therapists.

Students must apply separately for admission to the two colleges. Once admitted to both colleges, applicants will be selected for participation in the program by a special admissions committee consisting of representatives from both institutions.

Campus Code

Knoxville Campus

Program Curriculum

- Year I: Year I of the program is ordinarily undertaken completely at The University of Tennessee College of Social Work and consists of the traditional first-year curriculum.
- Year I Summer: Students will complete MSSW and MLS courses.
- Year II: Year II of the program consists of courses taken at both colleges.
- Year II Summer: Students will complete MSSW and MLS courses.

Admissions Standards/Procedures

- Applicants for the MLS-MSSW program must make separate application to, and be independently accepted by, each of the following:
  - the Office of Graduate Admissions and the College of Law for the MLS degree,
  - the Office of Graduate Admissions and the College of Social Work for the MSSW degree, and
  - the Dual Program Committee.

- Students who have been accepted by both colleges may apply for approval to pursue the dual program at any time prior to or after matriculation in either or both colleges.
  - Such approval will be granted, provided that dual program studies are started prior to entry into the last 10 credit hours of College of Law course work and prior to the third semester of the MSSW program.

- Students interested in entering the dual degree program should submit a letter of application to the Dual Degree Program Committee. Upon receipt of the application, the Dual Degree Program Committee will determine eligibility and assign students to advisors who will be responsible for course approval and supervision of the student's progress through the dual program.

Academic Standards

- The College of Law will award up to six credit hours for MSSW courses, as approved by the MLS advisor, that materially contribute to the student's study of law and career goals. Any such course cannot primarily address substantive law. The student has earned a B grade or higher in any such course.
- The College of Social Work will award up to nine credit hours for law courses that have been approved by the student's advisors, provided the student has earned a 2.30 or C+ grade or higher.
- A dual program candidate must satisfy the graduation requirements of each college.
- Students withdrawing from the dual program before completion of both degrees will not receive credit toward graduation from either college for courses in the other college, except as such courses qualify for credit without regard to the dual program.

Credit Hours Required

- 75 credit hours
  - 30 credit hours for the MLS, including six credit hours from the MSSW, for 24 credit hours.
  - 60 credit hours for the MSSW, including nine credit hours from the College of Law, for 51 credit hours.

Required Courses

- Law: See the requirements for the Master of Legal Studies.
- Social Work: See the requirements for the Master of Science in Social Work.
  - Law courses may satisfy the Advanced Policy requirement for the MSSW, subject to approval by the student's advisors.

Concentrations

Social Work (Required)

Evidence-Based Interpersonal Practice (EBIP) — Course Only with Comprehensive Exams
Organizational Leadership —Course Only with Comprehensive Exams

Non-Course Requirements

- Students may not enroll in MLS course work while completing the first year of the social work curriculum.

✚ ADD GRADUATE CERTIFICATE

Law and Social Welfare

In the 2021-22 Graduate Catalog, add heading, text, and requirements for new certificate.

Law and Social Welfare Graduate Certificate
The add-on graduate certificate in Law and Social Welfare is a partnership between the College of Law and the College of Social Work. The certificate is intended for current law students. This certificate provides students with the coursework and practical experience needed to provide legal representation to traditionally under-represented clients in a variety of settings including but not limited to prisons, juvenile justice settings, child welfare, public defender offices and legal aid, programming and policy development.

Campus Code
Knoxville Campus

Graduate Certificate Type
Add-On

Admissions Standards/Procedures
- Students must submit an application to the Associate Dean of Academic Affairs prior to the commencement of the student's final semester.
- Students selected for admission must be formally admitted to the certificate through the Office of Graduate Admissions.

Credit Hours Required
16 Law and graduate credit hours

Certificate Requirements
- Law Doctrinal Requirement: At least three credit hours from among the following courses:
  - LAW 848 - Civil Rights Actions (3)
  - LAW 854 - Criminal Procedure (3)
  - LAW 855 - Adjudicatory Criminal Procedure (3)
  - LAW 862 - Family Law (3)
  - LAW 933 - Elder Law (3)
  - Law 990 - Special Topics and other courses as approved by the Associate Dean for Academic Affairs

- Social Work Doctrinal Requirement: Students will take ONE three credit course chosen from:
  - SOWK 503 - Introduction to Direct Social Work Practice (3)
  - SOWK 511- Introduction to Macro Social Work Practice (3)

- Students must also take at least three credit hours from among the following courses:
  - SOWK 510 - Social Welfare Policies and Programs (3)
  - SOWK 515 - Human Development in Context: Prenatal through Adolescence (3)
  - SOWK 531 - Trauma Theory (3)
  - SOWK 535 - School Social Work (3)
  - SOWK 538 – Social Justice and Anti-Oppressive Practices (3)
  - SOWK 545 - Resource Development and Management (3)
  - SOWK 564 - Substance Use Disorders (3)
  - SOWK 573 - Forensic Social Work (3)
  - Other College of Social Work courses as approved by the Associate Dean for Academic Affairs in consultation with the MSSW Program Director

- Law Experiential Requirement: At least six credit hours from among the following courses:
  - LAW 905 - Advocacy Clinic (6)
  - LAW 908 - Mediation Clinic (3)
  - LAW 911 - Family Law Mediation Clinic (6)
  - LAW 946 - Business Law Clinic (6)
  - LAW 950 - Community Economic Development Clinic (6)
  - LAW 951 - Domestic Violence Clinic (3)
  - LAW 953 - Wills Clinic (4)
  - LAW 948 - Public Defender Externship (6)
  - Law 992 - Field Placements (up to 6) as approved by the Associate Dean for Academic Affairs
  - Law 982 - Semester in Residence Placement (10) as approved by the Associate Dean for Academic Affairs

- Law Skills/Perspective Requirement: At least one credit hour from among the following courses:
  - LAW 914 - Alternative Dispute Resolution (3)
  - LAW 929 - Interviewing and Counseling (3)
  - LAW 906 - Expungement Mini-Clinic (1)
  - LAW 990 - Access to Justice Lab (3)

- LAW 993 - Directed Research Paper (1) as approved by the Associate Dean for Academic Affairs
- LAW 994 - Independent Study (1) as approved by the Associate Dean for Academic Affairs

Non-Course Requirements

- To receive the certificate, students must 1) complete the Graduate Certificate Course Verification Form (located on the Graduate School webpage under the Forms Central tab) and 2) through MyUTK, apply to graduate from the certificate program.

Rationale for new programs: Many problems faced by people today require an understanding of issues and solutions that transcend traditional boundaries between law and social work. A social work background provides attorneys who work with traditionally underrepresented clients with the tools needed to understand their clients and work collaboratively with them and community resources. Similarly, a legal education gives social work professionals many of the tools they need to affect change essential to assisting their clients. The proposed programs are designed to provide aspiring lawyers and social workers with the tools necessary for their chosen career paths.

During the 2019-20 academic year, representatives from the College of Law met with representatives from the College of Social Work. The Colleges of Law and Social Work currently collaborate on the Graduate Certificate in Forensic Social Work, offered by the College of Social Work. This certificate provides social work students with the coursework and practical experience needed to provide forensic services and evidence-based interventions in a variety of settings including, but not limited to, prisons, juvenile justice settings, child welfare, public defender offices, legal aid, victim witness divisions of prosecutor's offices, and programming and policy development. The certificate program is currently in its second year. Seven social work students enrolled in the first year of the program, and fourteen students enrolled in the current year. **Need CIP Code**.

The learning outcomes for each degree program remain unchanged.

Below is a brief summary of each program:

(1) The proposed JD/MSSW dual degree is designed to prepare students with combined skills in both social work and law for professional practice with complex social and legal issues in areas where social work and law converge. This program would offer individuals interested in social work and law the opportunity to obtain graduate degrees in both programs in four academic years, rather than the five years needed if pursued separately. There are upward of 50 schools that offer this dual degree option. No other law school in Tennessee offers this degree program. Of the University of Tennessee's six peer institutions that have law schools, three (Alabama, LSU, and South Carolina) offer this dual degree. Of the University of Tennessee's five aspirational institutions that have law schools, two (Georgia and Florida) offer this dual degree.

(2) The proposed MLS/MSSW dual degree would build upon the existing MLS degree and would enable social work students to gain a deeper and broader understanding of legal issues that may overlap with the practice of social work. This program would offer individuals interested in social work and law the opportunity to obtain MLS and MSSW degrees in two academic years (including summers), rather than the three academic years needed if pursued separately.

(3) The Graduate Certificate in Law and Social Welfare would be an add-on certificate for students pursuing the J.D. at the College of Law who have an interest in social work but do not wish to pursue a social work degree. Enrollment will be limited to students enrolled at the College of Law and pursuing the JD. This certificate program will provide students enrolled in the J.D. program at the College of Law with the opportunity to focus a portion of their studies on courses related to legal services for the underrepresented and to benefit from interdisciplinary study in forensic social work. An understanding of theories of social work and interpersonal dynamics may enhance a lawyer's ability to represent and advocate on behalf of clients and victims of crimes. A background in social work principles is potentially useful in numerous fields, including child welfare, domestic relations, domestic violence, education, immigration, juvenile justice, behavioral health, and services to the elderly. While the JD/MSSW program is fairly common at law schools, this type of certificate is not. The law school that offers the closest equivalent is Michigan State.

Each program would advance the College of Law's and College of Social Work's goal of improving the professional services afforded to the underrepresented.

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

► **DROP DUAL JD-MPH PROGRAM WITH DEPARTMENT OF PUBLIC HEALTH**

Rationale: There is insufficient interest in the dual degree, as evidenced by only one student obtaining the dual degree in its eight-year history. No student is currently enrolled in the dual degree program. Impact on other units: The Department of Public Health also proposes ending the dual degree. Financial impact: None.

COLLEGE OF NURSING

All changes effective Fall 2021

I. COURSE CHANGES

DROP COURSES

NURS 506 Advanced Anesthesia Pharmacology

NURS 516 Advanced Pathophysiology: Anesthesia Implications in Neurological and Cardiovascular Conditions

NURS 517 Advanced Pathophysiology: Anesthetic Implications in Respiratory and Renal Conditions

NURS 518 Advanced Pathophysiology: Anesthesia Implications in Obstetrics and Pediatrics

NURS 523 Advanced Principles of Nurse Anesthesia Practice

NURS 524 Basic Principles of Anesthesia I

NURS 525 Basic Principles of Anesthesia II

NURS 526 Practice Issues: Nurse Anesthesia

NURS 544 Clinical Nurse Anesthesia Practicum/Seminar I

NURS 545 Clinical Nurse Anesthesia Practicum/Seminar II

NURS 546 Clinical Nurse Anesthesia Practicum/Seminar III

NURS 547 Clinical Nurse Anesthesia Practicum/Seminar IV

NURS 548 Clinical Nurse Anesthesia Practicum/Seminar V

NURS 549 Clinical Nurse Anesthesia Practicum/Seminar VI

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: None.

REVISE TO REMOVE (RE)COREQUISITES

NURS 565 Teaching Practicum for Healthcare Professionals (1-6)

Formerly: (RE)Corequisite(s): 566.

REVISE TO REMOVE (DE)PREREQUISITES AND ADD (RE)COREQUISITES

NURS 650 Wellness, Development, and Behavior of the Pediatric Population (4)
(RE) Corequisite(s): NURS 653.

Formerly: (DE)Prerequisite(s): NURS 639 and NURS 648 and NURS 649.

REVISE TO REMOVE (RE)PREREQUISITES AND ADD (RE)COREQUISITES

NURS 651 Pediatric Nurse Practitioner I: Care of the Pediatric Patient with an Acute Illness (3)
(RE) Corequisite(s): NURS 653.

Formerly: (RE)Prerequisite(s): NURS 650.

NURS 652 Pediatric Nurse Practitioner II: Care of the Pediatric Patient with Chronic Conditions (3)
(RE) Corequisite(s): NURS 653.

Formerly: (RE)Prerequisite(s): NURS 651.

NURS 653 Clinical Experiences in Pediatric Populations (1-5)
(RE) Corequisite(s): NURS 650 or NURS 651 or NURS 652.

Formerly: (RE)Prerequisite(s): NURS 651.

NURS 666 Nurse Executive Practice II (2)
(RE) Corequisite(s): NURS 669.

Formerly: (RE)Prerequisite(s): NURS 665.

REVISE TO ADD (RE)COREQUISITES

NURS 665 Nurse Executive Practice I (2)
(RE) Corequisite(s): NURS 669.

NURS 669 Clinical Practice: Nurse Executive (1-5)
(RE) Corequisite(s): NURS 665 or NURS 666.

REVISE (RE)COREQUISITES

NURS 670 Acute Care Pediatric Nurse Practitioner I (3)
(RE) Corequisite(s): NURS 672.

Formerly: NURS 671.

NURS 672 Clinical Practice: Pediatric Acute Care (1-5)
(RE) Corequisites(s): NURS 670 or NURS 671.

Formerly: NURS 669 or NURS 670.

REVISE (RE)PREREQUISITES

NURS 602 Advanced Statistical Methods for Health Care Research (3)
(RE) Prerequisite(s): NURS 599.

Formerly: (RE)Prereqisite(s): NURS 511.

NURS 671 Acute Care Pediatric Nurse Practitioner II (4)
(RE) Prerequisites(s): NURS 670.

Formerly: (RE)Prerequisite(s): NURS 669.

REVISE TO REMOVE (RE)PREREQUISITES ON PRIMARY COURSE

NURS 614 Nursing Preceptorship (1-3)
Cross-listed: Same as Public Health 614.

Formerly: (RE)Prerequisite(s): NURS 601.

REVISE REGISTRATION RESTRICTION

NURS 584 Directed Clinical Practice (1-10)
Registration Restriction(s): Doctor of Nursing Practice, Family Nurse Practitioner Graduate Certificate, Pediatric Nurse Practitioner Graduate Certificate, Pediatric Acute Care Nurse Practitioner Graduate Certificate, Psychiatric Mental Health Nurse Practitioner Graduate Certificate. Minimum student level – graduate.

Formerly: Registration Restriction(s): Master of Science in Nursing – nursing major. Minimum student level – graduate.

REVISE REPEATABILITY

NURS 633 DNP Practice Immersion (1-12)
Repeatability: May be repeated. Maximum 18 hours

Formerly: May be repeated. Maximum 12 hours

REVISE TO ADD REPEATABILITY

NURS 634 DNP Scholarly Project (1)
Repeatability: May be repeated. Maximum 2 hours.

Formerly: None

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.

II.PROGRAM CHANGES

► **DROP THE FOLLOWING MAJOR, DEGREE, AND CONCENTRATION**

Nursing Major, MSN

Nurse Anesthesia Concentration

Rationale: Continuation of transition of Advanced Practice Nurse educational preparation from MSN to DNP degree to align with AACN Essentials of Doctoral Education standards. Teach out plan for all MSN students will be complete in August 2021. Impact on other units: None. Financial impact: None. The current 15 students in the MSN will graduate spring and summer 2021. Notification of Substantive Change Report will be completed with accreditation agencies in June 2021.

REVISE REQUIREMENTS – NURSING MAJOR, PHD

In the 2021-22 Graduate Catalog, under the Additional Course Requirements heading, remove course NURS 614 and replace with course NURS 565.

REVISE REQUIREMENTS – NURSING MAJOR, DNP

1) In the 2021-2022 Graduate Catalog, under the Required Courses heading, remove course NURS 623 from the list of courses and replace with course NURS 557. This change pertains to all concentrations.

2) Under the Required Courses heading, then under the Nurse Anesthesia Requirements heading revise to add the following two courses to the list.

   NURS 599
   NURS 648

3) Under the Non-Course Requirements heading, revise the text of the first bullet as shown below. This change pertains to all concentrations.

   - Students will be admitted to candidacy upon successful completion of the DNP Scholarly Project Proposal and oral defense for all DNP students.

Formerly: Students will be admitted to candidacy after successfully passing a comprehensive examination and defending the DNP Scholarly Project Proposal.

COLLEGE OF SOCIAL WORK

All changes effective Fall 2021

I. COURSE CHANGES

(905) (SOWK) Social Work

ADD

SOWK 503 Introduction to Interpersonal Social Work Practice (3) A required generalist course, taken concurrently with Interpersonal Social Work Skills Lab, which covers micro and mezzo practice, specifically with individuals, families, and small groups. Introduces the profession of social work, its history, ethical code, and theories related to interpersonal practice with an emphasis on social justice, trauma-informed care, and interprofessional practice. Will allow students to compare and contrast evidence-based interventions and models of social work practice with clients/client systems in the context of social work values, attention to all forms of diversity, and professional engagement with clients.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

SOWK 504 Interpersonal Social Work Skills Lab (3) A required generalist course, taken concurrently with Introduction to Interpersonal Social Work Practice. This experiential course will address the essential skills of social work practice of empathy, engagement, assessment, intervention, evaluation, and termination. Students will learn appropriate use of self, including self-care strategies. Skills will be addressed with consideration of the various frameworks of social work practice with diverse populations including trauma-informed care, interprofessional practice, and social justice.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

SOWK 511 Introduction to Macro Social Work Practice (3) A required generalist course covers systemic macro practice, specifically communities, organizations, and leadership roles. A range of methods, strategies, and skills applicable to diverse macro settings are examined. Taking into consideration the historical and contemporary relevance of macro practice, students will explore issues of social justice, inequality, and systemic oppression.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

SOWK 515 Human Development in Context: Pre-Natal through Adolescence (3) A required generalist course examines biological, psychological, and social theories and frameworks for individuals and families, emphasizing the interaction between neurophysiological development and environmental contexts. Risk and protective factors that influence and shape development while promoting resilience are identified. The influences of culture, oppressive systems, and dynamic processes critical to risk and resilience for vulnerable populations are explored. Practice implications for early prevention, policies, and services for healthy and atypical developmental patterns are examined.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

SOWK 516 Human Development in Context: Young Adulthood through Older Adulthood (3) A required generalist course examines biological, psychological, and social theories and frameworks for individuals and families, emphasizing the interaction between neurophysiological development and environmental contexts. Risk and protective factors that influence and shape development while promoting resilience are identified. The influences of culture, oppressive systems, and dynamic processes critical to risk and resilience for vulnerable populations are explored. Practice implications for working with adults are examined, including behavioral health challenges, chronic illness, family and social relationships, and death and dying.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

SOWK 550 Generalist Seminar I: Micro Social Work Practice (3) A required generalist seminar designed to provide incoming advanced standing students with the required foundation before starting the concentration program of study. Seminar will address essential social work skills related to inter-professional practice including values, ethics, and the impact of trauma and traumatic stress on the human person. Will learn basic neuro-biological theories as related to the practice of social work. A foundational framework for diagnostic criteria related to psychological dysfunction will be reviewed in preparation for advanced social work practice. The course material will be presented through the lens of anti-racist and anti-oppressive practice.
Comment(s): Admission to Advanced Standing program.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

SOWK 551 Generalist Seminar I: Macro Social Work Practice (3) A required generalist seminar is designed to provide incoming advanced standing students with the required foundation before starting the concentration program of study. Will learn the essentials of community-based social work practice, ethics, and leadership skills. Foundational aspects of macro practice through the lens of anti-racist, anti-oppressive, and trauma-informed theory are examined. Practice behaviors related to combatting systemic oppression in organizations and communities are addressed.
Comment(s): Admission to Advanced Standing program.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

REVISE TITLE, CREDIT HOURS AND DESCRIPTION AND ADD REPEATABILITY

SOWK 542 Generalist Field Practice I (2-3) A required generalist course with a focus on integrating social work theory and practice in an organizational setting. The first in a sequence of required field practicum courses. Includes an agency-based placement and a seminar. This experiential course gives students the opportunity to apply, practice, and refine generalist social work competencies, knowledge, and skills with individuals, families, groups, organizations, and communities. The seminar content, assignments, and activities prepare students for successful engagement and learning in a professional practice setting.
Repeatability: Not Repeatable. May be taken once for either 2 or 3 hours.

Formerly: (2) Generalist Field Practice Full Time I/Extended II
Instruction and supervision in generalist social work practice. Includes a seminar and agency-based internship.

SOWK 544 Generalist Field Practice II (3-4) A required generalist course with a focus on integrating social work theory and practice in an organizational setting. The second in a sequence of required field practicum courses. Includes an agency-based placement and a seminar. Students continue and complete the agency placement that they commenced in Generalist Field Practice I. Students apply, practice, and demonstrate appropriate mastery of all generalist competencies in preparation for their concentration placement experience. The seminar focuses on processing student learning and content related to ethical and professional practice.
Repeatability: Not Repeatable. May be taken once for either 3 or 4 hours.

Formerly: Generalist Field Practice Full Time II (4)
Instruction and supervision in generalist and transition to advanced social work practice. This course includes a seminar and agency-based internship.

REVISE TITLE, DESCRIPTION AND REGISTRATION RESTRICTIONS; ADD REGISTRATION PERMISSION

SOWK 510 Social Welfare Policy and Programs (3) A required generalist course. Explores the policies that shape the welfare system and influence social work practice. Will emphasize organizational and legislative systems at the federal, state, local levels and their impact on social services. Links social welfare policy and social work practice by critically analyzing the historic and contemporary contexts of social welfare practice. The processes of analyzing, influencing, developing, implementing, and advocating for policies and programs through the lens of social work values and ethics are addressed.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

Formerly: Will identify issues in social welfare policy and social service delivery at the micro, mezzo and macro levels of practice within the profession of social work. This includes neighborhood, local, state, national and international levels of policy practice. Will address methods which will expand the student's capacity to promote social, economic and environmental justice and access to services. Such areas of policy practice as policy analysis and advocacy will be discussed and simulated. The history of the social work profession's role in policy as well as ethical considerations will also be addressed.
Registration Restriction(s): Graduate students only. Minimum student level graduate.

REVISE TITLE, DESCRIPTION AND REGISTRATION RESTRICTION, ADD REGISTRATION PERMISSION

SOWK 519 Foundations of Social Work Research (3) A required generalist course. Includes the concepts and skills underlying social work research, including basic research terminology, the value of research in social work practice, research ethics, research with minoritized populations, problem formulation and conceptualization, measurement, research designs, sampling, quantitative and qualitative data collection and analytic techniques.
Registration Restriction(s): Master of Science in Social Work – social work major. Graduate students only. Minimum student level graduate.
Registration Permission: Non-MSSW students may register with permission of program director.

Formerly: Social Work Research (3)
Social work practice-focused quantitative and qualitative research knowledge and skills. Includes critical evaluation of empirical literature and basic research methodology including construct operationalization; study design; selection, development, implementation, and evaluation of measures and instruments; and data management and analysis using statistical software.
Registration Restriction(s): Graduate students only. Minimum student level graduate.

REVISE TITLE, DESCRIPTION AND ADD REGISTRATION PERMISSION

SOWK 538 Social Justice and Anti-oppressive Practices (3) A required generalist course designed to increase students' awareness of the dimensions of human diversity and forms of oppression, discrimination, and inequality. Students will learn to apply and articulate social justice frameworks, critical theory, and a human rights perspective to complex social problems. Students will be prepared to integrate these concepts into future ethical decision-making and practice with marginalized populations.
Registration Permission: Non-MSSW students may register with permission of program director.

Formerly: Culturally Relevant Practice with Diverse Populations (3)
In-depth study of evidence-informed and evidenced-based practice models with diverse and at-risk populations. Assessment and interventions focus on individuals, families, groups, and communities. Integrates local to international information about our global, diverse, multicultural society with evidence-based knowledge and skills that are culturally affirming, address oppression, and promote social and economic justice, human dignity, and a human rights perspective.

Rationale: New courses added and revisions to existing courses to meet competencies for the revised MSSW generalist curriculum. Financial Impact: None. Impact on other units: None

ADD 400-LEVEL COURSE FOR GRADUATE CREDIT

SOWK 455 Human Sexuality (3) Addresses core concepts and contemporary topics about human sexuality. Human sexuality is an integral part of being human and as such, social workers have the responsibility to be knowledgeable about sexuality to treat and provide resources for people in a holistic manner. Social workers can play a key role in helping people heal from sexual trauma, access necessary resources and provide education around healthy sexuality.
(RE) Prerequisite(s): 312.

Rationale: Content of this existing course is relevant to master's level social work students. It will be an elective in the MSSW program with additional course requirements for those who enroll for graduate credit. Financial Impact: None Impact on other units: None

II. PROGRAM CHANGES

REVISE REQUIREMENTS - SOCIAL WORK MAJOR, MSSW

Revisions below are for both concentrations and for both options (Thesis and Course Only with Comprehensive Exams)

REVISE CREDIT HOURS REQUIRED FOR ADVANCED STANDING

In the 2021-22 Graduate Catalog, under the Credit Hours Required heading, revise the Advanced Standing required hours from 37 to 36 as shown below.

60 graduate credit hours; Advanced Standing requires 36 graduate credit hours.

Formerly: 60 graduate credit hours; Advanced Standing requires 37 graduate credit hours

REVISE REQUIRED COURSES

In the 2021-22 Graduate Catalog, under the Required Courses heading, revise courses and text as shown below.

Professional Generalist Curriculum
SOWK 503 (3 credit hours)
SOWK 504 (3 credit hours)
SOWK 511 (3 credit hours)
SOWK 515 (3 credit hours)
SOWK 542 (3 credit hours)
SOWK 510 (3 credit hours)
SOWK 516 (3 credit hours)
SOWK 519 (3 credit hours)
SOWK 538 (3 credit hours)
SOWK 544 (3 credit hours)

Advanced standing students take the following courses (6 credit hours) during their entry semester (summer) and then continue into the concentration curriculum.

SOWK 550 (3 credit hours)
SOWK 551 (3 credit hours)

Formerly:Professional Generalist Curriculum
SOWK 510 (3 credit hours)
SOWK 512 (2 credit hours)
SOWK 513 (4 credit hours)
SOWK 519 (3 credit hours)
SOWK 522 (4 credit hours)
SOWK 537 (3 credit hours)
SOWK 538 (3 credit hours)
SOWK 539 (2 credit hours)
SOWK 542 (2 credit hours)
SOWK 544 (4 credit hours)

Advanced standing students take the following courses (7 credit hours) during their entry semester (summer) and then continue into the concentration curriculum.
SOWK 520 (1 credit hour)
SOWK 528 (1 credit hour)
SOWK 537 (3 credit hours)
SOWK 539 (2 credit hours)

REVISE REQUIREMENTS - ACCELERATED BACHELOR OF SCIENCE IN SOCIAL WORK AND MASTER OF SCIENCE IN SOCIAL WORK

Revisions below are for both concentrations and for both options (Thesis and Course Only with Comprehensive Exams)

1) REVISE CREDIT HOURS REQUIRED

In the 2021-22 Graduate Catalog, under the Credit Hours Required heading, revise the required hours from 37 to 36 as shown below.

36 graduate credit hours.

Formerly: 37 graduate credit hours

2) REVISE REQUIRED SUMMER COURSES

In the 2021-22 Graduate Catalog, under the Required Courses heading, revise courses listed under the bullet "Summer following BSSW graduation"

- Summer following BSSW graduation
  - SOWK 550 (3 credit hours)
  - SOWK 551 (3 credit hours)

Formerly:
SOWK 537 (3 credit hours)
SOWK 539 (2 credit hours)
SOWK 593 (2 credit hours)

REVISE TO ADD THE NASHVILLE CAMPUS CODE TO THE ACCELERATED BSSW-MSSW PROGRAM

Campus Code

Knoxville Campus
Nashville Campus
Distance Education

Formerly:
Knoxville Campus
Distance Education

Rationale: The last full scale revision of the generalist MSSW curriculum was in 2008. The redevelopment has incorporated the themes of social justice and anti-racism, interprofessional practice, and trauma-responsive practice throughout the generalist MSSW curriculum. The goal is to ensure strong integration of course material and reduce fragmentation across the curriculum while preparing students to fill current needs in professional areas in TN and prepare for future trends. Financial Impact: None. Impact on other units: None

REVISE CAMPUS CODE FOR CERTIFICATE – FORENSIC SOCIAL WORK GRADUATE CERTIFICATE

In the 2021-22 Graduate Catalog, revise the Campus Code to add Nashville Campus and Distance Education

Campus Codes

Knoxville Campus
Nashville Campus
Distance Education

Formerly:
Knoxville Campus

Rationale: Required courses for the Forensic Social Work Graduate Certificate will be available online, therefore allowing Nashville campus and Online MSSW students to participate. Financial Impact: None. Impact on other units: None.

► **ADD DUAL DEGREE PROGRAM – DUAL MSSW-JD (SOCIAL WORK / LAW)**

Dual MSSW-JD Program / Social Work-Law

In the 2021-22 Graduate Catalog, add heading and text for the Dual MSSW-JD Program

Dual MSSW-JD Program / Social Work-Law

The College of Social Work and The College of Law offer a combined program of study in graduate level social work and law to students who seek to earn both a Master of Science in Social Work (MSSW) degree and Juris Doctor (JD) degree. This interdisciplinary program offers individuals interested in social work and law the opportunity to obtain graduate degrees in both programs in four academic years, rather than the five years needed if pursued separately.

The program consists of an integrated curriculum specifically designed for those who are interested in acquiring the knowledge and skills pertinent to both disciplines. The goal of the program is to prepare future professionals who are competent in both disciplines. The areas of work in which both fields play significant roles are often complex and require expertise in counseling, administration, and policy-making, beyond the underlying substantive knowledge. The program stresses an interdisciplinary approach, which values collaboration and communication skills.

The dual degree program is challenging but rewarding. A dual degree student in social work and law studies the skills and material of both disciplines and enters field placements, summer internships, and eventually the workplace with a unique skill set of valuable practice experiences. Alumni of the dual degree program in social work and law at The University of Tennessee will go on to work in a variety of settings in law and social work. Some alumni will choose to practice law, while others will find employment as social workers, program directors, and therapists.

Students must apply separately for admission to the two colleges. Once admitted to both colleges, applicants will be selected for participation in the program by a special admissions committee consisting of representatives from both institutions.

Concentrations

Social Work (Required)
Evidence-Based Interpersonal Practice (EBIP) — Course Only with Comprehensive Exams
Organizational Leadership —Course Only with Comprehensive Exams

Campus Code

Knoxville Campus

Admissions Standards/Procedures

- Applicants for the JD-MSSW program must make separate application to, and be competitively and independently accepted by, each of the following:
  - the College of Law for the JD degree,
  - the Office of Graduate Admissions and the College of Social Work for the MSSW degree, and
  - the Dual Program Committee.
- Students who have been accepted by both colleges may apply for approval to pursue the dual program any time prior to or after matriculation in either or both colleges.
  - Such approval will be granted, provided that dual program studies are started prior to entry into the last 28 credit hours of JD course work and prior to the third semester of the MSSW program.
- Students interested in entering the dual degree program should submit a letter of application to the Dual Degree Program Committee. Upon receipt of the application, the Dual Degree Program Committee will determine eligibility and assign students to advisors who will be responsible for course approval and supervision of the student's progress through the dual program.
- Enrollment in the program will ordinarily be capped at 10 entering students per year.

Academic Standards

- The College of Law will award up to nine credit hours for MSSW courses, as approved by the JD advisor, that materially contribute to the dual degree student's study of law and career goals. Any such course cannot primarily address substantive law. The student must earn a B grade or higher in any such course.
- The College of Social Work will award up to nine credit hours for JD courses that have been approved by the student's advisors and in which the student has earned a 2.30 or C+ grade or higher.
- A dual program candidate must satisfy the graduation requirements of each college.
- Students withdrawing from the dual program before completion of both degrees will not receive credit toward graduation from either college for courses in the other college, except as such courses qualify for credit without regard to the dual program.

Credit Hours Required

- 131 credit hours
  - 89 credit hours of the JD including nine credit hours from the MSSW, for 80 credit hours.
  - 60 credit hours of the MSSW including nine credit hours from the JD, for 51 credit hours.

Required Courses

- Law: See the requirements for the Doctor of Jurisprudence.
- Social Work: See the requirements for the Master of Science in Social Work.

Concentrations

Social Work (Required)

Evidence-Based Interpersonal Practice (EBIP) — Course Only with Comprehensive Exams

Organizational Leadership —Course Only with Comprehensive Exams

Non-Course Requirements

- Students may not enroll in MSSW course work while completing the first year of the law curriculum and, except as indicated or approved, may not enroll in JD course work while completing the first year of the social work curriculum.
- During the first year in the JD program, students register through the College of Law. During the first year in the MSSW program, students register as graduate students. After the first two years, any term in which students take law courses or a mixture of law and graduate courses, they are classified and registered as law students. If taking only graduate courses, they are classified and registered as graduate students.

Program Curriculum:

- Year I: Students may begin their studies in either the JD or the MSSW program, but may not enroll in MSSW course work while completing the first year of the law curriculum and may not enroll in JD course work while completing the first year of the social work curriculum.

- Year II: For a student who begins course work in the College of Law, Year II of the program is undertaken largely in the College of Social Work and consists largely of the traditional first year MSSW curriculum. For a student who begins course work in the College of Social Work, Year II of the program is undertaken at the College of Law and consists of the traditional first year JD curriculum.

- Years III and IV: Years III and IV consist of courses taken at both colleges.

- Field Practicum - Social work practicums are required in Years II and III. The Year III practicum for students in this program allows students to study under professionals in both fields. The Year III practicum involves enrollment in (a) a six-credit hour course as part of the College of Law's Legal Clinic (excluding the Business Law Clinic), (b) the College of Law's six-credit hour Public Defender Externship, or (c) a six-credit hour field placement that is approved by the appropriate representatives at both colleges.

► **ADD DUAL DEGREE PROGRAM – DUAL MSSW-MLS (SOCIAL WORK / LAW)**

Master of Science in Social Work / Master of Legal Studies

In the 2021-22 Graduate Catalog, add heading and text for Dual MLS-MSSW Program

DUAL MLS-MSSW PROGRAM

The College of Social Work and The College of Law offer a combined program of study in graduate level social work and legal studies to students who seek to earn both a Master of Science in Social Work (MSSW) and a Master of Legal Studies (MLS). This interdisciplinary program offers individuals interested in social work and law the opportunity to obtain graduate degrees in both programs in two academic years (including summers), rather than the three years needed if pursued separately.

The program consists of an integrated curriculum specifically designed for those who are interested in acquiring the knowledge and skills pertinent to both disciplines. The MSSW program seeks to prepare its graduates to make demonstrable improvements in the quality of life of at-risk and vulnerable populations of individuals, families, groups, organizations, communities, the state of Tennessee, the nation, and internationally. The MLS program is designed for professionals whose fields intersect with the law and who would benefit from legal studies but do not wish to pursue the JD or practice law.

The program stresses an interdisciplinary approach, which values collaboration and communication skills. Alumni of the dual degree program in social work and legal studies at The University of Tennessee will go on to work in a variety of settings, including as social workers, program directors, and therapists.

Students must apply separately for admission to the two colleges. Once admitted to both colleges, applicants will be selected for participation in the program by a special admissions committee consisting of representatives from both institutions.

Campus Code

Knoxville Campus

Program Curriculum

- Year I: Year I of the program is ordinarily undertaken completely at The University of Tennessee College of Social Work and consists of the traditional first-year curriculum.
- Year I Summer: Students will complete MSSW and MLS courses.
- Year II: Year II of the program consists of courses taken at both colleges.
- Year II Summer: Students will complete MSSW and MLS courses.

Admissions Standards/Procedures

- Applicants for the MLS-MSSW program must make separate application to, and be independently accepted by, each of the following:
  - the Office of Graduate Admissions and the College of Law for the MLS degree,
  - the Office of Graduate Admissions and the College of Social Work for the MSSW degree, and
  - the Dual Program Committee.
- Students who have been accepted by both colleges may apply for approval to pursue the dual program at any time prior to or after matriculation in either or both colleges.
  - Such approval will be granted, provided that dual program studies are started prior to entry into the last 10 credit hours of College of Law course work and prior to the third semester of the MSSW program.
- Students interested in entering the dual degree program should submit a letter of application to the Dual Degree Program Committee. Upon receipt of the application, the Dual Degree Program Committee will determine eligibility and assign students to advisors who will be responsible for course approval and supervision of the student's progress through the dual program.

Academic Standards

- The College of Law will award up to six credit hours for MSSW courses, as approved by the MLS advisor, that materially contribute to the student's study of law and career goals. Any such course cannot primarily address substantive law. The student has earned a B grade or higher in any such course.
- The College of Social Work will award up to nine credit hours for law courses that have been approved by the student's advisors, provided the student has earned a 2.30 or C+ grade or higher.
- A dual program candidate must satisfy the graduation requirements of each college.
- Students withdrawing from the dual program before completion of both degrees will not receive credit toward graduation from either college for courses in the other college, except as such courses qualify for credit without regard to the dual program.

Credit Hours Required

- 75 credit hours
  - 30 credit hours for the MLS, including six credit hours from the MSSW, for 24 credit hours.
  - 60 credit hours for the MSSW, including nine credit hours from the College of Law, for 51 credit hours.

Required Courses

- Law: See the requirements for the Master of Legal Studies.

- Social Work: See the requirements for the Master of Science in Social Work.
    - Law courses may satisfy the Advanced Policy requirement for the MSSW, subject to approval by the student's advisors.

Concentrations

Social Work (Required)

Evidence-Based Interpersonal Practice (EBIP) — Course Only with Comprehensive Exams

Organizational Leadership —Course Only with Comprehensive Exams

Non-Course Requirements

- Students may not enroll in MLS course work while completing the first year of the social work curriculum.

Rationale for new programs: Many problems faced by people today require an understanding of issues and solutions that transcend traditional boundaries between law and social work. A social work background provides attorneys who work with traditionally underrepresented clients with the tools needed to understand their clients and work collaboratively with them and community resources. Similarly, a legal education gives social work professionals many of the tools they need to affect change essential to assisting their clients. The proposed programs are designed to provide aspiring lawyers and social workers with the tools necessary for their chosen career paths.

Below is a brief summary of each program:

(1) The proposed JD/MSSW dual degree is designed to prepare students with combined skills in both social work and law for professional practice with complex social and legal issues in areas where social work and law converge. This program would offer individuals interested in social work and law the opportunity to obtain graduate degrees in both programs in four academic years, rather than the five years needed if pursued separately. There are upward of 50 schools that offer this dual degree option. No other law school in Tennessee offers this degree program. Of the University of Tennessee's six peer institutions that have law schools, three (Alabama, LSU, and South Carolina) offer this dual degree. Of the University of Tennessee's five aspirational institutions that have law schools, two (Georgia and Florida) offer this dual degree.

(2) The proposed MLS/MSSW dual degree would build upon the existing MLS degree and would enable social work students to gain a deeper and broader understanding of legal issues that may overlap with the practice of social work. This program would offer individuals interested in social work and law the opportunity to obtain MLS and MSSW degrees in two academic years (including summers), rather than the three academic years needed if pursued separately.

Each program would advance the College of Law's and College of Social Work's goal of improving the professional services afforded to the underrepresented.

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

COLLEGE OF VETERINARY MEDICINE

All changes effective Summer 2021

I. COURSE CHANGES

(VMC) VETERINARY MEDICINE – Clinical

REVISE GRADING [FROM LETTER GRADE A–F TO HONORS OR S/NC GRADING ONLY]

VMC 874 Clinical Rotation in Equine Performance Medicine and Rehabilitation (2–4)
Grading Restriction(s): Honors or Satisfactory/No Credit grading only.

Rationale: This change is to reflect the revision in clinical course grading during the 2019 submission. This course was overlooked during last year's submission. All other clinical courses are now H/S/NC grading only. The college faculty voted in August 2019 to move to non-graded clinical rotation courses. The final faculty voting 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. Impact on other units: None. Financial impact: None.

(VMP) VETERINARY MEDICINE – Pre-clinical

REVISE TITLE AND DESCRIPTION

VMP 877 Cultural Competency in Veterinary Medicine (1)
Elective builds cultural competence in veterinary medicine by exploring the issues of diversity and inclusion within the profession, as well as cultural differences that may affect the receptiveness of pet owners to the veterinary medical care of their animals. Students will learn details about pet keeping and human-animal relationships through the lens of minority cultures and marginalized populations. Current issues regarding prejudice and implicit bias as it relates to the veterinary profession will be discussed.

Formerly:
Cultural Influences on Animal Health Elective (1)
Elective introduces students to cultural differences that may affect the receptiveness of pet owners to the veterinary medical care of their animals. Cultures explored including populations that are underserved (elderly, homeless, disabled, low income) and ethnic (Native American, Appalachian, Latino, and African American). Also explored are animal perspectives of several religions and veterinary care for animals of military families.

Rationale: This change is a result of the integration of cultural competency content into several core courses in the curriculum. Such content is now required by the American Veterinary Medical Association's Council on Education. Much of the content of this elective is no longer necessary because the topics are integrated into the core curriculum; therefore, this elective is being revised to reflect adjusted content. Impact on other units: None. Financial impact: None.

II. PROGRAM CHANGES

REDUCE CREDIT HOURS REQUIRED TO GRADUATE FOR CLASS OF 2021

***Informational Item*: The College is reducing the number of credit hours required to graduate for the Class of 2021 only.**

This change is due to COVID-19 restrictions on in-person clinical instruction at the beginning of the clinical year for the Class of 2021.

No catalog change is needed.

Rationale: The Class of 2021 was scheduled to enter in-person clinical rotations in the UT Veterinary Medical Center on April 20, 2020. A few weeks before, the COVID-19 pandemic and the university-shutdown necessitated sending students home. Although the Tennessee Department of Health classified most Veterinary Medical Center staff as essential, they did not classify veterinary students as essential. Therefore, to mitigate possible spread of COVID-19, the college removed all students from in-person clinical rotations for 2 weeks, from April 20 to May 3. Students who were scheduled for core courses during that time were rescheduled in order to meet minimum curricular requirements. However, this shutdown resulted in students lacking 2 credit hours (1 credit hour peer week on a clinical rotation) required for graduation. The number of credit hours would be reduced from 162 to 160, which is still well above the required credit hours for other doctoral degrees at UT and still meets the requirement of the college's accrediting body: the American Veterinary Medical Association's Council on Education (AVMA COE). The

AVMA COE requires 30 weeks of clinical training. UTCVM students will have had a minimum of 48 weeks of clinical training. The change was discussed with Dr. Dixie Thompson via email in May 2020. Faculty voted on the change. Of the 89 votes, 86 (95%) agreed with the change. Three faculty opposed. Impact on other units: None. Financial impact: A financial impact to the college occurred due to lowered caseload during the time students were not in clinics.

REVISE ADMISSIONS TEXT - VETERINARY MEDICINE MAJOR, DVM

In the 2021-2022 Graduate Catalog, under the Admissions Standards heading, add paragraph for the Technical Standards for admission.

At the end of the paragraph about Admissions Standards/Procedures, add the following paragraph.

Additionally, admission is conditional on the candidate's having the ability to satisfy Technical Standards for admission. Technical Standards are designed to communicate the necessary intellectual and physical abilities, and behavioral and social attributes of all candidates and students. These standards are not intended to deter candidates for whom reasonable accommodation will allow successful completion of the curriculum. Consult the college's admissions Web site for a full description of the Technical Standards for Admission.

Rationale: Technical standards for admissions to health professional programs are common across the United States. The veterinary professional program includes rigorous academic training in semesters 1–5, requiring long hours in class, extensive after-class study, and intensive examination periods during midterm and final exam periods. Clinical training in semesters 6–9 requires long hours, limited breaks, and the physical agility and stamina needed to conduct diagnosis, treatment, and general husbandry of various animal species. Candidates and students must have the physical and emotional capacity to competently meet the demands of the hospital, classroom, and laboratory settings, including settings that may involve heavy workloads; long hours; fractious, frightened, or dangerous animals; and stressful situations. These Technical Standards were reviewed and approved by the college's Curriculum Committee, Student Disability Services, and UT General Counsel. Other schools with technical standards include The Ohio State University, Kansas State University, Michigan State University, and the University of California-Davis veterinary schools, to name a few. Impact on other units: None. Financial impact: None.

REVISE REQUIREMENTS - VETERINARY MEDICINE MAJOR, DVM

In the 2021-22 Graduate Catalog,

2. under the Required Courses heading, revise the first indented bullet point, second sentence as follows:

Required Courses

- Beginning with the Class of 2022, the final four semesters of the professional curriculum begin immediately following semester five and are continuous clinical rotation experiences extending over 68 weeks.

Formerly:
Beginning with the Class of 2022, the final four semesters of the professional curriculum begin immediately following semester five and are continuous clinical rotation experiences extending over 68 weeks.

Rationale: Removed wording "extending over 68 weeks" from the sentence. Descriptors elsewhere in the catalog sufficiently describe the length of students' clinical training. For example, the first indented bullet point indicates that the final four semesters are devoted to clinical rotation experiences. The fourth indented bullet point also indicates four semesters. Impact on other units: None. Financial impact: None.

3. Under the Non-Course Requirements heading, for the Comprehensive Examination bullet, revise sentence as follows:

Non-Course Requirements
Comprehensive Examination: Students in the 3rd year are required to pass a comprehensive examination.

Formerly:
Comprehensive Examination: Students in the second semester of the 3rd year are required to pass a comprehensive examination prior to transitioning to clinical training.

Rationale: Because students now enter clinical rotations during the second semester of their third year, the previous language is no longer applicable. Students will now take the comprehensive examination during their third year, but not necessarily the second semester of the third year. Additionally, due to the testing window provided by the testing company, the comprehensive exam might not be able to be scheduled before students enter clinical rotations. *Impact on other units*: None. *Financial impact*: None.

4. Under the Non-Course Requirements heading, for the Clinical Skills bullet, revise sentence as follows:

Non-Course Requirements
Clinical Skills: Students must demonstrate competency of a minimum number of clinical skills by the conclusion of the 9th semester.

Formerly:
During clinical rotations, students must demonstrate competency of a minimum of 200 clinical skills by the conclusion of the 9th semester.

Rationale: Clinical skills are being integrated into pre-clinical courses. Therefore, clinical skills are no longer completed only in clinical rotations. This language clarifies that change. Also, the COVID-19 pandemic necessitated that the college seek an emergency adjustment to the 200 required skills. This change was approved with communication with the Dean of the Graduate School. However, the college wishes to have more flexibility in the number of skills required to graduate in the future. Impact on other units: None. Financial impact: None.

INTERCOLLEGIATE

COMPARATIVE AND EXPERIMENTAL MEDICINE

All changes effective Fall 2021

PART II. PROGRAM CHANGES

► **ADD MINOR**

One Health

The new Interdisciplinary Graduate Minor will be housed in Comparative and Experimental Medicine.

In the 2021-2022 Graduate Catalog, add heading, text, and requirements for the One Health minor.

One Health
Emerging infectious diseases, controlling zoonoses, antibiotic resistance, and food safety threaten economic stability, human life, and biodiversity. Global One Health initiatives have been developed to protect global health security by creating transdisciplinary collaborations among human, animal, and environmental sectors. The One Health minor is for graduate students wishing to develop skills to prepare themselves for careers in agricultural, environmental, and human sciences in addition to scientific policy and communication. The required courses are interdisciplinary and will provide training in communication and leadership, translation of evidence to policy, and One Health that is relevant for all majors.

Campus Code
Knoxville Campus

Admissions Standards/Procedures
The One Health minor is available to any degree-seeking student who is in good academic standing with the UT Graduate School, with the consent of the student's major professor.

Credit Hours Required
10 graduate credit hours.

Required Courses
The minor consists of 10 credit hours (four courses) in three areas of focus as detailed below:

Category 1: Communication and Leadership (3 credit hours)
This category introduces students to the importance of communicating scientific information by gaining skills in oral communication and leadership. Select one course.

ALEC 520 - Leadership Development in Organizations and Community Nonprofit
ALEC 522 - Supervisory Leadership
ALEC 535 - Communicating in Agriculture and Natural Resources
ALEC 551 - Servant Leadership in Agriculture and Natural Resources
CMST 554 - Organizational Communication, Strategic Leadership, and Culture

Category 2: Translation of Evidence to Policy (3 credit hours)
This category allows students to gain knowledge in analyzing and understanding public policy and its impact on One Health at the national and global levels. Select one course.

NURS 612 - Health and Health Care Policy
POLS 514 - Research Design and Methodology in Public Administration
POLS 549 - Environmental Policy
POLS 551 - Energy Policy
POLS 556 - Policy Analysis

Category 3: One Health (4 credit hours total)
This category prepares students to explore and respond to One Health issues at both a local and global level. Select both courses.

CEM 506 - One Health (3 credit hours)
Journal Club that addresses One Health issues, as approved by the CEM Director of Graduate Studies (1 credit hour)

Non-Course Requirements
Graduate Committee

- The student's graduate committee must include at least one member who is affiliated with One Health (teaches one of the courses in the minor or is active in One Health initiatives), as approved by the student's major professor and the CEM Director of Graduate Studies.

Admission to Candidacy

- When application is made for admission to candidacy, the minor and the courses required for the minor must be indicated.

Students who do not complete the requirements of the minor will still receive academic credit for the courses they have successfully completed.

Rationale: In the United States, the 2018 Health Security National Action Plan (NAP) calls for enhanced communication, resources, and infrastructure to support real-time monitoring and rapid detection of emerging infectious diseases; advancements in rapid genomic characterization of pathogens; identification of molecular, ecological and environmental factors that influence transmission and pathogenesis (including antimicrobial resistance); and development of disease intervention strategies for emerging and re-emerging pathogens. The NAP also calls for an expanded One Health workforce in the United States. In the next five years and beyond, state and federal agencies will rely increasingly on land grant institutions to provide support for pathogen surveillance and research that leads to practical solutions for responding to and managing diseases in wildlife, livestock, and human populations. This has led to the formation of the One Health Initiative at the University of Tennessee, Knoxville (UTK). A graduate minor in One Health allows for the preparation of UTK students for the One Health workforce by providing additional curriculum opportunities in communication, leadership, policy, and global issues beyond the scope of other course work.

Impact on other units: Increased enrollment in the required courses may lead to additional teaching burden on faculty. However, due to the number of options in each of the first two categories of classes, the impact of additional students on any single faculty member should be low.

Financial impact: None. All required courses already exist and will continue to be taught as part of the normal course load of existing faculty.