Graduate Council Curriculum Committee  
November 15, 2017  
2:30 p.m., Millican Hall room 395E

Agenda

1. Welcome and call to order
2. Review of minutes from October 18, 2017
3. General business
4. Updates to Strategic Communication PhD by Dr. Robert Littlefield
5. Addition of RCHM Hospitality and Tourism Technologies Graduate Certificate program effective Fall 2018
6. Addition of COHPA Emergency and Crisis Management MECM program effective Fall 2018
7. Addition of COHPA Public Policy Analysis Graduate Certificate program effective Fall 2018
8. Revision of CAH Theatre MA program effective Summer 2018
9. Revision of CEHP Educational Technology (Instructional Design and Technology) Graduate Certificate program effective Summer 2018
10. Revision of CEHP Instructional Design and Technology Track of Instructional Systems MA program effective Summer 2018
11. Revision of CEHP Instructional Design and Technology Track of Educational Technology MA program effective Summer 2018
12. Revision of CEHP Initial Teacher Professional Preparation Graduate Certificate program effective Summer 2018
13. Addition of COS split level course: PCB 4XXXc/5XXXc Wetland Ecology & Biogeochemistry
14. Addition of COS split level course: BOT 4XXXL/5XXXL Plant Microtechniques
15. Equipment Fees
16. Courses and special topics
17. Adjournment
### Members of the Graduate Council Curriculum Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charles Kelliher, Chair, CBA</td>
<td>Devon Jensen, CGS Liaison</td>
</tr>
<tr>
<td>Jim Moharam, Steering Liaison, COP</td>
<td>Mostafa Bassiouni, CECS</td>
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<td>Kerry Purmensky, CAH</td>
<td>Joellen Edwards, CON</td>
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<td>Elsie Olan, CEHP</td>
<td>Foard Jones, CBA</td>
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<tr>
<td>Jennifer Sandoval, COS</td>
<td>David Hagan, COP</td>
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<tr>
<td>Cheyenne Ro, RCHM</td>
<td>Lynn Hepner, CAH</td>
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<tr>
<td>Art Weeks, CECS</td>
<td>Jana Jasinski, COS</td>
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<tr>
<td>Diane Andrews, CON</td>
<td>Jesse Mendez, CEHP</td>
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<tr>
<td>Steven Ebert, COM</td>
<td>Saleh Naser, COM</td>
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<tr>
<td>Mercedeh Khajavikhan, COP</td>
<td>Youcheng Wang, RCHM</td>
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<tr>
<td>Terrie Sypolt, LIB</td>
<td>Ross Wolf, COHPA</td>
</tr>
<tr>
<td>Joshua Troche, COHPA</td>
<td>Andrea Pulido, GSA</td>
</tr>
</tbody>
</table>
The hospitality and tourism industries have changed fundamentally over the past two decades with regard to the contribution of the Internet and Social Media in shaping new products, services, experiences and above all, electronic channels of distribution. This trend is global and is driven by a number of major global corporations including Expedia, Travelocity, Google, TripAdvisor to name but a few. Locally, a number of these corporations are now evident in and around Central Florida with a number of recent graduates from the MS Hospitality & Tourism Management finding good, full-time employment in this increasingly important sector of the industry. This, in part, explains the continued popularity of one of our existing courses - HMG 6446 Hospitality & Tourism Information Technology - which comprises one of the three courses that constitute this new graduate certificate. Building on the success of the Rosen College’s two existing graduate certificates (Event Management and Destination Marketing & Management), this new graduate certificate will contribute strongly to the continued growth of our graduate portfolio.
Impact on Current Students

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?  □ Yes  □ No

If yes, state the name of the program or track where students are currently enrolled and attach a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate?  □ Yes  □ No

If yes, how will current students be impacted by the addition of a program, track or certificate?

This new certificate represents an additional graduate certificate that can be taken rather than a replacement for an existing one. All of the three courses are existing/new electives on the MS Hospitality & Tourism Management program as per below:

- HMG 6446 - Hospitality and Tourism Information Technology
- HMG 6XXX - Social Media in Hospitality and Tourism
- HMG 6XXX - Digital Marketing and Big Data Management for Hospitality and Tourism

Future Students

Provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

This new certificate will be open to all existing students on the MS Hospitality & Tourism Management in addition to any qualified student applying from within Florida or beyond as is the case for our two existing graduate certificate programs. It is anticipated that most students will complete the certificate in a full academic year (fall, spring and summer).

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<td>270</td>
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<tr>
<td>3</td>
<td>90</td>
<td>270</td>
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</table>

Indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Students completing this certificate are likely to be employed in any area within the wider hospitality and tourism industry that incorporates online booking and reservation systems, e-intermediaries, online travel agencies, digital marketing agencies, social media organizations, destination marketing, hospitality marketing etc.

Please complete the following table on financial support:
(Specify all forms of support – assistantships, fellowships, and tuition remission.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of assistantship students</th>
<th>Source of funds</th>
<th>Number of fellowship students (specify fellowship)</th>
<th>Number of tuition remissions</th>
<th>Source of funds</th>
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</tbody>
</table>
Signatures

Recommend Approval (all approval levels must be signed)

Graduate Faculty Program Coordinator:
Print: Dr. Alan Fyall
Signature: ________________________________ Date: 10/12/2017

Department Chair / Director
Print: Dr. Kevin Murphy
Signature: ________________________________ Date: 10/12/2017

College Academic Standards
Print: Dr. Youcheng Wang
Signature: ________________________________ Date: 10/12/2017

College Dean
Print: Dr. Abraham Pizam
Signature: ________________________________ Date: 10/12/2017

Graduate Council
Print: ________________________________ Signature: ________________________________ Date: 

Vice President for Research and Dean of the College of Graduate Studies:
Print: ________________________________ Signature: ________________________________ Date: 

Approval

Provost and Executive Vice President:
Print: ________________________________ Signature: ________________________________ Date: 

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
The Graduate Certificate in Hospitality and Tourism Technologies

The Graduate Certificate in Hospitality & Tourism Technologies provides knowledge and information that facilitates the effective use of existing and emerging technologies in the marketing and management of hospitality and tourism products, services, experiences and electronic channels of distribution. The certificate covers the development, use and future of hospitality and tourism technologies, the critical role played by social media as a strategy for differentiation, business development and new product/experience development, and the major perspectives and concepts associated with digital marketing and big data management.

Students learn to synthesize theory and application at the graduate level in order to produce the knowledge base necessary to fully utilize available technological and social media techniques and strategies in the hospitality and tourism industries. Students successfully completing this certificate are likely to be employed in any area in hospitality and tourism that incorporates online booking and reservation systems, e-intermediaries, online travel agencies, digital marketing agencies, social media organizations, destination marketing, hospitality marketing etc.

Please note: This program may be completed online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF Online classes may enroll with a reduction in campus-based fees. See http://ucf.edu/online for more information.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.international.ucf.edu. If you have questions, please consult International Affairs and Global Strategies at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

The Graduate Certificate in Hospitality & Tourism Technologies is comprised of three required three-credit courses, nine credits in total.

Total Credit Hours Required:

9 Credit Hours Minimum Beyond the Bachelor's Degree
Required Courses – 9 Credit Hours

Although HMG 6446 may serve as a prerequisite for the two remaining courses that comprise the certificate, the order of courses taken is at the discretion of the Graduate Programs’ Director and will be determined by the students’ previous professional and academic experience. A number of sections of each course are available throughout the year with students able to commence in the Fall, Spring or Summer semester.

HMG 6446 – Hospitality and Tourism Information Technology

HMG 6XXX – Social Media in Hospitality and Tourism

HMG 6XXX – Digital Marketing and Big Data Management for Hospitality and Tourism

Application Requirements

Admission is open to those with a bachelor’s degree from a regionally-accredited institution. An application to the graduate certificate program and official transcripts must be submitted. Applicants must apply online. All requested materials must be submitted by the established deadline.

Materials received after the established deadline may not be considered. Admission to this certificate is competitive; applicants meeting the minimum application requirements are not guaranteed admission to the program.

In addition to the above application requirements, all applicants to this certificate program will be required to submit:

- A current resume
- A 500-word academic goal statement
- The GRE/GMAT is not required, however, the Admission Committee may ask for the GRE/GMAT to strengthen a candidate’s package.

The goal statement should address the applicant’s interest in pursuing the certificate program and fully discuss any experience that he or she has had in the field. A minimum of 2 years of full-time post-undergraduate work experience is required for admission.

Further Information

For further information, please contact Dr. Alan Fyall, Graduate Programs’ Director at alan.fyall@ucf.edu or Mrs. Kathy King, Graduate Programs’ Coordinator at kathy.king@ucf.edu.
Graduate Certificate in Hospitality & Tourism Technologies

Participating Faculty:

**HMG 6446 – Hospitality and Tourism Information Technology**

Dr. Tingting Zhang, Ph.D., Ohio State University (Information Technology/Customer Engagement)

http://hospitality.ucf.edu/person/tingting-zhang/


**HMG 6XXX – Social Media in Hospitality and Tourism**

Dr. Ahmet Ozturk, Ph.D., Oklahoma State University (Individual and Organizational RFID Technology Adoption in the Hospitality Industry)

http://hospitality.ucf.edu/person/ahmet-ozturk/


This memorandum is submitted for review and approval. As requested by Dr. Alan Fyall, Graduate Programs Director at the Rosen College of Hospitality Management, an analysis was conducted to evaluate the University of Central Florida (UCF) Libraries’ resources to support a new Graduate Certificate in Hospitality & Tourism Technologies.

Analysis
This analysis provides resource comparisons with peer institutions to evaluate current holdings for databases, journals, books, and audiovisuals. To complete the analysis, the expertise and assistance of fellow UCF Librarians Sara Duff and Ying Zhang was also solicited, which significantly added to the overall evaluation.

Peer Comparisons
When reviewing library support for the proposed certificate, the following institutions were selected for comparison:

- Florida International University (FIU)
- Temple University
- Oklahoma State University

FIU was selected as the closest comparable institution in the state of Florida with a hospitality/tourism master’s degree program. Temple and Oklahoma State were selected as out-of-state programs with comparable hospitality/tourism master’s degree programs.

Summary and Projected Costs for New Library Resources:
The analysis provides a snapshot of the UCF Libraries’ holdings and those held at peer institutions.

The UCF Libraries’ journals and database holdings appear to meet the current needs for the proposed certificate, and therefore no immediate subscription costs are requested (see full analysis below).
However, in the event any new key journal or database becomes critical for the certificate in the future, additional recurring funding will need to be provided to the Libraries to add these resources. Also note that in the unfortunate event library budget shortfalls occur, some existing resource subscriptions may be cut or scaled back.

The UCF Libraries' book and audiovisual holdings are deficient in some of the areas covered by this graduate certificate (see full analysis below). While funds needed to cover the gap can be drawn from the general Rosen monograph budget for now, if the certificate ever shifts to a full track or program a new assessment will need to be undertaken and new funds may need to be requested.

Full Comparative Analysis on Key Library Resources Supporting the New Graduate Certificate in Hospitality & Tourism Technologies:

Key Databases

The following databases covering hospitality, tourism, marketing, and related areas were compared:

<table>
<thead>
<tr>
<th>Database</th>
<th>UCF</th>
<th>FIU</th>
<th>Temple</th>
<th>Oklahoma State</th>
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<tr>
<td>ABI/INFORM (ProQuest)</td>
<td>x</td>
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<td>x</td>
<td>x</td>
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<tr>
<td>Business Source Premier (EBSCOhost)</td>
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<td>x</td>
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<tr>
<td>Hospitality &amp; Tourism Complete (EBSCOhost)</td>
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<td>x</td>
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<td>x</td>
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<tr>
<td>Hoover’s Online</td>
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<td>IBISWorld</td>
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<td>x</td>
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<tr>
<td>Leisure Tourism Abstracts (CABI)</td>
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<tr>
<td>MarketLine Advantage</td>
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<td>Mintel</td>
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<td>NetAdvantage S&amp;P</td>
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</table>

Recommendation:
The UCF Libraries database list compares very favorably with the chosen institutions. We have the databases needed to support this new Graduate Certificate. However, in the event any new key database becomes critical for the degree in the future, additional recurring funding will need to be provided to the Libraries to add these resources.
Key Journals

The following key journals covering hospitality/tourism marketing, e-commerce, technology, and related areas were compared:

<table>
<thead>
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<th>Journal Titles</th>
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<td>Annals of Tourism Research</td>
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<td>Cornell Hospitality Quarterly</td>
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<tr>
<td>Current Issues in Tourism</td>
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<td>Information Technology &amp; Tourism</td>
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<td>International Journal of Contemporary Hospitality Management</td>
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<td>International Journal of Tourism Research</td>
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<td>Journal of Hospitality &amp; Tourism Research</td>
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<td>Journal of Hospitality Marketing &amp; Management</td>
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**Recommendation:**

The UCF Libraries journal list compares very favorably with the chosen institutions. **We have the journals needed to support this new Graduate Certificate.** However, in the event any new key journal becomes critical for the certificate in the future, additional recurring funding will need to be provided to the Libraries to add these resources.

Books & Audiovisuals

The following subject keywords were compared in the respective institutions’ library catalogs.

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<thead>
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<th>Subject</th>
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<td><strong>48422</strong></td>
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**Recommendation:**
The analysis of the collection shows that UCF Libraries compares favorably with the chosen institutions in book and audiovisual holdings in the areas of Hospitality, Tourism, Travel, and Marketing. But in the more specific subject areas covered by this certificate (e.g. e-commerce, social media, and big data), we do not currently have enough monographs to fully support this new Graduate certificate.

The UCF Libraries will therefore need to purchase additional monographs to fill the gap. At the certificate level, the needed funds will be drawn from the general Rosen monograph budget. However, if this certificate program ever shifts to a full track or program, new funds may need to be requested to purchase new publications.
Graduate Program Recommendation Form - ADDITIONS ONLY

This form is to be used to ADD degree programs, tracks, or certificate programs. If there are tracks being added to the program, one form may be used for both the program and the track(s).

Please refer to the Graduate Council Curriculum Meeting Schedule for submission deadlines.

Checklist of items to be attached with completed form:

☐ Complete and current Graduate Catalog copy (www.graduacatalog.ucf.edu), including description, curriculum, contact information, application requirements, and application deadlines.

☐ A list of faculty who will participate in the program, track or certificate and their credentials.

☐ If applicable, a written agreement from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate.

☐ Course Action Request forms, as needed.

☐ Library assessment of resources.

College/Unit(s) Submitting Proposal: College of Heath and Public Affairs

Proposed Effective Term/Year: Fall 2018

Unit(s) Housing Program: School of Public Administration

Name of program, track and/or certificate: Master of Emergency and Crisis Management

Please check all that apply: This action affects a: ☐ Program ☐ Track ☐ Certificate

DELIVERY: Program will be delivered: ☐ Face to Face ☑ UCF Online ☐ Mixed Delivery

Will the program be a market tuition rate program? ☐ Yes ☑ No

Will the program be a cost recovery program? ☐ Yes ☐ No

Brief description of program and rationale for the addition: Do not add complete catalog copy here.

The Master of Emergency and Crisis Management program is designed to prepare future emergency management leaders through the development of core competencies including: resiliency, hazard mitigation and analysis, disaster response and recovery, emergency preparedness and planning, fiscal management, communication, intergovernmental administration, geographic information systems, legal and ethical decision making, cultural competency and diversity, and general emergency management. For communities to be prepared for, respond to, recovery from, and mitigate these disasters, an educated and professional workforce of emergency management specialists is required. Emergency Management and Homeland Security remains one of the fastest growing occupations in the U.S. The Bureau of Labor and Statistics projects an 8% increase between 2012 and 2022 and...
Impact on Current Students

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?  
☐ Yes  ☑ No

If yes, state the name of the program or track where students are currently enrolled and attach a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate?  
☑ Yes  ☐ No

If yes, how will current students be impacted by the addition of a program, track or certificate?

We predict little to no impact on the current Emergency Management & Homeland Security Graduate Certificate students. They will have the option to either remain in the certificate program or apply for the Master of Emergency and Crisis Management. Since the core certificate courses are core master's courses, they will receive the same quality education from leading experts in the emergency management discipline.

Future Students

Provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

Prospective students include undergraduates from the EMHS Minor, graduate students in the MPA or EMHS Graduate Certificate programs, practitioners wanting to advance in their career, and military service men and women. The online format will be appealing to those individuals seeking career advancement in the emergency and crisis management professions. There is no licensure or certification required in this profession.

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<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>SChs</td>
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</tbody>
</table>

Indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Graduates of this program have several job opportunities available to them in all levels of government and each sector. Example job titles include: Emergency Management Specialist, Director of Emergency Management, Disaster Program Specialist, Emergency Management Coordinator, Emergency Preparedness Staff, Emergency Planner, Incident Analyst, Network Support Technician, and Command Center Operator.

Please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

<table>
<thead>
<tr>
<th></th>
<th>Number of assistantship students</th>
<th>Source of funds</th>
<th>Number of fellowship students (specify fellowship)</th>
<th>Number of tuition remissions</th>
<th>Source of funds</th>
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</table>
Signature Page

Recommend Approval (all approval levels must be signed)

Graduate Faculty (Print) Claire Connolly Knox, Ph.D. (Signature) cknox
Program Coordinator

Department Chair (Print) (Signature) Date 9/28/17
/Director

College Academic (Print) (Signature) Date 9/28/17
Standards

College Dean (Print) (Signature) Date 10/20/17

Graduate Council (Print) (Signature) Date 9/11/17

Vice President for Research and Dean of the College of Graduate Studies
(Print) (Signature) Date

Approval

Provost and Executive Vice President Date

Distribution: After approval is received from the Provost, distribution will be to:

UCF College of Graduate Studies - P.O. Box 160112, Orlando FL 32816-0112
Master of Emergency and Crisis Management

PROGRAM DESCRIPTION

The Master of Emergency Management (MECM) designed to prepare individuals to practice as highly trained practitioners in the emergency management field through the development of core competencies including: resiliency, hazard mitigation and analysis, disaster response and recovery, emergency preparedness and planning, fiscal management, communication, intergovernmental administration, geographic information systems, legal and ethical decision making, cultural competency and diversity, and general emergency management.

The frequency of man-made and natural disasters has dramatically increased since the 1990s; emergency and disaster declarations in the U.S. reflect it. Florida is the fifth highest state with 67 major disaster declarations between 1953 and 2015 (Congressional Research Service, 2016). For communities to be prepared for, respond to, recover from, and mitigate these disasters, an educated workforce of emergency management specialists is required. Students in UCF’s Master of Science in Emergency and Crisis Management program would learn and demonstrate competencies required to lead and manage in this dynamic and complex profession.

CURRICULUM

The Master of Emergency and Crisis Management program requires a minimum of 36 credit hours beyond the bachelor’s degree. The program is offered completely online and students have an option of taking part time or full time coursework.

Total Credit Hours Required:
36 Credit Hours Minimum beyond the Bachelor's Degree

Required Courses—36 Credit Hours

Emergency and Crisis Management Core Courses—27 Credit Hours

- PAD 6399 Foundations of Emergency Management and Homeland Security (3 credit hours)
- PAD 6938 Hazard Analysis and Disaster Planning (3 credit hours)
- PAD 6700 Research Methods for Public Administration (3 credit hours)
- PAD 6397 Managing Emergencies and Crises (3 credit hours)
- PAD 6705 Public Sector Communications (3 credit hours)
- PAD 6825 Cross Sectoral Governance (3 credit hours)
- PAD 6207 Public Financial Management (3 credit hours)
- PAD 6439 Leadership in Public Service (3 credit hours)
- PAD 6XXX Advanced Concepts and Application in Emergency and Crisis Management (Capstone) (3 credit hours)
Additional Elective Courses—9 Credit Hours

Select from list below

- PAD 6946 Internship (Required unless 3+ years of related experience) (3 credit hours)
- PAD 5356 Managing Community & Economic Development (3 credit hours)
- PAD 5850 Grant and Contract Management (3 credit hours)
- PAD 6307 Public Policy Analysis & Management (3 credit hours)
- PAD 6327 Public Program Evaluation and Techniques (3 credit hours)
- PAD 6335 Strategic Planning & Management (3 credit hours)
- PAD 6353 Environmental Planning & Policy (3 credit hours)
- PAD 6716 Information Systems for Public Managers and Planners (3 credit hours)
- CCJ 6027 Criminal Justice Responses to Terrorism (3 credit hours)
- COM 6815 Risk Communication (3 credit hours)
- CPO 6729 Global Security in the Age of Migration (3 credit hours)
- IDC 5602 Cybersecurity: A Multidisciplinary Approach (3 credit hours)
- INR 6136 Seminar in American Security Policy (3 credit hours)
- PLA 5587 Current Issues in Cyberlaw (3 credit hours)
- POS 6686 National Security Law (3 credit hours)
- PUR 6403 Crisis Public Relations (3 credit hours)

Additional Program Requirements

- Students must achieve a grade of "B-" (80%) or higher in all Emergency and Crisis concentration courses.
- Students must maintain a program of study and graduate status GPA of 3.0 or higher and can only graduate with a graduate status GPA of 3.0 or higher.

Independent Learning

Independent learning is demonstrated throughout the curriculum through the process of inquiry, dialogue and service learning. Tangible projects such as strategic plans, grant proposals, commercialization plans and case studies along with projects, scholarly papers, internships, and presentations at professional conferences contribute to the self-development of our students.

Application Requirements

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the Admissions section of the Graduate Catalog. Applicants must apply online. All requested materials must be submitted by the established deadline.

In addition to the general UCF graduate application requirements, applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
• Three letters of recommendation specifically for the MECM program. Letters of recommendation should be from professors, researchers, or professional administrators who can attest to the applicant’s ability to succeed in graduate coursework and his or her work ethic.
• Résumé: The most current, professional resume should be provided.
• Statement of goals: The goal statement is a key component of the admission review process and serves as an example of the applicant’s ability to express him or herself in writing. The goal statement must be single-spaced, one-inch margins, and no longer than two pages (500-800 words). Applicant must address the following:
  o Reason for pursuing graduate study in Emergency and Crisis Management, including future goals and plans.
  o Topics or areas of special interest in Emergency and Crisis Management.
  o Expectations of the graduate program.
  o What the applicant will bring to the program that would make him or her a special candidate for admission to this program.
• Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from World Education Services (WES) or Josef Silny and Associates, Inc. only.
• All International students must meet university minimum TOEFL requirements regardless of language in which the undergraduate program was completed.

Admission to this program is competitive. Applicants are encouraged to apply early to this program. All requested material must be submitted by the established deadline date. Materials received after the established deadline may not be considered.

Students are expected to be computer literate upon entry to the program. This program is completely online, so computer skills and computer internet access are necessary to take the courses.

Application Deadlines

Emergency and Crisis Management MECM *Fall Priority    Fall    Spring    Summer

Domestic Applicants    -       June 15   Nov 1
International Applicants -       Jan 15    Jul 1
International Transfer Applicants -       Mar 1    Sep 1
<table>
<thead>
<tr>
<th>Instructor Name</th>
<th>Position</th>
<th>Tenure Status</th>
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<tbody>
<tr>
<td>Claire Connolly Knox, Ph.D.</td>
<td>Associate Professor</td>
<td>Tenured</td>
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<td>Public Administration</td>
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<td>Naim Kapucu, Ph.D.</td>
<td>Professor</td>
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<td>Public and International Affairs</td>
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<td>Thomas Bryer, Ph.D.</td>
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<td>Qian Hu, Ph.D.</td>
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<td>Christopher Emrich, Ph.D.</td>
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<td>Abdul-Akeem Sadiq, Ph.D.</td>
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<td>Jungwon Yeo, Ph.D.</td>
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<td>Public and International Affairs</td>
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<td>Kelly Stevens, Ph.D.</td>
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<tr>
<td>David Mitchell, Ph.D.</td>
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<tr>
<td>David Mitchell, Ph.D.</td>
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<td>Tenure Earning</td>
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<td>Public Administration</td>
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</table>
Hello Claire,

There are no objections from my part.

Best,
Kerstin

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From: Eugene Paoline  
Sent: Tuesday, September 05, 2017 1:06 PM  
To: Claire Knox <Claire.Knox@ucf.edu>  
Subject: Re: Requesting Support for Newly Proposed Masters of Emergency and Crisis Management

Hello Claire,

I see no issues, on our end, with your proposed program. Best of luck with it.

Best,
Gene

On Sep 5, 2017, at 12:36 PM, Claire Knox <Claire.Knox@ucf.edu> wrote:

Hello again Gene,

I wanted to check in with you regarding this request. Attached is the program brief. Please let me know if you have any additional questions - Claire
Hi, Claire,

I apologize for my delay responding. I wanted to make sure my dept was on the same page.

My dept has no issues/objections with this proposed BA/BA in Emergency Management. Good luck to you and your dept!

Barry Edwards, J.D., Ph.D.
Department of Political Science
University of Central Florida
4297 Andromeda Loop N.
Howard Phillips Hall 305b
Orlando, FL 32816
Hi Claire:

My apologies for not replying. I am embarrassed to admit your first email got buried in the summer and fell off my radar.

Thank you for contacting us about this program. We have discussed it, and we see no conflict.

One note: PUR 4400 Crisis Communication is limited to Ad/PR and Communication and Conflict majors, so your majors would not be able to enroll.

That prompted us to discuss the possibility of creating a second version of PUR 4400, perhaps online, for non Ad/PR and Comm and Conflict majors. I will keep you posted as that progresses.

Best of luck with your new program.

Joan

Joan McCain
Associate Instructor and Program Coordinator
Advertising/Public Relations, UCF
Joan.McCain@ucf.edu

407 823 2852
Program Recommendation Form - ADDITIONS ONLY

This form is to be used to ADD degree programs, tracks, or certificate programs. If there are tracks being added to the program, one form may be used for both the program and the track(s).

Please refer to the Graduate Council Curriculum Meeting Schedule for submission deadlines.

Checklist of items to be attached with completed form:

☐ Complete and current Graduate Catalog copy (www.graduatemcatalog.ucf.edu), including description, curriculum, contact information, application requirements, and application deadlines.

☐ A list of faculty who will participate in the program, track or certificate and their credentials.

☐ If applicable, a written agreement from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate.

☐ Course Action Request forms, as needed.  N/A

☐ Library assessment of resources.

College/Unit(s) Submitting Proposal: School of Health and Public Affairs

Proposed Effective Term/Year: Fall 2019

Unit(s) Housing Program: School of Public Administration

Name of program, track and/or certificate: Graduate Certificate in Public Policy Analysis

Please check all that apply: This action affects a:  □ Program  □ Track  □ Certificate

DELMIVERY: Program will be delivered:  □ Face to Face  □ Completely Online  ☑ Mixed Delivery

Will the program be a market tuition rate program?  □ Yes  □ No

Brief description of program and rationale for the addition: Do not add complete catalog copy here.

This certificate program is designed for students interested in a range of policy domains, such as urban policy, environmental policy, transportation policy, economic development policy, disaster policy, homeland security policy, and health policy. It prepares graduate students for professional careers as policy analysts and leaders in public service at all levels of government and in the private and nonprofit sectors, with a particular focus on public policy formulation, implementation, and evaluation.
**Impact on Current Students**

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?  
☑ Yes  ☐ No

If yes, state the name of the program or track where students are currently enrolled and attach a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate?  
☑ Yes  ☐ No

If yes, how will current students be impacted by the addition of a program, track or certificate?

This Certificate will offer students an additional body of knowledge to Public Administration students who have interest in Public Policy Analysis.

**Future Students**

Provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

Students in the Master of Public Administration who have keen interest in policy creation and analysis. A career in public service frequently requires some expertise in policy analysis to address issues that are dynamic in nature.

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<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<td>SCHs</td>
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</table>

Indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

- Economic Policy Analyst
- Senior Policy Analyst
- Taxation policy analyst
- Immigration Policy Analyst
- Transportation Policy Analyst

Please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

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<tr>
<th></th>
<th>Number of assistantship students</th>
<th>Source of funds</th>
<th>Number of fellowship students (specify fellowship)</th>
<th>Number of tuition remissions</th>
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<td>Year 3</td>
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</table>
Signature Page

Recommend Approval (all approval levels must be signed)

Department Chair (Print) /Director  Dr. Naim Kapucu  (Signature)  nkapucu  Date 9/21/2017
College Academic (Print) Standards  Ross Wolf  (Signature)  Date 10/20/17
College Dean (Print)  Jose Fernandez  (Signature)  Date 10/21/17
Graduate Council (Print)  (Signature)  Date
Graduate Dean (Print)  (Signature)  Date

Approval
Provost and Executive Vice President: __________________________ Date

Distribution: After approval is received from the Provost, distribution will be to:
Department(s), College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
Graduate Certificate In Public Policy Analysis

PROGRAM DESCRIPTION

Policy Analysis that is primarily designed to complement the Master of Public Administration (MPA) program by providing a formalized path for students to specialize in public policy analysis. This certificate program is designed for students interested in a range of policy domains, such as urban policy, environmental policy, transportation policy, economic development policy, disaster policy, homeland security policy, and health policy. It prepares graduate students for professional careers as policy analysts and leaders in public service at all levels of government and in the private and nonprofit sectors, with a particular focus on public policy formulation, implementation, and evaluation.

CURRICULUM

The Graduate Certificate in Public Policy Analysis is comprised of 18 credit hours of graduate courses, including four required courses and two electives. This certificate prepares students for professional careers in Public Policy Analysis.

**Total Credit Hours Required:**
18 Credit Hours Minimum beyond the Bachelor's Degree

**Required Courses—12 Credit Hours**

- PAD 6035  Public Administration in the Policy Process
- PAD 6307  Public Policy Analysis & Management
- PAD 6616  Economic Principles for Public Policy and Management
- PAD 6327  Public Program Evaluation Techniques

**Electives—6 Credit Hours**

Choose two courses from the following list.

- PAD 6238  Revenue Policy and Administration
- PAD 6701  Analytic Techniques for Public Administration
- PAD 6829  Network Analysis in Public Policy & Management
- PAD 5356  Managing Community & Economic Development
- PAD 6387  Transportation Policy
- PAD 6353  Environmental Planning & Policy
- PUP 6007  Public Policy Analysis
- CCJ 6106  Policy Analysis in Criminal Justice
- PHC 6146  Health Planning and Policy
Application Requirements

Admission is open to those with a bachelor's degree from a regionally accredited institution. An application to the graduate certificate program and official transcripts must be submitted. Applicants must apply online. All requested materials must be submitted by the established deadline.

All applicants to this certificate program will be required to submit:

- An official transcript in a sealed envelop from each college/university attended, showing a GPA of 2.5 or better on a 4.0 scale.
- A current, professional resume.
- Statement of Goals: This is a key component of the admission review process and serves as an example of the applicant's ability to express him or herself in writing. The goal statement must be no longer than two pages and should address the following:
  - What is your reason for pursuing graduate study in Public Policy Analysis, including your future goals and plans?
  - What specific areas of Public Policy Analysis interest you?
  - Any previous work experience in the field.
- Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from World Education Services (WES) or Josef Silny and Associates, Inc. only.

Materials received after the established deadline may not be considered. Admission to this certificate is competitive; applicants meeting the minimum application requirements are not guaranteed admission to the program.

Application Deadlines

<table>
<thead>
<tr>
<th>Public Policy Analysis Graduate Certificate</th>
<th><em>Fall Priority</em></th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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<td>Domestic Applicants</td>
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<td>Jun 15</td>
<td>Nov 1</td>
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<td>International Applicants</td>
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<td>International Transfer Applicants</td>
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*Applicants who plan to enroll full time in a degree program and who wish to be considered for university fellowships or assistantships should apply by the Fall Priority date.*
Please refer to the Graduate Council Curriculum Meeting Schedule for submission deadlines.

Checklist of items to be attached with completed form:

☐ Complete and current Graduate Catalog copy (www.graduatemain.ucf.edu), including description, curriculum, contact information, application requirements, and application deadlines. Use Track Changes in Word to show revisions.

☐ A list of faculty who will participate in the program, track or certificate and their credentials.

☐ All course action requests that will be needed to implement the curriculum changes.

☐ If applicable, a written agreement from all involved units that they are in support of the revisions.

College/Unit(s) Submitting Proposal: Theatre; School of Performing Arts

Proposed Effective Term/Year: Summer 2018

Unit(s) Housing Program: Theatre

Name of program, track and/or certificate: Theatre MA

Please check all that apply. This action affects a: ☐ Program ☐ Track ☐ Certificate

If the revision applies to multiple tracks, please list them here:

Brief description of program and rationale of the revision: Do not add complete catalog copy here.

Program Description: The focus of this new program will be on the pedagogy and methodology of musical theatre. The Master of Arts in Musical Theatre program provides high school teachers, community college teachers, and developing theatre scholars the opportunity to strengthen skills and knowledge of musical theatre beyond the undergraduate level.

Rationale: To expand the focus of the MA program to include the pedagogy and methodology of musical theatre and to strengthen crossover between existing theatre studies and musical theatre pedagogy. In a proposed format, the MA program in Theatre will have two concentrations: Theatre Studies and Musical Theatre. This will define the program in a more effective way and increase the number of graduate students.

- Adding new concentration to the existing MA
- Adjusting the new curriculum to reflect the new program structure
- Adding summer course offerings
- Revising 2 existing courses (TPP 5754 and TPP 6755)
- Remove GRE requirement for admission
- Adjusting title of an already existing course (TPA 5405)
Name Change
Are you changing the name of an existing program, track, or certificate?  □ Yes  □ No
If yes, provide the new name of the program, track, or certificate: __________________________

A proposed name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

If you are ONLY making a name change, skip the "Impact on Current Students" section.

Impact on Current Students
Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?  □ Yes  □ No
If yes, state the name of the program or track where students are currently enrolled and attach a list of students if possible.

Will students have the option to stay in their existing program, track, or certificate?  □ Yes  □ No
If yes, how will current students be impacted by this change?

Upon request, existing MA students may enroll in the summer courses being offered for the new concentration.

If there are substantial revisions, please complete the following table on financial support: (Specify all forms of support assistantships, fellowships, and tuition remission.)

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<thead>
<tr>
<th>Year</th>
<th>Number of assistantship students</th>
<th>Source of funds</th>
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<td>Year 3</td>
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Signatures

Recommend Approval (all approval levels must be signed)

Graduate Faculty Program Coordinator:
Print: Julia Listengarten Signature: Julia Listengarten Date: 10/10/17

Department Chair / Director:
Print: Michael Wainstein Signature: Date: 10/10/17

College Academic Standards:
Print: Lynn Hepner Signature: Lynn Hepner Date: 10/27/17

College Dean:
Print: Jeffrey Moore Signature: Jeffrey Moore Date: 10/27/17

Graduate Council:
Print: Signature: Date: 

Vice President for Research and Dean of the College of Graduate Studies:
Print: Signature: Date: 

Approval

Provost and Executive Vice President:
Print: Signature: Date: 

Distribution: After approval is received from the Provost, distribution will be to:
Department(s): College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
PROGRAM DESCRIPTION

The Master of Arts in Theatre provides high school teachers, community college teachers, and developing theatre scholars the opportunity to strengthen skills and knowledge of theatre beyond the undergraduate level. 

Show Program Description

CURRICULUM

The Master of Arts in Theatre program offers a rigorous course of study of 39 credit hours minimum, culminating in the writing of a scholarly thesis. Of the 39 credit hours required for the degree, 30 credit hours are required core courses with the other 9 credit hours chosen from a specified list of elective Theatre courses offered by the School.

Total Credit Hours Required:
39 Credit Hours Minimum beyond the Bachelor’s Degree

Candidates must demonstrate the ability to understand the conceptual basis of their art and to be able to articulate that understanding to others. In addition to their theoretical studies, MA students are also required to demonstrate proficiency in theatrical production. Students are expected to select either Theatre Studies or Musical Theatre as their concentration when applying for the program.

Students must maintain a minimum “B” (3.00) overall Theatre GPA to continue in the major. Fifty percent of graduate course work must be at the 6000 level. Theatre courses with grades of less than “C” will not be counted toward degree requirements. Continuation in the MA program requires a positive annual evaluation. All graduate students must consult with an area adviser. All MA students must successfully complete a written thesis. The thesis proposal must be approved in advance.

Required Courses—21 Credit Hours

Core: 6 Credit Hours
- THE 5910 Research Methods in Theatre (3 credit hours)
- THE 6507 Dramatic Theory and Criticism (3 credit hours)
- THE 5205 American Theatre (3 credit hours)
- TPA 5405 Theatre Management for Non-Majors or elective (3 credit hours)
- THE 6086C Careers in Professional Theatre or elective (3 credit hours)
- THE 5307 Contemporary Theatre Practice or Dramatic Literature elective (3 credit hours)
- THE 5945L Theatre Practicum I (1 credit hour)
- THE 5946L Theatre Practicum II (1 credit hour)
- THE 6947L Theatre Practicum III (1 credit hour)

Theatre Studies Concentration—15 Credit Hours
• THE 6507 Dramatic Theory and Criticism (3 credit hours)
• THE 5205 American Theatre (3 credit hours)
• TPA 5405 Theatre Management for Non-Majors or elective (3 credit hours)
• THE 6086C Careers in Professional Theatre or elective (3 credit hours)
• THE 5307 Contemporary Theatre Practice or Dramatic Literature elective (3 credit hours)

**Musical Theatre Concentration—15 Credit Hours**

• THE 6308 Script and Score Analysis (3 credit hours)
• TPA 6344 Musical Theatre Directing (3 credit hours)
• TPP 5754 Musical Theatre Voice I (2 credit hours)
• TPP 6755 Musical Theatre Voice II (2 credit hours)
• TPA 5554 Musical Theatre Dance I (2 credit hours)
• THE 6918 Directed Research (1 credit hour)
• TPP 6933 Acting Studio V (2 credit hours)

**Elective Courses—9 Credit Hours**

Other graduate-level courses may be permitted with school approval.

• TPA 5545C 2D Computer Assisted Design for Theatre (3 credit hours)
• TPA 5546C 3D Modeling for Theatre (3 credit hours)
• THE 5288 Period Costumes, Architecture, and Decor I (3 credit hours)
• THE 5289 Period Costumes, Architecture, and Decor II (3 credit hours)
  • TPP 5246C Playwriting for Young Audiences (3-credit hours)
• TPP 5246C Circus Arts (2-credit hours)
• TPA 5885C Puppetry (2 credit hours)
• TPP 5125C Improvisation Studio (2 credit hours)
• THE 5385 Dramatic Lit for Children (2 credit hours)
• THE 6756 Methods of Teaching Drama (2 credit hours)
• TPA 5085C Design Seminar for Theatre
• THE 6918 Directed Research (1 credit hour)
• TPP 6933 Acting Studio V (2 credit hours)

**Musical Theatre Concentration**

Other graduate-level courses may be permitted with school approval.

• THE 5237 Cultural Diversity in Theatre (3 credit hours)
• THE 5425 Women in Theatre (3 credit hours)
• TPP 5248C Theatre for Social Change (3 credit hours)
• TPP 6908 Independent Study (3-6 credit hours)
- THE 5205 American Theatre (3 credit hours)
- THE 5288 Period Cost, Arch, Décor I (3 credit hours)
- THE 5289 Period Cost, Arch, Décor II (2 credit hours)
- THE 5307 Contemporary Theatre Practices (3 credit hours)
- THE 5385 Dramatic Lit for Children (3 credit hours)
- THE 6507 Dramatic Theory/Criticism (3 credit hours)
- THE 6756 Methods of Teaching Drama (3 credit hours)
- TPA 5085C Design Seminar for Theatre (2 credit hours)
- TPA 5345C 2D Cad for Theatre (2 credit hours)
- TPA 5346C 3D Modeling for Theatre (2 credit hours)
- TPA 5405 Theatre Management for Non-Majors (3 credit hours)
- TPA 5885C Puppetry (2 credit hours)
- TPP 5248C Storytelling as a Theatrical Art Form (2 credit hours)
- TFP 5474 Theatre for Social Change (3 credit hours)
- THE 6086C Careers in Professional Theatre (3 credit hours)

Thesis—9 Credit Hours for Theatre Studies and Musical Theatre Concentration
- THE 6971 Thesis (9 credit hours)

Course Schedule—Theatre Studies Concentration

YEAR 1

Fall—13.10 Credit Hours
- THE 5910 Research Methods in Theatre (3 credit hours)
- TPA 5405 Theatre Management for Non-Majors or elective (3 credit hours)
- 5000 level Theatre elective (3 credit hours)
- THE 6507 Dramatic Theory and Criticism (3 credit hours)
- THE 5945L Theatre Practicum I (1 credit hour)

Spring—13.10 Credit Hours
- THE 6086C Careers in Professional Theatre (3 credit hours)
- THE 5205 American Theatre (2 credit hours)
- THE 5307 Contemporary Theatre Practice (3 credit hours)
- THE 5946L Theatre Practicum II (1 credit hour)
- THE 6971L Thesis (3 credit hours)

YEAR 2

Fall—13.10 Credit Hours
- 6000-level Theatre electives (6.3 credit hours)
- THE 6507 Dramatic Theory and Criticism (3 credit hours)
• THE 6947L Theatre Practicum III (1 credit hour)
• THE 6971 Thesis (6.3 credit hours)

Spring—9 Credit Hours

• 6000-level Theatre electives (3 credit hours)
• THE 6971 Thesis (3 credit hours)

Course Schedule—Musical Theatre Concentration

SUMMER 1 (8 Credit Hours)

• TPP 5754 Musical Theatre Voice I (2 credit hours)
• THE 6344 Musical Theatre Directing (3 credit hours)
• THE 6308 Script and Score Analysis (3 credit hours)

SUMMER 2 (9 Credit Hours)

• TPP 5554 Musical Theatre Dance I (2 credit hours)
• THE 5910 Research Methods in Theatre (3 credit hours)
• TPP 6755 Musical Theatre Voice II (2 credit hours)
• TPP 6933 Acting Studio V (2 credit hours)

ACADEMIC YEAR COURSES (22 Credit Hours)

• THE 5945L Theatre Practicum I (1 credit hour)
• THE 5946L Theatre Practicum II (1 credit hour)
• THE 5947L Theatre Practicum III (1 credit hour)
• THE 6918 Directed Research (1 credit hour)
• THE 6971 Thesis (9 credit hours)
• Electives (9 credit hours)

Elective Courses—9 Credit Hours

• THE 5237 Cultural Diversity in Theatre (3 credit hours)
• THE 5425 Women in Theatre (3 credit hours)
• THE 5215 Global Theatre (3 credit hours)
• THE 6908 Independent Study (3-6 credit hours)
• THE 5205 American Theatre (3 credit hours)
• THE 5388 Period Cost, Arch, Decor I (3 credit hours)
• THE 5389 Period Cost, Arch, Decor II (3 credit hours)
• THE 5307 Contemporary Theatre Practices (3 credit hours)
• THE 5385 Dramatic Lit for Children (3 credit hours)
• THE 6507 Dramatic Theory Criticism (3 credit hours)
• THE 6756 Methods of Teaching Drama (3 credit hours)
• TPA 5085C Design Seminar for Theatre (2 credit hours)
• TPA 5345C 2D Cad for Theatre (2 credit hours)
• TPA 5346C 3D Modeling for Theatre (2 credit hours)
• TPA 5405 Theatre Management (3 credit hours)
• TPA 5885C Puppetry (2 credit hours)
• TPP 5248C Storytelling as a Theatrical Art Form (2 credit hours)
• TPP 6247 Theatre for Social Change (3 credit hours)

Examination

A comprehensive Theatre exam is administered to MA majors at the end of their course work. The department allows two attempts at a comprehensive exam.

Transfer and Residency

Students without an earned master’s degree can usually transfer up to 9 semester hours of credit into this program. A minimum of 30 credits must be taken at the University of Central Florida. Students must complete a residency requirement of at least two full-time consecutive semesters. A summer session may be counted toward the two consecutive semester requirement.

Independent Learning

A thesis is required.

Application Requirements

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the Admissions section of the Graduate Catalog. Applicants must apply online. All requested materials must be submitted by the established deadline.

In addition to the general UCF graduate application requirements, applicants to this program must provide:

• One official transcript (in a sealed envelope) from each college/university attended.
• BA or BFA in Theatre or equivalent.
• A 3.0 Theatre GPA.
• Official, competitive GRE score taken within the last five years.
• An interview is required.
• 5-10 page academic paper.
• Goals statement.
• An 8 X 10 headshot.
• Three letters of recommendation.
• Complete the general entrance prerequisites.
General Entrance Prerequisites—Students applying for entrance into the MA program must have successfully completed the following undergraduate courses or their equivalent: Script Analysis or Play Analysis, Theatre History I and II, Dramatic Literature I and II, Directing I.

Each student entering the program must be approved by the Graduate Committee of the Department of Theatre in the School of Performing Arts.

Application Deadlines

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The Fall 2017 application deadline has been extended to July 15, 2017.

* Applicants who plan to enroll full time in a degree program and who wish to be considered for university fellowships or assistantships should apply by the Fall Priority date.

FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student’s graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.
Theatre MA – Musical Theatre Concentration faculty

Summer 1:
MT Voice 1 – Dr. Stephen Chicurel-Stein – DMA in Piano Performance
Script and Score Analysis – Susan Glerum – MFA in Music Theory
MT Directing – Earl D. Weaver – MFA in Musical Theatre

Summer 2:
MT Voice 2 – Tara Snyder – MFA in Musical Theatre
Research Methods – Dr. Julia Listengarten – Ph.D. in Theatre Studies
Acting Methodologies – Michael Wainstein – MFA in Directing
Musical Theatre Dance – Earl D. Weaver – MFA in Musical Theatre
Graduate Program Recommendation Form - REVISIONS ONLY

This form is to be used to REVISE degree programs, tracks, or certificate programs. If there are changes to a program and the changes will also affect the program tracks, one form may be used for both the program and the track(s).

Please refer to the Graduate Council Curriculum Meeting Schedule for submission deadlines.

Checklist of items to be attached with completed form:

☐ Complete and current Graduate Catalog copy (www.graduategatalog.ucf.edu), including description, curriculum, contact information, application requirements, and application deadlines. Use Track Changes in Word to show revisions.

☐ A list of faculty who will participate in the program, track or certificate and their credentials.

☐ All course action requests that will be needed to implement the curriculum changes.

☐ If applicable, a written agreement from all involved units that they are in support of the revisions.

College/Unit(s) Submitting Proposal: Education & Human Performance

Proposed Effective Term/Year: Summer 2018

Unit(s) Housing Program: Educational & Human Sciences

Name of program, track and/or certificate: Instructional Design & Technology

Please check all that apply: This action affects a: ☐ Program ☐ Track ☐ Certificate

If the revision applies to multiple tracks, please list them here:

Educational Technology Certificate

Brief description of program and rationale of the revision: Do not add complete catalog copy here.

In the Educational Technology certificate program, students are provide with a 3-course option for 3 of the 15 credit hours. The 3 courses are designed to allow for a bit of specialization within the certificate program. However, one of the courses listed requires a pre-requisite and is a bit advanced for the certificate. Thus, we propose replacing EME6226: Instructional Development & Evaluation with its pre-requisite course, EME6613: Instructional Systems Design content in EME5050 has been subsumed in other courses. This will allow continued flexibility for our students in the Educational Technology Certificate program.

Name Change

Are you changing the name of an existing program, track, or certificate? □ Yes  ☑ No
If yes, provide the new name of the program, track, or certificate: ________________________________

A proposed name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

If you are ONLY making a name change, skip the “Impact on Current Students” section.

Impact on Current Students

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate? □ Yes  ☑ No
If yes, state the name of the program or track where students are currently enrolled and attach a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☑ Yes  □ No
If yes, how will current students be impacted by this change?

They will have the option, but there is no impact on students either way.

If there are substantial revisions, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

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Signature Page

Recommend Approval (all approval levels must be signed)

Graduate Faculty (Print)  Richard Hartsburg (Signature)  Date 10/11/17
Program Coordinator

Department Chair (Print)  Jeff Snell (Signature)  Date 10/11/17
/Director

College Academic (Print)  Valerie A. Strole (Signature)  Date 10/11/17
Standards

College Dean (Print)  JP Menard (Signature)  Date 10/24/17

Graduate Council (Print)  (Signature)  Date

Vice President for Research and Dean of the College of Graduate Studies

(Print)  (Signature)  Date

Approval

Provost and Executive Vice President  Date

Distribution: After approval is received from the Provost, distribution will be to:

Department(s): College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
Instructional / Educational Technology
Graduate Certificate

PROGRAM DESCRIPTION

The Graduate Certificate in Instructional/Educational Technology provides teachers with the knowledge and training to apply technological tools to the learning process. The Graduate Certificate in Instructional/Educational Technology provides an opportunity for study and professional training and development of the leadership skills necessary to become educational technology specialists in K-12 schools. The certificate requires substantial independent thinking and emphasis is placed on the cultivation of scholarly attitudes and methods, while assisting students in meeting the requirements for the State of Florida Teacher Certification. In addition, students will learn the subject matter needed to meet the National Educational Technology Standards for Teachers developed by the International Society for Technology in Education (ISTE), which is being adopted by the National Council for Accreditation of Teacher Education (NCATE).

Please note: This program may be completed online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees. See [http://ucf.edu/online](http://ucf.edu/online) for more information.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit [www.international.ucf.edu](http://www.international.ucf.edu). If you have questions, please consult International Affairs and Global Strategies at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

CURRICULUM

Several courses are taught online and other courses will be offered on a flexible schedule at the Orlando campus. The Instructional/ Educational Technology certificate requires five courses (15 credit hours total).

Total Credit Hours Required:
15 Credit Hours Minimum beyond the Bachelor's Degree

Required Courses—15 Credit Hours
- EME6417 Interactive Online and Virtual Teaching Environments (3 credit hours) or EME6613 Instructional Systems Design (3 credit hours) or EME6209: Multimedia Instructional Systems II (3 credit hours)
- EME 5053 Teaching & Learning with Emerging Technologies (3 credit hours)
- EME 6405 Adapting & Integrating Innovative Technologies in Education (3 credit hours)
- EME 6507 Multimedia in Education & Training (3 credit hours)
- EME 6602 Integration of Technology into Learning Environments (3 credit hours)
Graduate Program Recommendation Form - REVISIONS ONLY

This form is to be used to REVISE degree programs, tracks, or certificate programs. If there are changes to a program and the changes will also affect the program tracks, one form may be used for both the program and the track(s).

Please refer to the Graduate Council Curriculum Meeting Schedule for submission deadlines.

Checklist of items to be attached with completed form:

☐ Complete and current Graduate Catalog copy (www.graduatemcatalog.ucf.edu), including description, curriculum, contact information, application requirements, and application deadlines. Use Track Changes in Word to show revisions.

☐ A list of faculty who will participate in the program, track or certificate and their credentials.

☐ All course action requests that will be needed to implement the curriculum changes.

☐ If applicable, a written agreement from all involved units that they are in support of the revisions.

College/Unit(s) Submitting Proposal: Education & Human Performance

Proposed Effective Term/Year: Summer 2018

Unit(s) Housing Program: Educational & Human Sciences

Name of program, track and/or certificate: Instructional Design & Technology

Please check all that apply: This action affects a: ☐ Program  ☐ Track  ☐ Certificate

If the revision applies to multiple tracks, please list them here:

Instructional Systems MA

Brief description of program and rationale of the revision: Do not add complete catalog copy here.

The Instructional Systems, Educational Technology, and eLearning programs were merged a few years ago. During this process, though, Instructional Systems and Educational Technology/eLearning maintained separate internship/practicum courses. This is no longer practical, and we would like to merge the internship/practicum requirements for all tracks into a single course. So, we propose to remove EME6946: Practicum/Internship from the Instructional Systems track, and replace it with EME6940: Theory into Practice course. This will allow more flexibility for our students, as it allows for us to offer the single course more often, as it will be easier to meet the minimum student enrollment requirements.

Replace EME6946: Practicum/Internship with EME6940: Theory into Practice as a required Practicum course in the Instructional Systems MA track.

Briefly list curriculum changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. Remember to attach the catalog copy showing changes, using Track Changes in Word.
Name Change

Are you changing the name of an existing program, track, or certificate?  □ Yes  ☑ No
If yes, provide the new name of the program, track, or certificate:

A proposed name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

If you are ONLY making a name change, skip the "Impact on Current Students" section.

Impact on Current Students

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?  □ Yes  ☑ No
If yes, state the name of the program or track where students are currently enrolled and attach a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate?  ☑ Yes  □ No
If yes, how will current students be impacted by this change?

There is no impact on students, other than allowing more flexibility in when the student can complete the practicum/internship course.

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Recommend Approval (all approval levels must be signed)

Graduate Faculty (Print)  Richard Hartshorn  (Signature)  Date 10/4/17
Program Coordinator

Department Chair (Print)  Jeffrey Stout  (Signature)  Date 10/4/17
/Director

College Academic (Print)  Valerie A. Storer  (Signature)  Date 10/11/17
Standards

College Dean  (Print)  J.P. Mendoza  (Signature)  Date 10/24/17

Graduate Council (Print)  (Signature)  Date 

Vice President for Research and Dean of the College of Graduate Studies

Approval

Provost and Executive Vice President  Date 

Distribution: After approval is received from the Provost, distribution will be to:

Department(s): College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
Instructional Systems MA

TRACK DESCRIPTION

The Instructional Systems track in the Instructional Design and Technology MA program is designed for prospective and practicing instructional designers, training specialists and training directors/managers in business, industry, government, or other settings where training, professional development and lifelong learning takes place.

CURRICULUM

Total Credit Hours Required:

39 Credit Hours Minimum beyond the Bachelor's Degree

The Instructional Systems track in the Instructional Design and Technology MA program requires a minimum of 39 credit hours beyond the bachelor's degree. The curriculum includes 15 credit hours of instructional technology core courses, 12 credit hours of professional specialization, 9 credit hours of electives, three credit hours of practicum, and a comprehensive exam taken during the last semester of course work.

Required Courses—27 Credit Hours

Core—15 Credit Hours

- EME 6055 Current Trends in Instructional Technology (3 credit hours)
- EME 6062 Research In IT (3 credit hours)
- EDF 6432 Measurement and Evaluation in Education (3 credit hours) or EDF 6401 Statistics for Educational Data (3 credit hours)
- EDF 6481 Fundamentals of Graduate Research in Education (3 credit hours)
- EME 6613 Instructional System Design (3 credit hours)

Professional Specialization Courses—12 Credit Hours

- EME 6226 Instructional Development and Evaluation (3 credit hours)
- EME 5507 Multimedia for Education and Training (3 credit hours)
- EME 6607 Planned Change In IT (3 credit hours)
- EME 6705 Administration of IS (3 credit hours)

Elective Courses—9 Credit Hours

Courses not listed below require adviser approval. All ENC courses require approval from the English department.

- EME 6209 Multimedia IS II (3 credit hours)
• EME 6457 Distance Education: Technology Process Product (3 credit hours)
• EME 6601 Instructional Simulation Design for Training and Education (3 credit hours)
• EME 6614 Instructional Game Design In Training and Education (3 credit hours)
• EME 6646 Learning, Instructional Design, and Cognitive Neuroscience (3 credit hours)
• DIG 5875C Introduction to Modeling and Simulation (3 credit hours)
• IDS 6503 International Trends in Instructional Systems (3 credit hours)
• IDS 6504 Adult Learning (3 credit hours)
• EIN 5251 Usability Engineering (3 credit hours)
• EIN 5255C Interactive Simulation (3 credit hours)
• EIN 5317 Training System Design (3 credit hours)
• EIN 6258 Human Computer Interactions (3 credit hours)
• ENC 5216 Editing Professional Writing (3 credit hours)
• ENC 5225 Theory and Practice of Document Usability (3 credit hours)
• ENC 5261 Technical Writing, Theory and Practice (3 credit hours)
• ENC 6256 Computer Documentation (3 credit hours)
• DIG 6432 Transmedia Story Creation (3 credit hours)
• DIG 6136 Design for Media (3 credit hours)
• DIG 6551 Applied Interactive Story (3 credit hours)

Practicum—3 Credit Hours

Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

• EME 6440 Theory into Practice in Instructional Systems (3 credit hours)

Independent Learning

Practica are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

Application Requirements

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the Admissions section of the Graduate Catalog. Applicants must apply online. All requested materials must be submitted by the established deadline.

In addition to the general UCF graduate application requirements, applicants to this program must provide:

• One official transcript (in a sealed envelope) from each college/university attended.
• Three letters of recommendation.
• Personal letter of intent stating professional and academic goals and why you want to attend our program.
• Résumé.
• Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential
evaluations are accepted from World Education Services (WES) or Josef Silny and Associates, Inc. only.

For more information about the MA program, visit the program website at http://education.ucf.edu/insttech.

Application Deadlines

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☐ If applicable, a written agreement from all involved units that they are in support of the revisions.

College/Unit(s) Submitting Proposal: Education & Human Performance

Proposed Effective Term/Year: Summer 2018

Unit(s) Housing Program: Educational & Human Sciences

Name of program, track and/or certificate: Instructional Design & Technology

Please check all that apply: This action affects a: ☐ Program ☐ Track ☐ Certificate

If the revision applies to multiple tracks, please list them here:

Educational Technology MA

Brief description of program and rationale of the revision: Do not add complete catalog copy here.

The Instructional Systems, Educational Technology, and eLearning programs were merged a few years ago. Currently, the eLearning and Instructional Systems tracks have 12 hours of core courses, 12 hours of specialization courses, 9 hours of electives, and a practicum/internship course. The Educational Technology track has 15 hours of specialization courses, with one of the courses being a required option of 1 of 3 courses. The Educational Technology track also only has 6 hours of electives. Thus, to align the Educational Technology track with other tracks in the program, we propose to move 3 hours (from the 1 of 3 course option) from the specialization requirements to the elective hours. Thus, the Educational Technology MA would align with the other tracks in the program, having 12 specialization hours and 9 elective hours.

Remove (must complete 1 of 3) EME 6417 Interactive Online and Virtual Teaching Environments (3 credit hours) or EME 6226 Instructional Development & Evaluation (3 credit hours) or EME 6209: Multimedia Instructional Systems II (3 credit hours) from the Educational Technology MA track specialization requirements.

Change the required number of electives hours from 6 to 9.
Name Change

Are you changing the name of an existing program, track, or certificate?  ☐ Yes  ☑ No
If yes, provide the new name of the program, track, or certificate:

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Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?  ☑ Yes  ☐ No
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Will students have the option to stay in their existing program, track, or certificate?  ☑ Yes  ☐ No
If yes, how will current students be impacted by this change?

There is no impact on students, other than allowing more flexibility in completing program requirements.

If there are substantial revisions, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

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Signature Page

Recommend Approval (all approval levels must be signed)
Graduate Faculty (Print) Richard Hrdlicka (Signature) Date 10/4/17
Program Coordinator

Department Chair (Print) Jefferson Scott (Signature) Date 10/4/17
/Director

College Academic (Print) Vanessa A. Storey (Signature) Date 10/11/17
Standards

College Dean (Print) J. P.许 (Signature) Date 10/11/17

Graduate Council (Print) (Signature) Date

Vice President for Research and Dean of the College of Graduate Studies
(Print) (Signature) Date

Approval
Provost and Executive Vice President Date

Distribution: After approval is received from the Provost, distribution will be to:
Department(s); College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
Educational Technology MA

TRACK DESCRIPTION
The Educational Technology track is designed for classroom teachers who want to increase their technological skills and become highly skilled at successfully integrating technology into the curriculum as well as develop leadership skills necessary to become site-based technology coordinators in K-12 schools, colleges and universities.

Show Program Description

CURRICULUM

Total Credit Hours Required:

36 Credit Hours Minimum beyond the Bachelor's Degree

The Educational Technology track in the Instructional Design and Technology MA program requires a minimum of 36 credit hours beyond the bachelor's degree. The curriculum includes 12 credit hours of instructional technology core courses, 12 credit hours of professional specialization, nine credit hours of electives, and three credit hours of practicum.

Required Courses—24 Credit Hours

- EME 6055 Current Trends in Instructional Technology (3 credit hours)
- EME 6062 Research in Instructional Technology (3 credit hours)
- EDF 6432 Measurement and Evaluation in Education (3 credit hours) or EDF 6401 Statistics for Educational Data (3 credit hours) or EDF 6401 Fundamentals of Graduate Research in Education (3 credit hours) or EDF 6472 Data—Driven Decision Making for Instruction (3 credit hours)
- EME 6613 Instructional System Design (3 credit hours)

Professional Specialization Courses—12 Credit Hours

- EME 66417 Interactive Online and Virtual Teaching Environments (2 credit hours) or EME 66228 Instructional Development & Evaluation (3 credit hours) or EME 6209: Multimedia Instructional Systems II (3 credit hours)
- EME 5053 Teaching & Learning with Emerging Technologies (3 credit hours)
- EME 6405 Adapting & Integrating Innovative Technologies in Education (3 credit hours)
- EME 6507 Multimedia in Education & Training (3 credit hours)
- EME 6602 Integration of Technology into Learning Environments (3 credit hours)

*Online delivery course.
**Online delivery course with blended flexible schedule, Saturday, 9:00 a.m. - 5:00 p.m.
***25-35 percent of the course delivered online.

Elective Courses—2 Credit Hours

- EME 6209 Multimedia Instructional Systems II (3 credit hours)
- EME 6457 Distance Education: Technology Process Product (3 credit hours)
- EME 6607 Planned Change in Instructional Technology (3 credit hours)
- EME 6603 Instructional Simulation Design for Training and Education (3 credit hours)
- EME 6614 Instructional Game Design for Training and Education (3 credit hours)
- DIG 5875C Introduction to Modelling and Simulation (3 credit hours)
- IDS 6504 Adult Learning (3 credit hours)
- ENC 6236 Editing Professional Writing (3 credit hours)
- ENC 5225 Theory and Practice of Document Usability (3 credit hours)
- ENC 6261 Technical Writing, Theory and Practice (3 credit hours)
- ENC 6296 Computer Documentaion (3 credit hours)
- DIG 6432 Transmedia Story Creation (3 credit hours)
- EDF 6635 Capstone: Action Research in Teacher Leadership (3 credit hours)
- EDF 6884 Education as a Cultural Process (3 credit hours)
- EDF 6886 Multicultural Education (3 credit hours)
- EGI 6051 Understanding the Gifted/Talented Student (3 credit hours)
- ESE 6217 Curriculum Design (3 credit hours)
- TSL 5345 Methods of ESOL Teaching (3 credit hours)

Practicum—3 Credit Hours
Practicum are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

- EME 6940 Theory into Practice in Educational Technology (3 credit hours)

Independent Learning
Practicum are independent learning activities that take place in authentic settings in which students must apply, reflect on, and refine knowledge and skills acquired in the program.

Application Requirements
For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the Admissions section of the Graduate Catalog. Applicants must apply online. All requested materials must be submitted by the established deadline.
In addition to the general UCF graduate application requirements, applicants to this program must provide:
- One official transcript (in a sealed envelope) from each college/university attended.
- Two letters of recommendation.
- Résumé.
- Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation. Credential evaluations are accepted from World Education Services (WES) or Joseph Silvy and Associates, Inc., only.

For more information about the MA program, visit the program website at http://insttech.education.ucf.edu.

Application Deadlines

<table>
<thead>
<tr>
<th>Educational Technology</th>
<th>*Fall Priority</th>
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Domestic Applicants
International Applicants

Jan 15
Jan 15
Jul 1
Nov 1

International Transfer Applicants

Jan 15
Mar 1
Sep 1
Dec 15

*Applicants who plan to enroll full time in a degree program and who wish to be considered for university fellowships or assistantships should apply by the Fall Priority date.

FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see the College of Graduate Studies Funding website, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The Financial Information section of the Graduate Catalog is another key resource.

Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see UCF Graduate Fellowships, which includes descriptions of university fellowships and what you should do to be considered for a fellowship.
Graduate Program Recommendation Form - REVISIONS ONLY

This form is to be used to REVISE degree programs, tracks, or certificate programs. If there are changes to a program and the changes will also affect the program tracks, one form may be used for both the program and the track(s).

Please refer to the Graduate Council Curriculum Meeting Schedule for submission deadlines.

Checklist of items to be attached with completed form:

☑ Complete and current Graduate Catalog copy (www.graduatemprogram.ucf.edu), including description, curriculum, contact information, application requirements, and application deadlines. Use Track Changes in Word to show revisions.

☑ A list of faculty who will participate in the program, track or certificate and their credentials.

☐ All course action requests that will be needed to implement the curriculum changes.

☐ If applicable, a written agreement from all involved units that they are in support of the revisions.

College/Unit(s) Submitting Proposal: Education and Human Performance, School of Teaching, Learning and Leadership

Proposed Effective Term/Year: Summer 2018

Unit(s) Housing Program: School of Teaching, Learning and Leadership

Name of program, track and/or certificate: Initial Teacher Professional Preparation

Please check all that apply. This action affects a: ☐ Program ☐ Track ☐ Certificate

If the revision applies to multiple tracks, please list them here:

Brief description of program and rationale of the revision: Do not add complete catalog copy here.

We propose to eliminate the requirement for students to complete one co-requisite special methods course. The governing body, Florida Department of Education, has updated the requirements for State Board rule 6A-4.006 which determines what professional education competencies are required. The special methods co-req is now waived for many candidates. Since these classes were preventing the certificate from being fully online, eliminating them as a requirement enables the certificate to be truly online. Classes will still be available for those students who wish to take them.

Briefly list curriculum changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. Remember to attach the catalog copy showing changes, using Track Changes in Word.

- Change minimum credit hours to 15
- Remove co-requisite (3 credit) special methods classes: ARE 5359, LAE 5346, MAE 5327, MAE 5336, MUE 5348, SCE 5325, SCE 5337, SSE 5790, BTE 6935
Name Change
Are you changing the name of an existing program, track, or certificate? □ Yes □ No
If yes, provide the new name of the program, track, or certificate: ________________________________

A proposed name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

If you are ONLY making a name change, skip the "Impact on Current Students" section.

Impact on Current Students
Will students be moved from an existing program, track, or certificate into this new program, track, or certificate? □ Yes □ No
If yes, state the name of the program or track where students are currently enrolled and attach a list of students if possible:

Initial Teacher Professional Preparation
Will students have the option to stay in their existing program, track, or certificate? □ Yes □ No
If yes, how will current students be impacted by this change?

Some students may still need to take the co-req special methods class if their FLDOE eligibility letter was written prior to 2016 or they are not currently teaching in the field they want to certify in. If that is the case then they are welcome to stay in the current form of the program and take the class as needed. It is important to note that moving forward, any student in the ITTP program will still have the option to take the special methods class if they need it, they can enter the classes as a non-degree seeking ITTP student. If they are a UCF Online student, they will need to move out of UCF Online status to complete the special methods class.

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<tr>
<th>Year</th>
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<th>Source of funds</th>
<th>Number of fellowship students (specify fellowship)</th>
<th>Number of tuition remissions</th>
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Signatures

Recommend Approval (all approval levels must be signed)

Graduate Faculty Program Coordinator:
Print: Lindsay Archambault  Signature:  Date: 9/26/17

Department Chair / Director:
Print: Mike Hynes  Signature:  Date: 9/26/17

College Academic Standards:
Print: Valerie A. Storey  Signature:  Date: 10/11/17

College Dean:
Print:  Signature:  Date: 

Graduate Council:
Print:  Signature:  Date: 

Vice President for Research and Dean of the College of Graduate Studies:
Print:  Signature:  Date: 

Approval

Provost and Executive Vice President:
Print:  Signature:  Date: 

Distribution: After approval is received from the Provost, distribution will be to:
Department(s); College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services;
College of Graduate Studies
Initial Teacher Professional Preparation Graduate Certificate

PROGRAM DESCRIPTION

The Graduate Certificate in Initial Teacher Professional Preparation is designed for students who have secured a teaching position, plan to obtain a teaching position, or have a temporary teaching certificate.

The Initial Teacher Professional Preparation certificate prepares candidates to meet the State of Florida Department of Education requirements through a sequence of professional core courses. The goal of the certificate is to enable educators to have successful teaching experiences in grades 6-12 classrooms. Students may enroll in the Initial Teacher Professional Preparation certificate and apply to be accepted to the Teacher Education MAT program either concurrently or after earning the certificate.

Please note: This program may be completed online, although not all elective options or program prerequisites may be offered online. Newly admitted students choosing to complete this program exclusively via UCF online classes may enroll with a reduction in campus-based fees. See http://ucf.edu/online for more information.

International students (F or J visa) are required to enroll in a full-time course load of 9 credit hours during the fall and spring semesters. Only 3 of the 9 credit hours may be taken in a completely online format. For a detailed listing of enrollment requirements for international students, please visit www.international.ucf.edu. If you have questions, please consult International Affairs and Global Strategies at 407-823-2337.

UCF is not authorized to provide online courses or instruction to students in some states. Refer to State Restrictions for current information.

CURRICULUM

For the Initial Teacher Professional Preparation graduate certificate, students complete six-five courses (15 credit hours total) to satisfy the minimum 15 credit hours in Professional Education competencies required by Florida Department of Education for professional preparation, including five required core courses (15 credit hours) and at least one special methods course (3 credit hours).

Total Credit Hours Required:

1815 Credit Hours Minimum beyond the Bachelor's Degree
Required Courses——15 Credit Hours

All of the required courses are available online and must be taken at UCF:

- EDP 6727: Critical Analysis of Social, Ethical, Legal, and Safety Issues Related to Education (3 credit hours)
- EDF 6237: Principles and Assessment in Classroom—Minnesota (3 credit hours)
- EDG 6415: Principles of Instruction and Classroom Management (3 credit hours)
- RED 5414: Developmental Reading (3 credit hours) or LAT 6496: Disciplinary Literacy in the Content Areas (3 credit hours)
- TOL 5665: Teaching Language Minority Students in K-12 Classrooms (3 credit hours)

Co-requisites—3 Credit Hours Minimum

Special Methods. Course selection depends on the student's intended certification area. Equivalent courses from other accredited Florida State Institutions may be used to satisfy this requirement at the discretion of the Program Director. Students are advised to obtain permission in advance of registering for these courses.

- English Language Arts: EAD 4310 Teaching English Language Arts (3 credit hours)
- Math Education: MAF 6354 APL Math (4 credit hours)
- Science Education: GST 6335 Elementary and Middle School Science (3 credit hours)
- Social Science Education: SSE 5720: Inquiry and Instructional Analysis in Social Science (4 credit hours)
- Social Science Education: SSE 5730: Inquiry and Instructional Analysis in Social Science (4 credit hours)
- Social Science Education: SSE 5720: Inquiry and Instructional Analysis in Social Science (4 credit hours)
- English Language Arts: EAD 4310 Teaching English Language Arts (3 credit hours)
- Math Education: MAF 6354 APL Math (4 credit hours)
- Science Education: GST 6335 Elementary and Middle School Science (3 credit hours)
- Social Science Education: SSE 5720: Inquiry and Instructional Analysis in Social Science (4 credit hours)
- Social Science Education: SSE 5730: Inquiry and Instructional Analysis in Social Science (4 credit hours)

Application Requirements:

Admission to the program is determined on the basis of the candidate's ability to demonstrate the professional knowledge and skills necessary to effectively teach. An application to the graduate certificate program must be submitted. Applicants are encouraged to meet with the Graduate Advisor prior to applying. A completed application must be submitted by the established deadline.

Application Deadlines:

<table>
<thead>
<tr>
<th>Initial Teacher Preparation</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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<tr>
<td>Domestic Applicants</td>
<td>Jul 15</td>
<td>Oct 1</td>
<td>Apr 15</td>
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<tr>
<td>International Applicants</td>
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</table>
International Transfer Applicants

Applicants who plan to enroll full time in a degree program and who wish to be considered for university fellowships or assistantships should apply by the Fall Priority date.

• Contact INFO

Request Information

• Graduate Program
  - Lindsay Archambault
  - Lindsay.Archambault@ucf.edu
  - Telephone: 407-823-2881
  - Education 205F

• Graduate Admissions
  - Cameron Leonard
  - gradadmissions@ucf.edu
  - Telephone: 407-823-2755

• Millican Hall 230
  - Online Application
  - Graduate Admissions

• Mailing Address
  - UCF College of Graduate Studies
  - Millican Hall 230
  - PO Box 160112
  - Orlando, FL 32816-0112

• Institution Codes
  - GRE: 5233
  - GMAT: RZT-HT-58
  - TOEFL: 5233
  - ETS PPL: 5233
College of Education and Human Performance

INITIAL TEACHER PROFESSIONAL PREPARATION

Course Descriptions

SED 6277 Critical Analysis of Social, Ethical, Legal and Safety Issues Related to Education
Can be used towards the required 15 hours of FLDGE required education course electives.
Faculty Course Leader: Dr. Kendall Hewitt
Analysis of critical issues in education including social, ethical, legal, and safety concerns which impact the quality of education.
Fall, Spring / 3 credit hours

EDF 6324 Principles of Learning and Introduction to Classroom Assessment
SSE Child and adolescent development including theories and principles of learning
SSE Educational assessment practices that include analysis and application of data from statewide standardized assessments and other multiple sources to improve instruction and learning.
Faculty Course Leader: Dr. Taylor Wenzel
Students will examine prominent developmental and learning theories in depth and their implications for instruction and assessment. Key issues in educational psychology will be explored.
Fall, Spring / 3 credit hours

EDG 6415 Principles of Instruction and Classroom Management
SSE Effective instructional techniques, strategies, and materials to meet the needs of diverse learners, including students with disabilities
SSE Classroom management with a focus on creating safe learning environments for students
Faculty Course Leader: Dr. Todd Zimmerer
Students are exposed to various methods of delivering instruction, as well as organizational and management skills. Students microteach and view lessons to develop reflective practices.
Fall, Spring, Summer / 3 credit hours

RED 5147 Developmental Reading
SSE Applications of research-based instructional practices in reading
Faculty Course Leader: Dr. Vicky Zygnarski-Gim
Principles, procedures, organization, and current practices in the elementary reading program. Materials and methods of instruction.
Fall, Spring, Summer / 3 credit hours

OR

LAE 5496 Disciplinary Literacy in the Content Areas
SSE Applications of research-based instructional practices in reading
Faculty Course Leader: Dr. Ethel Olen
This course is designed to assist in understanding of adolescent reader and writer and will examine theory, strategies, resources and implementation options of disciplinary literacy specifically in the content areas.
Fall, Spring / 3 credit hours

TSL 5085 Teaching Language Minority Students in K-12 Classrooms
SSE Instructional strategies for teaching students of limited English proficiency including instruction in the English language (Teaching experience cannot be used to satisfy this requirement.)
Faculty Course Leader: Dr. Michele Begalda
Teaching K-12 Limited English Proficient (LEP) students. Florida standards regarding cross-cultural communication, ESL, curriculum, and materials, ESL methodology, testing and evaluation of ESL students, applied linguistics.
SPECIAL METHODS

One course from any of the Teacher Education MAT Program Tracks listed below.

Art Education
ARF 5329 Teaching Art K-12
Faculty Course Leader: Debby Glaucy

Transition from university art practice to public school teaching of art. Organize, design, and analyze art learning for students K-12.

Summer / 4 credit hours

Career and Technical Education
BTE 6935 Seminar in Business Education
Faculty Course Leader: Joanne Whiteman

Current problems, issues and trends in business education.

Fall / 3 credit hours

Language Arts Education with ESL Endorsement
LAE 5346 Methods of Teaching English Language Arts
Faculty Course Leader: Dr. Elke Oehl

Designed for alternative certification and Master of Arts students to explore the strands, methods and materials related to school curriculum in teaching English.

Fall, Spring, Summer / 3 credit hours

Mathematics Education
MAE 5336 Current Methods in Secondary School Mathematics
Faculty Course Leader: Dr. Enrique Ortega

Required special methods course for mathematics 6-12 certification. Assessment, curriculum, technology, practical classroom ideas and activities.

Summer / 3 credit hours

Middle School Mathematics
MAE 5387 Teaching Middle School Mathematics
Faculty Course Leader: Dr. Edwin Sultenfuss

Students will develop skills in planning and delivering mathematics instruction in grades 5–9. The use of technology, cooperative learning, ESOL, and inquiry in science.

Summer / 3 credit hours

Middle School Science
SCE 5335 Teaching Middle School Science
Faculty Course Leader: Malcolm Butler

This course will provide experiences that promote effective science teaching in grades 5-9 including interdisciplinary learning, technology use, ESOL, and inquiry in science.

Occasional / 3 credit hours

Science Education: Biology
SCE 5337 Issues and Methods in Secondary School Science Education
Faculty Course Leader: Malcolm Butler

Secondary science education special methods course is designed to augment students' understanding of instructional methods and their applications to middle and high school science curriculum.

Fall, Spring / 3 credit hours

Science Education: Chemistry
SCE 5337 Issues and Methods in Secondary School Science Education
Faculty Course Leader: Malcolm Butler

Secondary science education special methods course is designed to augment students' understanding of instructional methods and their applications to middle and high school science curriculum.

Fall, Spring / 3 credit hours

Science Education: Physics
SCE 5337 Issues and Methods in Secondary School Science Education
Faculty Course Leader: Malcolm Butler

Secondary science education special methods course is designed to augment students' understanding of instructional methods and their applications to middle and high school science curriculum.

Fall, Spring / 3 credit hours

Social Science Education
SSE 5790 Inquiry and Instructional Analysis in Social Science Education
Faculty Course Leader: Dr. William Russell
Study of instructional programs in social science education and related scholarship: development of an inquiry about the intersection of theory and practice in social science teaching.

Summer / 3 credit hours
6A-4.006 General and Professional Preparation.

(1) General preparation. A bachelor’s or higher degree from an accredited or approved institution as described in Rule 6A-4.003, F.A.C., shall be considered to have met the general preparation course requirements.

(2) Professional preparation.

(a) For applications received beginning January 1, 2016, professional preparation courses pursuant to Section 1012.56(6)(f), F.S., are a minimum of fifteen (15) semester hours with credit in the following professional education areas:

1. Classroom management with a focus on creating safe learning environments in which effective teaching and learning can take place by promoting a physically, emotionally, socially and academically secure climate for students;

2. Child and adolescent development including theories and principles of learning;

3. Educational assessment practices that include analysis and application of data from statewide standardized assessments and other multiple sources to improve instruction and learning;

4. Effective instructional techniques, strategies, and materials to meet the needs of diverse learners, including students with disabilities;

5. For certificate subject coverages classified by rule as academic or degree career and technical, applications of research-based instructional practices in reading; and,

6. Instructional strategies for teaching students of limited English proficiency including instruction in the English language and development of the student’s mastery of the four language skills of listening, speaking, reading and writing.

(b) Practical experience in teaching. Practical experience in teaching may be satisfied by one of the following methods:

1. One year of full-time teaching experience in an elementary or secondary school as specified in Rule 6A-4.002, F.A.C.; or

2. Six semester hours earned in a college student teaching or supervised internship in which the candidate demonstrates his or her ability to positively impact student learning growth with a diverse population of students completed in an elementary or secondary school.

(c) The requirements of paragraph (2)(a) of this rule are not applicable and shall not be required for school social worker or speech-language impaired certification.
1012.56 Educator certification requirements.—

(1) APPLICATION.—Each person seeking certification pursuant to this chapter shall submit a completed application containing the applicant’s social security number to the Department of Education and remit the fee required pursuant to s. 1012.59 and rules of the State Board of Education. Pursuant to the federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996, each party is required to provide his or her social security number in accordance with this section. Disclosure of social security numbers obtained through this requirement is limited to the purpose of administration of the Title IV-D program of the Social Security Act for child support enforcement.

(a) Pursuant to s. 120.60, the department shall issue within 90 calendar days after receipt of the completed application a professional certificate to a qualifying applicant covering the classification, level, and area for which the applicant is deemed qualified and a document explaining the requirements for renewal of the professional certificate.

(b) The department shall issue a temporary certificate to a qualifying applicant within 14 calendar days after receipt of a request from an employer with a professional education competence demonstration program pursuant to paragraphs (6)(f) and (8)(b). The temporary certificate must cover the classification, level, and area for which the applicant is deemed qualified. The department shall electronically notify the applicant’s employer that the temporary certificate has been issued and provide the applicant an official statement of status of eligibility at the time the certificate is issued.

(c) Pursuant to s. 120.60, the department shall issue within 90 calendar days after receipt of the completed application, if an applicant does not meet the requirements for either certificate, an official statement of status of eligibility.

The statement of status of eligibility must be provided electronically and must advise the applicant of any qualifications that must be completed to qualify for certification. Each method by which an applicant can complete the qualifications for a professional certificate must be included in the statement of status of eligibility. Each statement of status of eligibility is valid for 3 years after its date of issuance, except as provided in paragraph (2)(d).

(2) ELIGIBILITY CRITERIA.—To be eligible to seek certification, a person must:

(a) Be at least 18 years of age.

(b) File an affidavit that the applicant subscribes to and will uphold the principles incorporated in the Constitution of the United States and the Constitution of the State of Florida and that the information provided in the application is true, accurate, and complete. The affidavit shall be by original signature or by electronic authentication. The affidavit shall include substantially the following warning:

WARNING: Giving false information in order to obtain or renew a Florida educator’s certificate is a criminal offense under Florida law. Anyone giving false information on this affidavit is subject to criminal prosecution as well as disciplinary action by the Education Practices Commission.
(c) Document receipt of a bachelor's or higher degree from an accredited institution of higher learning, or a nonaccredited institution of higher learning that the Department of Education has identified as having a quality program resulting in a bachelor's degree, or higher. Each applicant seeking initial certification must have attained at least a 2.5 overall grade point average on a 4.0 scale in the applicant's major field of study. The applicant may document the required education by submitting official transcripts from institutions of higher education or by authorizing the direct submission of such official transcripts through established electronic network systems. The bachelor's or higher degree may not be required in areas approved in rule by the State Board of Education as nondegree areas. The State Board of Education may adopt rules that, for purposes of demonstrating completion of specific certification requirements, allow for the acceptance of college course credits recommended by the American Council for Education (ACE), as posted on an official ACE transcript.

(d) Submit to background screening in accordance with subsection (10). If the background screening indicates a criminal history or if the applicant acknowledges a criminal history, the applicant's records shall be referred to the investigative section in the Department of Education for review and determination of eligibility for certification. If the applicant fails to provide the necessary documentation requested by the department within 90 days after the date of the receipt of the certified mail request, the statement of eligibility and pending application shall become invalid.

(e) Be of good moral character.

(f) Be competent and capable of performing the duties, functions, and responsibilities of an educator.

(g) Demonstrate mastery of general knowledge, pursuant to subsection (3).

(h) Demonstrate mastery of subject area knowledge, pursuant to subsection (5).

(i) Demonstrate mastery of professional preparation and education competence, pursuant to subsection (6).

(3) MASTERY OF GENERAL KNOWLEDGE.—Acceptable means of demonstrating mastery of general knowledge are:

(a) Achievement of passing scores on the general knowledge examination required by state board rule;

(b) Documentation of a valid professional standard teaching certificate issued by another state;

(c) Documentation of a valid certificate issued by the National Board for Professional Teaching Standards or a national educator credentialing board approved by the State Board of Education;

(d) Documentation of two semesters of successful, full-time or part-time teaching in a Florida College System institution, state university, or private college or university that awards an associate or higher degree and is an accredited institution or an institution of higher education identified by the Department of Education as having a quality program; or

(e) Effective July 1, 2015, achievement of passing scores, identified in state board rule, on national or international examinations that test comparable content and relevant standards in verbal, analytical writing, and quantitative reasoning skills, including, but not limited to, the verbal, analytical writing, and quantitative reasoning portions of the Graduate Record Examination. Passing scores identified in state board rule must be at approximately the same level of rigor as is required to pass the general knowledge examinations.

(4) ALIGNMENT OF SUBJECT AREAS.—The State Board of Education shall align the subject area examinations to the Next Generation Sunshine State Standards.

(5) MASTERY OF SUBJECT AREA KNOWLEDGE.—Acceptable means of demonstrating mastery of subject area knowledge are:

(a) For a subject requiring only a baccalaureate degree for which a Florida subject area examination has been developed, achievement of a passing score on the Florida-developed subject area examination specified in state board rule;

(b) For a subject for which a Florida subject area examination has not been developed, achievement of a passing score on a standardized examination specified in state board rule, including, but not limited to, passing scores on both the oral proficiency and written proficiency examinations administered by the American Council on the Teaching of Foreign Languages;
(c) For a subject for which a Florida subject area examination has not been developed or a standardized examination has not been specified in state board rule, completion of the subject area specialization requirements specified in state board rule and verification of the attainment of the essential subject matter competencies by the district school superintendent of the employing school district or chief administrative officer of the employing state-supported or private school;

(d) For a subject requiring a master’s or higher degree, completion of the subject area specialization requirements specified in state board rule and achievement of a passing score on the Florida-developed subject area examination or a standardized examination specified in state board rule;

(e) Documentation of a valid professional standard teaching certificate issued by another state;

(f) Documentation of a valid certificate issued by the National Board for Professional Teaching Standards or a national educator credentialing board approved by the State Board of Education;

(g) Documentation of successful completion of a United States Defense Language Institute Foreign Language Center program; or

(h) Documentation of a passing score on the Defense Language Proficiency Test (DLPT).

School districts are encouraged to provide mechanisms for middle grades teachers holding only a K-6 teaching certificate to obtain a subject area coverage for middle grades through postsecondary coursework or district add-on certification.

6. MASTERY OF PROFESSIONAL PREPARATION AND EDUCATION COMPETENCE.—Acceptable means of demonstrating mastery of professional preparation and education competence are:

(a) Successful completion of an approved teacher preparation program at a postsecondary educational institution within this state and achievement of a passing score on the professional education competency examination required by state board rule;

(b) Successful completion of a teacher preparation program at a postsecondary educational institution outside Florida and achievement of a passing score on the professional education competency examination required by state board rule;

(c) Documentation of a valid professional standard teaching certificate issued by another state;

(d) Documentation of a valid certificate issued by the National Board for Professional Teaching Standards or a national educator credentialing board approved by the State Board of Education;

(e) Documentation of two semesters of successful, full-time or part-time teaching in a Florida College System institution, state university, or private college or university that awards an associate or higher degree and is an accredited institution or an institution of higher education identified by the Department of Education as having a quality program and achievement of a passing score on the professional education competency examination required by state board rule;

(f) Successful completion of professional preparation courses as specified in state board rule, successful completion of a professional preparation and education competency program pursuant to paragraph (8)(b), and achievement of a passing score on the professional education competency examination required by state board rule;

(g) Successful completion of a professional development certification and education competency program, outlined in paragraph (8)(a); or

(h) Successful completion of a competency-based certification program pursuant to s. 1004.85 and achievement of a passing score on the professional education competency examination required by rule of the State Board of Education.

The State Board of Education shall adopt rules to implement this subsection by December 31, 2014, including rules to approve specific teacher preparation programs that are not identified in this subsection which may be used to meet requirements for mastery of professional preparation and education competence.

7. TYPES AND TERMS OF CERTIFICATION.—
(a) The Department of Education shall issue a professional certificate for a period not to exceed 5 years to any applicant who fulfills one of the following:

1. Meets all the requirements outlined in subsection (2).
2. For a professional certificate covering grades 6 through 12:
   a. Meets the requirements of paragraphs (2)(a)-(h).
   b. Holds a master's or higher degree in the area of science, technology, engineering, or mathematics.
   c. Teaches a high school course in the subject of the advanced degree.
   d. Is rated highly effective as determined by the teacher's performance evaluation under s. 1012.34, based in part on student performance as measured by a statewide, standardized assessment or an Advanced Placement, Advanced International Certificate of Education, or International Baccalaureate examination.
   e. Achieves a passing score on the Florida professional education competency examination required by state board rule.

3. Meets the requirements of paragraphs (2)(a)-(h) and completes a professional preparation and education competence program approved by the department pursuant to paragraph (8)(c). An applicant who completes the program and is rated highly effective as determined by his or her performance evaluation under s. 1012.34 is not required to take or achieve a passing score on the professional education competency examination in order to be awarded a professional certificate.

(b) The department shall issue a temporary certificate to any applicant who completes the requirements outlined in paragraphs (2)(a)-(f) and completes the subject area content requirements specified in state board rule or demonstrates mastery of subject area knowledge pursuant to subsection (5) and holds an accredited degree or a degree approved by the Department of Education at the level required for the subject area specialization in state board rule.

(c) The department shall issue one nonrenewable 2-year temporary certificate and one nonrenewable 5-year professional certificate to a qualified applicant who holds a bachelor's degree in the area of speech-language impairment to allow for completion of a master's degree program in speech-language impairment.

Each temporary certificate is valid for 3 school fiscal years and is nonrenewable. However, the requirement in paragraph (2)(g) must be met within 1 calendar year of the date of employment under the temporary certificate. Individuals who are employed under contract at the end of the 1 calendar year time period may continue to be employed through the end of the school year in which they have been contracted. A school district shall not employ, or continue the employment of, an individual in a position for which a temporary certificate is required beyond this time period if the individual has not met the requirement of paragraph (2)(g). At least 1 year before an individual's temporary certificate is set to expire, the department shall electronically notify the individual of the date on which his or her certificate will expire and provide a list of each method by which the qualifications for a professional certificate can be completed. The State Board of Education shall adopt rules to allow the department to extend the validity period of a temporary certificate for 2 years when the requirements for the professional certificate, not including the requirement in paragraph (2)(g), were not completed due to the serious illness or injury of the applicant or other extraordinary extenuating circumstances or for 1 year if the temporary certificate holder is rated effective or highly effective based solely on a student learning growth formula approved by the Commissioner of Education pursuant to s. 1012.34(8). The department shall reissue the temporary certificate for 2 additional years upon approval by the Commissioner of Education. A written request for reissuance of the certificate shall be submitted by the district school superintendent, the governing authority of a university lab school, the governing authority of a state-supported school, or the governing authority of a private school.

(8) PROFESSIONAL DEVELOPMENT CERTIFICATION AND EDUCATION COMPETENCY PROGRAM.

(a) The Department of Education shall develop and each school district, charter school, and charter management organization may provide a cohesive competency-based professional development certification and education competency program by which instructional staff may satisfy the mastery of professional preparation and education competencies which are required for issuance of a professional certificate. The program must include a comprehensive plan for professional development for the district's instructional staff.
Participants must hold a state-issued temporary certificate. A school district, charter school, or charter management organization that implements the program shall provide a competency-based certification program developed by the Department of Education or developed by the district, charter school, or charter management organization and approved by the Department of Education. The program shall include the following:

1. A minimum period of initial preparation before assuming duties as the teacher of record.
2. An option for collaboration with other supporting agencies or educational entities for implementation.
3. A teacher mentorship and induction component.
   a. Each individual selected by the district as a mentor:
      (I) Must hold a valid professional certificate issued pursuant to this section;
      (II) Must have earned at least 3 years of teaching experience in prekindergarten through grade 12;
      (III) Must have completed specialized training in clinical supervision and participate in ongoing mentor training provided through the coordinated system of professional development under s. 1012.98(3)(e);
      (IV) Must have earned an effective or highly effective rating on the prior year’s performance evaluation under s. 1012.34; and
      (V) May be a peer evaluator under the district’s evaluation system approved under s. 1012.34.
   b. The teacher mentorship and induction component must, at a minimum, provide weekly opportunities for mentoring and induction activities, including common planning time, ongoing professional development targeted to a teacher’s needs, opportunities for a teacher to observe other teachers, co-teaching experiences, and reflection and followup discussions. Mentorship and induction activities must be provided for an applicant’s first year in the program and may be provided until the applicant attains his or her professional certificate in accordance with this section. A principal who is rated highly effective as determined by his or her performance evaluation under s. 1012.34 must be provided flexibility in selecting professional development activities under this paragraph; however, the activities must be approved by the department as part of the district’s, charter school’s, or charter management organization’s program.
4. An assessment of teaching performance aligned to the district’s system for personnel evaluation under s. 1012.34 which provides for:
   a. An initial evaluation of each educator’s competencies to determine an appropriate individualized professional development plan.
   b. A summative evaluation to assure successful completion of the program.
5. Professional education preparation content knowledge, which must be included in the mentoring and induction activities under subparagraph 3., that includes, but is not limited to, the following:
   a. The state standards provided under s. 1003.41, including scientifically based reading instruction, content literacy, and mathematical practices, for each subject identified on the temporary certificate.
   b. The educator-accomplished practices approved by the state board.
   c. A variety of data indicators for monitoring student progress.
   d. Methodologies for teaching students with disabilities.
   e. Methodologies for teaching students of limited English proficiency appropriate for each subject area identified on the temporary certificate.
   f. Techniques and strategies for operationalizing the role of the teacher in assuring a safe learning environment for students.
6. Required achievement of passing scores on the subject area and professional education competency examination required by State Board of Education rule. Mastery of general knowledge must be demonstrated as described in subsection (3).

(b)1. Each school district and a private school or state-supported public school, including a charter school, may develop and maintain a system by which members of the instructional staff may demonstrate mastery of professional preparation and education competence as required by law. Each program must be based on classroom application of the Florida Educator Accomplished Practices and instructional performance and, for public
schools, must be aligned with the district’s or state-supported public school's evaluation system established under s. 1012.34, as applicable.

2. The Commissioner of Education shall determine the continued approval of programs implemented under this paragraph, based upon the department’s review of performance data. The department shall review the performance data as a part of the periodic review of each school district’s professional development system required under s. 1012.98.

(c) No later than December 31, 2017, the department shall adopt standards for the approval of professional development certification and education competency programs, including standards for the teacher mentorship and induction component, under paragraph (a). Standards for the teacher mentorship and induction component must include program administration and evaluation; mentor roles, selection, and training; beginning teacher assessment and professional development; and teacher content knowledge and practices aligned to the Florida Educator Accomplished Practices. Each school district or charter school with a program under this subsection must submit its program, including the teacher mentorship and induction component, to the department for approval no later than June 30, 2018. After December 31, 2018, a teacher may not satisfy requirements for a professional certificate through a professional development certification and education competency program under paragraph (a) unless the program has been approved by the department pursuant to this paragraph.

(d) The Commissioner of Education shall determine the continued approval of programs implemented under paragraph (a) based upon the department’s periodic review of the following:
   1. Evidence that the requirements in paragraph (a) are consistently met; and
   2. Evidence of performance in each of the following areas:
      a. Rate of retention for employed program completers in instructional positions in Florida public schools.
      b. Performance of students in prekindergarten through grade 12 who are assigned to in-field program completers on statewide assessments using the results of the student learning growth formula adopted under s. 1012.34.
   c. Performance of students in prekindergarten through grade 12 who are assigned to in-field program completers aggregated by student subgroups, as defined in the federal Elementary and Secondary Education Act (ESEA), 20 U.S.C. s. 6311(b)(2)(C)(v)(II)), as a measure of how well the program prepares teachers to work with a variety of students in Florida public schools.
   d. Results of program completers’ annual evaluations in accordance with the timeline as set forth in s. 1012.34.
   e. Production of program completers in statewide critical teacher shortage areas as defined in s. 1012.07.

(9) EXAMINATIONS.—
   (a) The Commissioner of Education, with the approval of the State Board of Education, may contract for developing, printing, administering, scoring, and appropriate analysis of the written examinations required.
   (b) The State Board of Education shall, by rule, specify the examination scores that are required for the issuance of a professional certificate and temporary certificate. Such rules must define generic subject area competencies and must establish uniform evaluation guidelines.
   (c) The State Board of Education shall designate the certification areas for subject area examinations. All required examinations may be taken prior to graduation.
   (d) The department shall provide procedures for an applicant who fails an examination developed by the department or by an entity under contract with the department to review his or her examination questions and his or her incorrectly answered responses to the questions. The applicant bears the actual cost for the department to provide an examination review pursuant to this subsection. Notwithstanding any other provisions of law, only an applicant who fails an examination within a score range established by rule of the State Board of Education is entitled to an examination review under this paragraph or to challenge the validity of the examination.
   (e) For any examination developed by this state, the Department of Education and the State Board of Education shall maintain confidentiality of the examination, developmental materials, and workpapers, which are exempt from s. 119.07(1).
(f) The examinations used for demonstration of mastery of general knowledge, professional education competence, and subject area knowledge shall be aligned with student standards approved by the state board. The delivery system for these examinations shall provide for overall efficiency, user-friendly application, reasonable accessibility to prospective teachers, and prompt attainment of examination results. The examination of competency for demonstration of subject area knowledge shall be sufficiently comprehensive to assess subject matter expertise for individuals who have acquired subject knowledge either through college credit or by other means.

(g) All examination instruments, including developmental materials and workpapers directly related thereto, which are prepared, prescribed, or administered pursuant to this section shall be confidential and exempt from the provisions of s. 119.07(1) and from s. 1001.52. Provisions governing access to, maintenance of, and destruction of such instruments and related materials shall be prescribed by rules of the State Board of Education.

(10) BACKGROUND SCREENING REQUIRED, INITIALLY AND PERIODICALLY.—

(a) Each person who seeks certification under this chapter must be fingerprinted and screened in accordance with s. 1012.32 and must not be ineligible for such certification under s. 1012.315. A person who has been screened in accordance with s. 1012.32 by a district school board or the Department of Education within 12 months before the date the person initially obtains certification under this chapter, the results of which are submitted to the district school board or to the Department of Education, is not required to repeat the screening under this paragraph.

(b) A person may not receive a certificate under this chapter until the person’s screening under s. 1012.32 is completed and the results have been submitted to the Department of Education or to the district school superintendent of the school district that employs the person. Every 5 years after obtaining initial certification, each person who is required to be certified under this chapter must be rescreened in accordance with s. 1012.32, at which time the school district shall request the Department of Law Enforcement to forward the fingerprints to the Federal Bureau of Investigation for federal criminal records checks. If, for any reason after obtaining initial certification, the fingerprints of a person who is required to be certified under this chapter are not retained by the Department of Law Enforcement under s. 1012.32(3)(a) and (b), the person must file a complete set of fingerprints with the district school superintendent of the employing school district. Upon submission of fingerprints for this purpose, the school district shall request the Department of Law Enforcement to forward the fingerprints to the Federal Bureau of Investigation for federal criminal records checks, and the fingerprints shall be retained by the Department of Law Enforcement under s. 1012.32(3)(a) and (b). The cost of the state and federal criminal history checks required by paragraph (a) and this paragraph may be borne by the district school board or the employee. Under penalty of perjury, each person who is certified under this chapter must agree to inform his or her employer within 48 hours if convicted of any disqualifying offense while he or she is employed in a position for which such certification is required.

(c) If it is found under s. 1012.796 that a person who is employed in a position requiring certification under this chapter has not been screened in accordance with s. 1012.32, or is ineligible for such certification under s. 1012.315, the person’s certification shall be immediately revoked or suspended and he or she shall be immediately suspended from the position requiring certification.

(11) NONCITIZENS.—

(a) The State Board of Education may adopt rules for issuing certificates to noncitizens who are needed to teach and who are legally admitted to the United States through the United States Bureau of Citizenship and Immigration Services. The filing of a written oath to uphold the principles of the Constitution of the United States and the Constitution of the State of Florida, required under paragraph (2)(b), does not apply to individuals assigned to teach on an exchange basis.

(b) A certificate may not be issued to a citizen of a nation controlled by forces that are antagonistic to democratic forms of government, except to an individual who has been legally admitted to the United States through the United States Bureau of Citizenship and Immigration Services.

(12) DENIAL OF CERTIFICATE.—
(a) The Department of Education may deny an applicant a certificate if the department possesses evidence satisfactory to it that the applicant has committed an act or acts, or that a situation exists, for which the Education Practices Commission would be authorized to revoke a teaching certificate.

(b) The decision of the department is subject to review by the Education Practices Commission upon the filing of a written request from the applicant within 20 days after receipt of the notice of denial.

(13) STATE BOARD RULES.—The State Board of Education shall adopt rules pursuant to ss. 120.536 and 120.54, as necessary to implement this section.

(14) PRIOR APPLICATION.—Persons who apply for certification are governed by the law and rules in effect at the time of application for issuance of the initial certificate, provided that continuity of certificates is maintained.

(15) PERSONNEL RECORDS.—The Department of Education shall maintain an electronic database that includes, but need not be limited to, the academic preparation, professional training, and teaching experience of each person to whom a certificate is issued. The applicant or the district school superintendent shall furnish the information using a form provided by the department.

(16) AUTHORITY OF COMMISSIONER.—The Commissioner of Education may make decisions regarding an applicant’s certification under extenuating circumstances not otherwise provided for in statute or by rule. However, an applicant for certification approved by the commissioner must possess the credentials, knowledge, and skills necessary to provide quality education in the public schools.
Course Information

College: Science  Department: Biology

Department Chair: Graham Worthy  Phone: 407-823-1333

Approved Graduate Faculty/Scholars: Lisa Chambers

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Number</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB</td>
<td>5xxxC</td>
<td>Wetland Ecology &amp; Biogeochemistry</td>
<td>4(2,3)</td>
</tr>
</tbody>
</table>

30 Character Abbreviation: WTL ECOL & BGC

Course Description (25 word limit)

Examination of wetland ecosystems, laws and policy, current research, global biogeochemical cycles, and relevant field and laboratory techniques.

New or revised Materials and Supply Fees? ☑ Yes  ☐ No  If yes, also complete the Materials and Supply Fee Request Form.

Repeat for credit? ☐ Yes  ☑ No  If yes, indicate the total times this course may be used in the degree program. __________________

Repeat within same semester? ☐ Yes  ☑ No

NOTE: For a repeatable course, indicate in the syllabus what will remain the same and what will change when the course is repeated. Also indicate who approves content before a course is repeated.

Prerequisite(s) and/or Corequisite(s): Graduate standing in the Dept. of Biology, or permission of instructor

Graded S/U? ☐ Yes  ☑ No

Split-Level Class: ☑ Yes  ☐ No

If offering a split-level class, complete this section even if it had been approved earlier for individual delivery.

List undergraduate split-level course: PCB 4xxxC

NOTE: Both the graduate and the undergraduate split-level syllabi must be approved through the established university process for approving courses so that there are two separate and complete syllabi for each course. The graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor. Attach both undergraduate and graduate syllabi to this form.

Term of Offering

When will the course be offered?

☐ Odd Fall  ☐ Odd Spring  ☐ Odd Summer  ☐ Every Semester

☐ Even Fall  ☑ Even Spring  ☐ Even Summer  ☐ Occasional

Intended Utilization of Course

The course will be used primarily as:

☐ Required Course  ☑ Elective Course
Justification for Course Addition or Course Revision

What is the rationale for adding or revising this course?
This class provides opportunities for graduate students to learn about wetland ecology and biogeochemical cycling and gain valuable field and laboratory skills.

What majors require or recommend this course for graduation? Elective for MS or PhD in Biology
If not a major requirement, what will be the source of students? Elective for MS or PhD in Biology; cross-listed undergrad
What is the estimated annual enrollment? 24

Possible duplications and conflicts with other departments or colleges should be discussed with appropriate parties. Please detail discussion you have had.

No similar courses are currently offered.

Justification for Course Deletion

Is this course a required course for graduation in a major or prerequisite? ☐ Yes ☐ No
If yes, have the involved major departments been informed, in writing, of proposed deletion? ☐ Yes ☐ No
If not, explain

Notes:

Approval Signatures

Department Chair

College Academic Standards

College Dean

Graduate Council

Vice President for Research and Dean of the College of Graduate Studies

Date 9-26-17

Date 10-23-17
The Graduate Council Curriculum Committee discourages the establishment of split-level classes. Graduate students are entitled to more challenging content, instruction, and assessment, which are difficult to provide in classes offered to undergraduates as well. Circumstances may compel a unit to propose a split-level class. In these cases, the proposal should indicate the reasons a split-level class is necessary and what long-term measures are being taken to provide undergraduates and graduates with appropriate coursework. In addition, it is important to differentiate each of the undergraduate and graduate course elements. To provide reviewers with a clear delineation of the differences between the 4000 and 5000 courses, Summary Tables 1 and 2 should be completed.

Please submit this form along with the completed Course Action Request (CAR) form. Include both the 4000 syllabus and the 5000 syllabus. The 5000 syllabus should bold any additions or differences.

Provide narrative rationale for split-level class:

A split-level format will provide graduate students an opportunity to take a more specialized class in ecology and gain exposure to concepts of biogeochemistry. Undergraduates will also benefit from a specialized elective course and exposure to a upper-level field and laboratory component. Also, because the topic is inherently interdisciplinary, the diversity in student backgrounds will enhance the exchange of ideas in the class.

Table 1—List any course objectives or content:

1) that is common to both the undergraduate and graduate syllabi but have been differentiated for undergraduate and graduate students. For example, an objective for undergraduates may require **identification** of a concept where the graduate objective may require **application**; or

2) in cases where entirely new objectives or content have been added to the existing undergraduate objectives and content, in the 5000 course column list any course elements that the graduate syllabus requires in addition to the elements of the undergraduate syllabus. For example, if there are 3 course readings in the undergraduate syllabus and a 4th reading was added for the graduate syllabus, list it in the 5000 course column and leave the 4000 course column blank.

<table>
<thead>
<tr>
<th>Course Element</th>
<th>4000 Course</th>
<th>5000 Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>engage in discussions of peer reviewed literature on current research</td>
<td>Lead discussions of peer reviewed literature</td>
</tr>
<tr>
<td>Exams</td>
<td>multiple choice, fill-in-the-blank, short answer, and essay questions</td>
<td>multiple choice, fill-in-the-blank, short answer, and essay questions, plus an additional essay prompt involving critical thinking and experimental design aspects.</td>
</tr>
</tbody>
</table>
Table 2—List different or additional assessment elements (course assignments and tests that count toward the grade). For example, if an undergraduate course assignment that requires students to read an article and write a reflection has been expanded to require graduate students to read a book and present it to the class, the two versions of this assignment would be contrasted in this table. If a third exam was added for graduate students, list it in the 5000 column.

<table>
<thead>
<tr>
<th>Course Element</th>
<th>4000 Course Assessment &amp; % of grade</th>
<th>5000 Course Assessment &amp; % of grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>documented participation in discussions, 3%</td>
<td>Presentation and leading discussion of journal article, 7%</td>
</tr>
<tr>
<td>Exams</td>
<td>Graded, 44%</td>
<td>Graded (includes extra essay), 46%</td>
</tr>
<tr>
<td>Lab Activities &amp; Assignments</td>
<td>participation, completed, correct assignments, 43%</td>
<td>participation, completed, correct assignments, 38%</td>
</tr>
<tr>
<td>Ecosystem Profile Project</td>
<td>Research paper and oral presentation, 10%</td>
<td>Research paper and oral presentation, 9%</td>
</tr>
</tbody>
</table>

For more information, contact the College of Graduate Studies (graduate@mail.ucf.edu or 407-823-2766) in Millican Hall 230.
Wetland Ecology and Biogeochemistry  
Spring 2018  
PCB 4xxxC – 4 credit hours

Contact: 2 hours per week lecture; 3 hours per week lab

Capacity: 24 students

Instructor: Dr. Lisa Chambers  
Rm 439, Biological Sciences Bldg. (BIO)  
Email: lisa.chambers@ucf.edu  
Office Hours:

Graduate Teaching Assistant: TBA  
Biological Sciences Bldg. (BIO)  
Email:  
Office Hours:

Prerequisite: B or better in PCB 3044, or permission of instructor

Course Website: Webcourses

Course description: This course will offer an in depth examination of wetland habitats, ranging from freshwater to marine, with a focus on the intersection of the biotic and abiotic attributes that make these ecosystems unique. The role of wetlands in the broader context of global biogeochemical cycles, current research in wetland ecology and biogeochemistry, and hands-on field and laboratory research techniques will be introduced.

Course goals:
- Understand the physical, biological, and chemical processes that define a wetland ecosystem.
- Understand the ecological function of wetlands within the landscape and in relation to global biogeochemical cycles.
- Discuss human valuation of wetlands, ecosystem services, and current laws and policies affecting wetland protection.
- Evaluate the application of wetland ecology and biogeochemical principles for water quality improvement and global climate change mitigation.


Performance Evaluation:
- Exams (2 total, 22% each) 44%
- Lab Activities & Assignments 43%
- Ecosystem Profile Project 10%
- Participation 3%

Total = 100%
**Exams:** One mid-term exam and a final exam will be given. The final exam will include both new material and a comprehensive assessment of your knowledge from the course. Exams may include multiple choice, fill-in-the-blank, short answer, and essay questions.

**Lab Activities & Assignments:** The scheduled laboratory meeting time will be used for a combination of class discussions, presentations, in-lab activities, field activities, and field trips. Each activity and field trip will include a written assignment due either at the end of class, or the following week (specific instructions will be provided with each assignment). There are no make-up labs. If you must miss a lab, review the missed exam/assignment policy outlined below and discuss the circumstance with the instructor to evaluate if the absence will be excused. Excused lab absences will be dealt with on a case-by-case basis using replacement assignments or adjusting point distributions. Unexcused lab absences will result in a zero for the missed assignment.

**Ecosystem Profile Project:** Each student is required to prepare a research paper (min. 5 pages) and oral presentation (15 min) on a high-profile, large wetland ecosystem of your choice. The project must include a minimum of 6 peer-reviewed citations and a detailed description of the unique physical, chemical, and biological characteristics of that system. Additional details on the assignment will be provided in class.

**Participation:** Undergraduate students are expected to actively participate in discussions of peer-reviewed literature lead by the graduate students. A failure to engage in discussions by answering questions and/or providing comments and questions will result in a reduction in your participation grade.

**Missed Exam/Assignment Policy:** Make-up mid-term exams or lab assignments will be provided for students who must miss due to official University business at which your presence was required (e.g. a university-sponsored team event). Students who miss an exam/assignment due to a conflicting event (e.g., trips required for work, observing a holiday, presenting at a conference, etc.) will be evaluated on a case-by-case basis; it will be up to the discretion of the instructor to determine if the student is eligible for a make-up exam/assignment. All students with prior knowledge they will miss an exam or assignment are expected to inform the instructor of the conflict at the beginning of the semester, and absolutely no later than **1 week prior** to the scheduled exam/assignment. Additionally, some form of documentation (e.g., letter from your coach, doctor’s note, conference program, etc.) must be provided at least 48 hours in advance of the scheduled exam/assignment to be eligible for a make-up. Acceptable forms of documentation can be determined through a discussion with the instructor.

Exams or assignments missed due to unforeseen illnesses of emergencies require the student to contact the professor promptly (e.g., within 24 hours or less) and provide documentation (a signed document from a doctor, police officer, judge etc.) **within one week.** The absence must have been caused by a valid emergency as defined by UCF and/or the professor, including but not limited to: major illness, serious family emergency, jury duty, military obligation, etc.
No make-up exams will be given for the final exam. Missing an exam or assignment for any reason that the instructor deems as unexcused will result in a grade of zero for that exam/assignment. Failure to meet the deadlines outline above for informing the instructor of your absence or providing appropriate documentation will results in a grade of zero.

Late Assignments: All deadlines are final. Late assignments will be deducted 20% for every day past the due date. Assignments will not be accepted on weekends or holidays. Once graded assignments have been returned or an answer key provided, any outstanding assignments will result in a grade of zero.

Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Minimum Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100%</td>
</tr>
<tr>
<td>A-</td>
<td>90-93%</td>
</tr>
<tr>
<td>B+</td>
<td>87-89%</td>
</tr>
<tr>
<td>B</td>
<td>84-86%</td>
</tr>
<tr>
<td>C+</td>
<td>77-79%</td>
</tr>
<tr>
<td>C</td>
<td>74-76%</td>
</tr>
<tr>
<td>C-</td>
<td>70-73%</td>
</tr>
<tr>
<td>D+</td>
<td>67-69%</td>
</tr>
<tr>
<td>D</td>
<td>64-66%</td>
</tr>
<tr>
<td>D-</td>
<td>60-63%</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60%</td>
</tr>
</tbody>
</table>

Grading and Evaluation: Students will be graded and evaluated based on the performance evaluation criteria outlined above. Students can access their current scores at any time using the Grade Book function of Webcourses. Final grades will be rounded to the nearest whole number. No adjustments will be made to final grades.

Classroom Conduct and Expectations:

- Class attendance and participation is expected. Lecture and lab will rely heavily on in-class discussion.
- Students should keep up with assigned readings by completing them prior to the class in which they will be discussed. All students should be prepared to discuss and ask questions during class.
- You will be responsible for both material presented in class and those materials assigned as readings (including textbook chapters, journal articles, etc.).
- Cheating or plagiarism of ANY kind will not be tolerated. The instructor will pursue disciplinary actions to the fullest extent possible, including (but not limited to) an automatic zero on any assignment in which cheating occurred.
- Students must be respectful and courteous to each other and the instructor at all times. Demeaning, abusive or otherwise foul language is prohibited.
- Talking on the cell phone (and cell phone ringing) is disruptive. All cell phones must be silenced before class begins. Do not make or receive calls during class under any circumstances. If you must use your phone, leave the classroom.
- Laptops are allowed in class for taking notes. Surfing the net, checking social media websites, or doing non-related work on a laptop during class is viewed as disrespectful and you will be asked to turn-off your computer or leave the class.
Class Schedule (subject to revision):
The dates and assignments/subjects/readings in this schedule are tentative, and can be changed at the discretion of the professor.

Class schedule (tentative):

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading</th>
<th>Lab Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to wetlands</td>
<td>1-2</td>
<td>Is it a wetland? A walk through the UCF arboretum</td>
</tr>
<tr>
<td>2</td>
<td>Wetland inventory, classification</td>
<td>3, 8</td>
<td>National Wetland Inventory exploration and field validation</td>
</tr>
<tr>
<td>3</td>
<td>Wetland hydrology</td>
<td>4</td>
<td>Water budgets, infiltration demo</td>
</tr>
<tr>
<td>4</td>
<td>Wetland biota, succession</td>
<td>6-7</td>
<td>Hydrologic indicator field identification</td>
</tr>
<tr>
<td>5</td>
<td>Wetland soils</td>
<td>5</td>
<td>Soil physical properties and field identification</td>
</tr>
<tr>
<td>6</td>
<td>Introduction to biogeochemistry</td>
<td>Supp.</td>
<td>Redox chemistry; hydric soils</td>
</tr>
<tr>
<td>7</td>
<td>Carbon cycle</td>
<td>Supp.</td>
<td>Greenhouse gas demo</td>
</tr>
<tr>
<td>8</td>
<td>Nitrogen and phosphorus cycle</td>
<td>Supp.</td>
<td>Everglades case study</td>
</tr>
<tr>
<td>9</td>
<td>Review, catch up</td>
<td></td>
<td>Mid-term Exam</td>
</tr>
<tr>
<td>10</td>
<td>Spring break- no class</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Treatment wetlands</td>
<td>13</td>
<td>Field trip: Orlando Wetlands Park (Christmas, FL)</td>
</tr>
<tr>
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<tr>
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<td>Supp.</td>
<td>Sea level rise exercise</td>
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Wetland Ecology and Biogeochemistry  
Spring 2018  
PCB 5xxxC – 4 credit hours

**Contact:** 2 hours per week lecture; 3 hours per week lab

**Capacity:** 24 students

**Instructor:** Dr. Lisa Chambers  
Rm 439, Biological Sciences Bldg. (BIO)  
Email: lisa.chambers@ucf.edu  
Office Hours:

**Graduate Teaching Assistant:** TBA  
Biological Sciences Bldg. (BIO)  
Email:  
Office Hours:

**Prerequisite:** Graduate standing in the Dept. of Biology, or permission of instructor

**Course Website:** Webcourses

**Course description:** This course will offer an in depth examination of wetland habitats, ranging from freshwater to marine, with a focus on the intersection of the biotic and abiotic attributes that make these ecosystems unique. The role of wetlands in the broader context of global biogeochemical cycles, current research in wetland ecology and biogeochemistry, and hands-on field and laboratory research techniques will be introduced.

**Course goals:**
- Understand the physical, biological, and chemical processes that define a wetland ecosystem.
- Understand the ecological function of wetlands within the landscape and in relation to global biogeochemical cycles.
- Discuss human valuation of wetlands, ecosystem services, and current laws and policies affecting wetland protection.
- Evaluate the application of wetland ecology and biogeochemical principles for water quality improvement and global climate change mitigation.


**Performance Evaluation:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (2 total, 23% each)</td>
<td>46%</td>
</tr>
<tr>
<td>Lab Activities &amp; Assignments</td>
<td>38%</td>
</tr>
<tr>
<td>Ecosystem Profile Project</td>
<td>9%</td>
</tr>
<tr>
<td>Participation/Article Discussion</td>
<td>7%</td>
</tr>
</tbody>
</table>

Total = 100%
Exams: One mid-term exam and a final exam will be given. The final exam will include both new material and a comprehensive assessment of your knowledge from the course. Exams may include multiple choice, fill-in-the-blank, short answer, and essay questions. **Graduate student exams will include an additional essay prompt involving critical thinking and experimental design aspects.**

Lab Activities & Assignments: The scheduled laboratory meeting time will be used for a combination of class discussions, presentations, in-lab activities, field activities, and field trips. Each activity and field trip will include a written assignment due either at the end of class, or the following week (specific instructions will be provided with each assignment). **There are no make-up labs.** If you must miss a lab, review the missed exam/assignment policy outlined below and discuss the circumstance with the instructor to evaluate if the absence will be excused. Excused lab absences will be dealt with on a case-by-case basis using replacement assignments or adjusting point distributions. Unexcused lab absences will result in a zero for the missed assignment.

Ecosystem Profile Project: Each student is required to prepare a research paper (min. 7 pages) and oral presentation (15 min) on a high-profile, large wetland ecosystem of your choice. The project must include a minimum of 8 peer-reviewed citations and a detailed description of the unique physical, chemical, and biological characteristics of that system. Additional details on the assignment will be provided in class.

Participation: **Graduate students are expected lead the class discussion of 1 peer-reviewed journal article that is related to the course material and chosen in collaboration with the instructor. Additionally, grad student are expected to participate in other student’s paper discussions. Failure to engage in discussions by answering questions and/or providing comments and questions will result in a reduction in your participation grade.**

**Missed Exam/Assignment Policy:** Make-up mid-term exams or lab assignments will be provided for students who must miss due to **official University business** at which your presence was required (e.g. a university-sponsored team event). Students who miss an exam/assignment due to a conflicting event (e.g., trips required for work, observing a holiday, presenting at a conference, etc.) will be evaluated on a case-by-case basis; it will be up to the discretion of the instructor to determine if the student is eligible for a make-up exam/assignment. All students with prior knowledge they will miss an exam or assignment are expected to inform the instructor of the conflict at the beginning of the semester, and absolutely no later than **1 week prior** to the scheduled exam/assignment. Additionally, some form of documentation (e.g., letter from your coach, doctor’s note, conference program, etc.) must be provided **at least 48 hours in advance** of the scheduled exam/assignment to be eligible for a make-up. Acceptable forms of documentation can be determined through a discussion with the instructor.

Exams or assignments missed due to unforeseen illnesses of emergencies require the student to contact the professor promptly (e.g., within 24 hours or less) and provide documentation (a signed document from a doctor, police officer, judge etc.) **within one week.** The absence must have been caused by a valid emergency as defined by UCF
No make-up exams will be given for the final exam. Missing an exam or assignment for any reason that the instructor deems as unexcused will result in a grade of zero for that exam/assignment. Failure to meet the deadlines outline above for informing the instructor of your absence or providing appropriate documentation will results in a grade of zero.

Late Assignments: All deadlines are final. Late assignments will be deducted 20% for every day past the due date. Assignments will not be accepted on weekends or holidays. Once graded assignments have been returned or an answer key provided, any outstanding assignments will result in a grade of zero.

Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100%</td>
</tr>
<tr>
<td>A-</td>
<td>90-93%</td>
</tr>
<tr>
<td>B+</td>
<td>87-89%</td>
</tr>
<tr>
<td>B</td>
<td>84-86%</td>
</tr>
<tr>
<td>B-</td>
<td>80-83%</td>
</tr>
<tr>
<td>C+</td>
<td>77-79%</td>
</tr>
<tr>
<td>C</td>
<td>74-76%</td>
</tr>
<tr>
<td>C-</td>
<td>70-73%</td>
</tr>
<tr>
<td>D+</td>
<td>67-69%</td>
</tr>
<tr>
<td>D</td>
<td>64-66%</td>
</tr>
<tr>
<td>D-</td>
<td>60-63%</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60%</td>
</tr>
</tbody>
</table>

Grading and Evaluation: Students will be graded and evaluated based on the performance evaluation criteria outlined above. Students can access their current scores at any time using the Grade Book function of Webcourses. Final grades will be rounded to the nearest whole number. No adjustments will be made to final grades.

Classroom Conduct and Expectations:

- Class attendance and participation is expected. Lecture and lab will rely heavily on in-class discussion.
- Students should keep up with assigned readings by completing them prior to the class in which they will be discussed. All students should be prepared to discuss and ask questions during class.
- You will be responsible for both material presented in class and those materials assigned as readings (including textbook chapters, journal articles, etc.).
- Cheating or plagiarism of ANY kind will not be tolerated. The instructor will pursue disciplinary actions to the fullest extent possible, including (but not limited to) an automatic zero on any assignment in which cheating occurred.
- Students must be respectful and courteous to each other and the instructor at all times. Demeaning, abusive or otherwise foul language is prohibited.
- Talking on the cell phone (and cell phone ringing) is disruptive. All cell phones must be silenced before class begins. Do not make or receive calls during class under any circumstances. If you must use your phone, leave the classroom.
- Laptops are allowed in class for taking notes. Surfing the net, checking social media websites, or doing non-related work on a laptop during class is viewed as disrespectful and you will be asked to turn-off your computer or leave the class.
Class Schedule (subject to revision):
The dates and assignments/subjects/readings in this schedule are tentative, and can be changed at the discretion of the professor.

Class schedule (tentative):

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading</th>
<th>Lab Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to wetlands</td>
<td>1-2</td>
<td>Is it a wetland? A walk through the UCF arboretum</td>
</tr>
<tr>
<td>2</td>
<td>Wetland inventory, classification</td>
<td>3, 8</td>
<td>National Wetland Inventory exploration and field validation</td>
</tr>
<tr>
<td>3</td>
<td>Wetland hydrology</td>
<td>4</td>
<td>Water budgets, infiltration demo</td>
</tr>
<tr>
<td>4</td>
<td>Wetland biota, succession</td>
<td>6-7</td>
<td>Hydrologic indicator field identification</td>
</tr>
<tr>
<td>5</td>
<td>Wetland soils</td>
<td>5</td>
<td>Soil physical properties and field identification</td>
</tr>
<tr>
<td>6</td>
<td>Introduction to biogeochemistry</td>
<td>Supp.</td>
<td>Redox chemistry; hydric soils</td>
</tr>
<tr>
<td>7</td>
<td>Carbon cycle</td>
<td>Supp.</td>
<td>Greenhouse gas demo</td>
</tr>
<tr>
<td>8</td>
<td>Nitrogen and phosphorus cycle</td>
<td>Supp.</td>
<td>Everglades case study</td>
</tr>
<tr>
<td>9</td>
<td>Review, catch up</td>
<td></td>
<td>Mid-term Exam</td>
</tr>
<tr>
<td>10</td>
<td>Spring break- no class</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>Treatment wetlands</td>
<td>13</td>
<td>Field trip: Orlando Wetlands Park (Christmas, FL)</td>
</tr>
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Hi Jana. Here's the updated CAR and our response from Chemistry (below). Is there anything else?

Ken Fedorka, PhD.
Associate Professor
Graduate Coordinator
Dept. Biology
University of Central Florida

From: Andres Campiglia
Sent: Tuesday, October 24, 2017 10:27 AM
To: Erica Walsh <Erica.Walsh@ucf.edu>
Cc: Kenneth Fedorka <Kenneth.Fedorka@ucf.edu>
Subject: RE: Possible Conflict for new Biology Class

Erica and Kenneth:
I see no conflict of interests.
Regards,

From: Erica Walsh
Sent: Monday, October 23, 2017 4:43 PM
To: Andres Campiglia <Andres.Campiglia@ucf.edu>
Cc: Kenneth Fedorka <Kenneth.Fedorka@ucf.edu>
Subject: FW: Possible Conflict for new Biology Class

Hi Dr. Campiglia,

Please see the below email from Kenneth Fedorka (Graduate Coordinator in Biology). Could you please review the attached course action request form to check if there are any conflicts with the proposed with our chemistry courses?

They require an answer in order for it to move onto the Graduate Curriculum Committee.

Thank you,
Erica

From: Kenneth Fedorka
Sent: Monday, October 23, 2017 4:31 PM
To: Erica Walsh <Erica.Walsh@ucf.edu>
Subject: Possible Conflict for new Biology Class

Hi Erica,

We have a new proposed course in Biology (see attached CAR). Could you pass this CAR along to the Graduate Coordinator for Chemistry to determine if they perceive any conflicts with the new course. If there are none, I will need to document the response to pass along to the Graduate Curriculum Committee.

Thanks,
Ken

Ken Fedorka, PhD.
Associate Professor
Graduate Coordinator
Dept. Biology
University of Central Florida
Fwd: Possible Conflict for new Biology Class

Jana Jasinski

Tue 10/24/2017 11:05 AM

To: COS Graduate Services <cosgrad@ucf.edu>

Categories: For Lisa

6 attachments (441 KB)

Draft: Sylabus_Chemistry_5secC.docx; ATT00001.htm; WTL ECOL & BGC graduate CAR.pdf; ATT00002.htm; WTL ECOL & BGC splitview Leonform.pdf; ATT00003.htm;

Sent from my iPhone

Begin forwarded message:

From: "Kenneth Fedorka" <Kenneth.Fedorka@ucf.edu>
To: "Jana Jasinski" <Jana.Jasinski@ucf.edu>
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Thanks,
Ken

Ken Fedorka, PhD.
Associate Professor
Graduate Coordinator
Dept. Biology
University of Central Florida
Course Action Request Form

Course Information

NOTE: Course additions and course revisions must be accompanied by a course syllabus and rationale.
Note: Departments must also submit an electronic syllabus to the college curriculum person.

College: COS
Department: Biology

Department Chair: Graham Worthy
Phone: 3-1333

Approved Graduate Faculty/Scholars:

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>Number</th>
<th>Title</th>
<th>Credit Hours</th>
<th>Ex.: (3,0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOT</td>
<td>5XXXL</td>
<td>Plant Microtechniques</td>
<td>2(0,6)</td>
<td></td>
</tr>
</tbody>
</table>

New or Proposed Revision

30 Char. Abbreviation: Plant Microtechniques

Course Description (25 word limit)

Introduction to techniques used in the preparation of microscope slides/specimens of vascular plants, including infecting organisms.

Will lab fees be charged? □ Yes □ No

Repeat for credit? □ Yes □ No If yes, indicate the total times this course may be used in the degree program.

Repeat within same semester? □ Yes □ No

NOTE: For a repeatable course, indicate in the syllabus what will remain the same and what will change when the course is repeated. Also indicate who approves content before a course is repeated.

Prerequisite(s) and/or Corequisite(s): BOT 4223C or permission of instructor Graded S/U? □ Yes □ No

Split-Level Class: □ Yes □ No

If offering a split-level class, complete this section even if it had been approved earlier for individual delivery.

List undergraduate split-level course: BOT 4XXXL

NOTE: Both the graduate and the undergraduate split-level syllabi must be approved through the established university process for approving courses so that there are two separate and complete syllabi for each course. The graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor. Attach both undergraduate and graduate syllabi to this form.

Term of Offering

When will course be offered?

□ Odd Fall □ Odd Spring □ Odd Summer □ Every Semester

□ Even Fall □ Even Spring □ Even Summer □ Occasional

Intended Utilization of Course

The course will be used primarily as:

□ Required Courses □ Elective Courses
Justification for Course Addition or Course Revision

What is the rationale for adding/changing this course?

This hands-on lab course will introduce students to the basics of collecting, fixing, staining, embedding, sectioning or otherwise preparing vascular plant samples for the production of permanent study microscope slides that serve as reference or voucher material specimens for various ecological, morphological, physiological and pathological studies involving plants.

What majors require or recommend this course for graduation?  
Biology, Biomedical Sciences, Nanotechnology, Chemistry

If not a major requirement, what will be the source of students?  

What is the estimated annual enrollment?  
12

Possible duplications and conflicts with other departments or colleges should be discussed with appropriate parties. Please detail discussion you have had.

---

Justification for Course Deletion

Is this course a required course for graduation in a major or prerequisite?  
☐ Yes  ☐ No

If yes, have the involved major departments been informed, in writing, of proposed deletion?  
☐ Yes  ☐ No

If not, explain:  
Course Description (25 word limit)

Introduction to techniques used in the preparation of microscope slides/specimens of vascular plants, including infecting organisms.

Notes:

---

Approval Signatures

Department Chair  

College Academic Standards  
Digitally signed by jjasinsk  
Date: 2017.10.23 14:35:06 -04'00'

College Dean  

Graduate Council  

Graduate Dean  

UCF College of Graduate Studies – P.O. Box 160112, Orlando, FL 32816-0112
Graduate Split-Level Class Action Request Form

The Graduate Council Curriculum Committee discourages the establishment of split-level classes. Graduate students are entitled to more challenging content, instruction, and assessment, which are difficult to provide in classes offered to undergraduates as well. Circumstances may compel a unit to propose a split-level class. In these cases, the proposal should indicate the reasons a split-level class is necessary and what long-term measures are being taken to provide undergraduates and graduates with appropriate coursework. In addition, it is important to differentiate each of the undergraduate and graduate course elements. To provide reviewers with a clear delineation of the differences between the 4000 and 5000 courses, Summary Tables 1 and 2 should be completed.

Please submit this form along with the completed Course Action Request (CAR) form. Include both the 4000 syllabus and the 5000 syllabus. The 5000 syllabus should bold any additions or differences.

What is the rationale for the split-level class?

Currently, the techniques employed in this course are not taught in any department at UCF but are of an application to any researcher that uses plant material as a primary or secondary focus. Thus, there has been extreme interest in these hands-on research methods by both graduate and upper level undergrad students from several departments (Biology, Chemistry, Nanotechnology).

Table 1

List any course objectives or content:

1) That is common to both the undergraduate and graduate syllabi but have been differentiated for undergraduate and graduate students. For example, an objective for undergraduates may require identification of a concept where the graduate objective may require application.

or

2) In cases where entirely new objectives or content have been added to the existing undergraduate objectives and content, in the 5000 course column list any course elements that the graduate syllabus requires in addition to the elements of the undergraduate syllabus. For example, if there are 3 course readings in the undergraduate syllabus and a 4th reading was added for the graduate syllabus, list it in the 5000 course column and leave the 4000 course column blank.

<table>
<thead>
<tr>
<th>Course Element</th>
<th>4000 Course</th>
<th>5000 Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature search for appropriate methods</td>
<td>NA</td>
<td>Grad students will identify methods specific to their research interests</td>
</tr>
<tr>
<td>Set of research slides</td>
<td>NA</td>
<td>Grad students will collect, prepare and make slide using the methods they have identified</td>
</tr>
<tr>
<td>Digital photography</td>
<td>NA</td>
<td>Grad students will photograph the slide they have produced</td>
</tr>
<tr>
<td>Oral presentation</td>
<td>NA</td>
<td>Grad students will give an oral presentation about their research using the images they have produced</td>
</tr>
</tbody>
</table>

Currently, the techniques employed in this course are not taught in any department at UCF but are of an application to any researcher that uses plant material as a primary or secondary focus. Thus, there has been extreme interest in these hands-on research methods by both graduate and upper level undergrad students from several departments (Biology, Chemistry, Nanotechnology).
Table 2

List different or additional assessment elements (course assignments and tests that count toward the grade). For example, if an undergraduate course assignment that requires students to read an article and write a reflection has been expanded to require graduate students to read a book and present it to the class, the two versions of this assignment would be contrasted in this table. If a third exam was added for graduate students, list it in the 5000 column.

<table>
<thead>
<tr>
<th>Course Element</th>
<th>4000 Course Assessment and % of grade</th>
<th>5000 Course Assessment and % of grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information, contact Dr. John Weishampel, Associate Dean, in the College of Graduate Studies.
Course Description: Introduction to techniques used in the preparation of microscope slides/specimens of vascular plants, including infecting organisms. Emphasis on fixation, embedding, sectioning, staining and interpretation of prepared materials.

Objectives:

- All students will learn techniques for light microscopy, which include: 1) general preservation methods for various plant tissues; 2) use of a rotary microtome; 3) free-hand sectioning methods; 4) paraffin embedding procedures; 5) staining protocols for various tissue types; and 6) maceration methods; 7) photography of slides

- All students will apply techniques learned during class to produce a collection of required microscope slides demonstrating good technique in collection, tissue preservation, staining and slide production.

Additional Graduate student requirements:

- Grad students will complete literature searches for specific techniques that apply to their individual research projects pertaining to their research/interests. Students will employ these techniques/stains to produce an additional set of slides demonstrating these techniques/stains

- Grad students will photograph the research slides using appropriate optics/microscope methods.

- Grad students will give oral presentations of their individual research, in the same style as a scientific meeting using the images captured above of their research slides.

Required material:
1.) Plant Microtechnique and Microscopy, by Stevin E. Ruzin, Oxford Univ. Press, Oxford. 1999
2.) Lab coat or other similar protective clothing
Suggested books:
1.) Plant Microtechniques and Protocols, by Edwrd Chee Tak Yeung and Claudio Stasolla [eds.], Springer, 2015

2.) Plant Microtechnique, by Donald A. Johansen, McGraw-Hill, 1940

Classroom Conduct: By enrolling at UCF, all students have agreed to abide by the Golden Rule. Please become familiar with this document at: http://www.goldenrule.sdes.ucf.edu/
Please also use common courtesy in class by arriving and departing on time, refraining from talking during class, and silencing cell phones.

Grading:
Lecture and lab are combined into one class grade that breaks down as follows:

All students:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syllabus quiz</td>
<td>5</td>
</tr>
<tr>
<td>Attendance</td>
<td>45</td>
</tr>
<tr>
<td>Midterm Exam</td>
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<td>Slide set</td>
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Additional Grad Student requirements:

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<tr>
<td>Lit. Search + Research Slides</td>
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<tr>
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<tr>
<td>Oral Presentation</td>
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Undergrad Total: 450
Grad Total: 650

89.5-100% = A, 79.5-89.4% = B, 69.5-79.4% = C; 59.5-69.4% = D; 0-59.4% = F

If you have a valid, documented reason for missing a lecture or laboratory session (from doctor, police, judge, official UCF event, etc.), you must contact me within 24 hours of the start of the class. Attendance will be taken at the beginning of each lab session. Closed-toe shoes are required by OSHA regulations in the laboratory at all times. A protective lab coat or similar protective clothing is also required. After the first week, if you are not wearing closed toed shoes you will be asked to leave and an unexcused absence will be recorded. There will be no smoking, eating, gum chewing or drinking in the laboratory. All long hair must be pulled back and securely fastened.

Disability Access Statement: The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations. No accommodations will be provided until the student has met with the professor to request accommodations. Students who need accommodations must be registered with Student Disability
services, student resource center room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Note that the instructor reserves the right to make changes to the syllabus or other aspects of the course at anytime. These changes will be announced in class.

two three-hour laboratories for 15 weeks, demonstrations on Monday

Week 1
Course overview, basic safety and working in the micro-technique laboratory
-chemical fixation methods
-field trip on campus to collect plant materials, begin tissue dehydration series

Week 2
-use of the light microscope, continue dehydration series, embed material
-hand sectioning, epidermal peels
-mounting and making semi-permanent slides using glycerol

Week 3
-ready paraffin embedded material for sectioning (prepare blocks)
-section sample material with the rotary microtome (make ribbons)
-serial sections

Week 4
-mount sections to slides
-stain sections:
  -staining with toluidine blue, phloroglucinol
  -multiple stain series

Week 5
-making chromosome preparations/squashes
-mounting and making permanent slides with Permount

Week 6
-exploring different stain series
-work on slide set

Week 7
-collect and dry material for use in clearings
-collect material for use in the SEM
-work on slide set

Week 8
-begin processing of leaf and floral clearings, mount slides
-work on slide set
Week 9
- using the scanning electron microscope
- work on slide set

Week 10
- using the scanning electron microscope
- work on slide set

Week 11
- intro to slide photography, Photoshop
- work on slide set

Week 12
- collect wood material and begin processing
- photomicrography
- work on slide set

Week 13
- maceration preparations of wood material
- work on slide set

Week 14
- final project presentations

Week 15
- final project presentations

Week 16
final exam – comprehensive review and exam
BOTANY 4XXXL/5XXXL
SPECIAL TOPICS:
PLANT MICROTECHNIQUES
SPRING 2018

Labs: M, W 9:30-12:20 BIO rm. # 206
Pre Requisites: BOT 4223C or Instructor permission  
Credit: 2(0,6)

Instructor: Dr. Elizabeth Harris  
Office: BIO 102A  
Email: elizabeth.harris@ucf.edu  
Office Hours: by appointment  
Phone: 823-1538

Course Description: Introduction to techniques used in the preparation of microscope slides/specimens of vascular plants, including infecting organisms. Emphasis on fixation, embedding, sectioning, staining and interpretation of prepared materials.

Objectives:

- All students will learn techniques for light microscopy, which include: 1) general preservation methods for various plant tissues; 2) use of a rotary microtome; 3) free-hand sectioning methods; 4) paraffin embedding procedures; 5) staining protocols for various tissue types; and 6) maceration methods; 7) photography of slides.

- All students will apply techniques learned during class to produce a collection of required microscope slides demonstrating good technique in collection, tissue preservation, staining and slide production.

Additional Graduate student requirements:

- Grad students will complete literature searches for specific techniques that apply to their individual research projects pertaining to their research/interests. Students will employ these techniques/stains to produce an additional set of slides demonstrating these techniques/stains.

- Grad students will photograph the research slides using appropriate optics/microscope methods.

- Grad students will give oral presentations of their individual research, in the same style as a scientific meeting using the images captured above of their research slides.

Required material:

1.) Plant Microtechnique and Microscopy, by Stevin E. Ruzin, Oxford Univ. Press, Oxford. 1999
2.) Lab coat or other similar protective clothing
Suggested books:
1.) Plant Microtechniques and Protocols, by Edwrd Chee Tak Yeung and Claudio Stasolla [eds.], Springer, 2015
2.) Plant Microtechnique, by Donald A. Johansen, McGraw-Hill, 1940

Classroom Conduct: By enrolling at UCF, all students have agreed to abide by the Golden Rule. Please become familiar with this document at: http://www.goldenrule.sdes.ucf.edu/
Please also use common courtesy in class by arriving and departing on time, refraining from talking during class, and silencing cell phones.

Grading: Lecture and lab are combined into one class grade that breaks down as follows:

All students:

<table>
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final exam – comprehensive review and exam
Graduate Equipment Fee Request Form

Forward to your college office.

This form is to be used for requests to add, change, or delete equipment fee requests for a program. All requests for the next catalog must be submitted by November 2 for the November agenda deadline of the Graduate Council Curriculum Committee.

Request routing:
1) Department Chair to College Dean’s Office; 2) Dean’s Office; 3) Graduate Council Curriculum Committee; 4) A list of approved requests will be forwarded to the provost for final approval. 5) University Board of Trustees — information only.

Under the rules of the Board of Trustees for the University of Central Florida, equipment fees may be assessed for the purchase, maintenance, and repair of equipment used by students in that graduate program. Fees take effect in the fall semester of each year. Departments must maintain detailed accounting of all expenditures and report them to the Dean of the College of Graduate Studies on July 1 of each year. Equipment Fee maximum per semester: $90.00 Full-time; $45.00 Part-time.

Request Information
Use one form for each program request:

Date Submitted: SEPTEMBER 28, 2017 College: ARTS & HUMANITIES
Department: SCHOOL OF PERFORMING ARTS Submitted by: KEITH KOONS
Degree program: MASTER OF ARTS IN MUSIC

Equipment Fees:

Graduate student enrollment per semester: 30 Full-time 10 $900 Full-time $900
Fee amount per semester: $45 FT

Part-time 20 $900 Part-time $900

Provide detailed Justification for the Request:

Include how the request will impact student learning outcomes. If appropriate, include a list of the courses served.
(Use additional sheet if necessary)

THIS EQUIPMENT FEE SERVES TO MAINTAIN PIANOS FOR STUDENT USE AND TO MAINTAIN AND REPLACE WIND, BRASS, STRING, AND PERCUSSION INSTRUMENTS. EVERY MUSIC STUDENT BENEFITS, AND ALMOST EVERY MUSIC COURSE IS SUPPORTED.
## Equipment Information

Provide information to detail the equipment to be replaced/maintained by the fee, its life span, and its cost. Include details on how the equipment costs are computed, where the equipment is located, and how the equipment is used by students. (Use additional sheet if necessary)

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**SEE ATTACHED LIST FOR FISCAL YEAR 2016-17**

**PLEASE NOTE: ALL EQUIPMENT FEES INCOME AND EXPENSES FOR THE MA IN MUSIC ARE COMBINED WITH BA IN MUSIC, BM AND BME DEGREES BY PRIOR AGREEMENT.**

Total Equipment Cost:

Total Maintenance Cost:

Total of all Costs: $50,927.98

Any special conditions or exemptions must be identified

---

## Payment Details

Account Number to Deposit Fees: 23170802

Item Type: Equipment Fee

Contact Person: BARBARA KELLY - HURSEY

Phone Number: 407-823-2263
Signatures

Recommend Approval (all approval levels must be signed)

Graduate Faculty Program Coordinator:
Print: KEITH KOLNEY Signature: Keith Korns Date: 9/29/17

Department Chair / Director
Print: MICHAEL KAINESTEIN Signature: 9/29/18

College Academic Standards
Print: Lynn Hapner Signature: 10/10/17

College Dean
Print: Jeffrey Moore Signature: 10/10/17

Graduate Council
Print:  Signature:  Date: 

Vice President for Research and Dean of the College of Graduate Studies:
Print:  Signature:  Date: 

Approval

Provost and Executive Vice President:
Print:  Signature:  Date: 

Distribution: After approval is received from the Provost, distribution will be to:

Department(s): College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
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**Total BD approved, Encumbered, Pending PO/IDT, Expenses, Revenue:** $23,440.00

**Available Budget or Overexpenditure (After Encumbered, Expenses, Revenue):** ($5,252.98)

**Available Budget or Overexpenditure (After BD Approved, Pending PO/IDT, Expenses, Revenue):** ($9,927.08)

**Estimated Expenses:** Robert Mart, RPT - Piano Tuning/Repair (April - June 2017) $1,000.00

**Available Balance (After Estimated Expenses):** $72,62
Graduate Equipment Fee Request Form

Forward to your college office.

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Request routing:

1) Department Chair to College Dean’s Office; 2) Dean’s Office; 3) Graduate Council Curriculum Committee;
4) A list of approved requests will be forwarded to the provost for final approval. 5) University Board of Trustees — information only.

Under the rules of the Board of Trustees for the University of Central Florida, equipment fees may be assessed for the purchase, maintenance, and repair of equipment used by students in that graduate program. Fees take effect in the fall semester of each year. Departments must maintain detailed accounting of all expenditures and report them to the Dean of the College of Graduate Studies on July 1 of each year. Equipment Fee maximum per semester: $90.00 Full-time; $45.00 Part-time.

Request Information

Use one form for each program request:

Date Submitted: 9/28/17

College: College of Arts & Humanities

Department: School of Visual Arts & Design

Master of Fine Arts: Emerging Media: Studio Art and the Computer

Submitted by: Jason Burrell

Degree program:

Equipment Fees:

Graduate student enrollment per semester: 18

<table>
<thead>
<tr>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>$90</td>
<td>$45</td>
</tr>
</tbody>
</table>

Fee amount per semester: $1440 (1200 FT/180 PT)

Provide detailed Justification for the Request:

Include how the request will impact student learning outcomes. If appropriate, include a list of the courses served.

(Use additional sheet if necessary)

As a curriculum making physical objects and experiences, equipment impacts all studio courses, specifically:

ART 5280 Serial Content
DIG 5487 Principles of Visual Language
ART 5696 Art, Design and Human Interactions
ART 5698 Concourse I
ART 5910 Studio Concentration I
DIG 6136 Design for New Media
ART 6683C Time Arts
ART 6687 Research Concentration I
ART 6689 Research Concentration II
ART 6699 Concourse II
ART 6911 Studio Concentration II

The outcomes of the degree depend upon manifesting contemporary practices and concepts through the traditional and digital tools this fee funds.
**Equipment Information**

Provide information to detail the equipment to be replaced/maintained by the fee, its life span, and its cost. Include details on how the equipment costs are computed, where the equipment is located, and how the equipment is used by students. (Use additional sheet if necessary)

<table>
<thead>
<tr>
<th>See attached list</th>
<th>Cost</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Equipment Cost:**

**Total Maintenance Cost:**

**Total of all Costs:**

Any special conditions or exemptions must be identified

---

**Payment Details**

Account Number to Deposit Fees: 23160804  
Equipment

Item Type:  
Contact Person: Christine Michel  
Phone Number: 407-823-0131
Signatures

Recommend Approval (all approval levels must be signed)

Graduate Faculty Program Coordinator:
Jason Burrell
Print: ___________________________ Signature: ___________________________ Date: 9/29/17

Department Chair / Director
Rudy McDaniel
Print: ___________________________ Signature: ___________________________ Date: 9/29/17

College Academic Standards
Print: ___________________________ Signature: ___________________________ Date: 10/6/17

College Dean
Print: ___________________________ Signature: ___________________________ Date: 10/6/17

Graduate Council
Print: ___________________________ Signature: ___________________________ Date: _______

Vice President for Research and Dean of the College of Graduate Studies:
Print: ___________________________ Signature: ___________________________ Date: _______

Approval

Provost and Executive Vice President:
Print: ___________________________ Signature: ___________________________ Date: _______

Distribution: After approval is received from the Provost, distribution will be to:

Department(s); College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies

UCF College of Graduate Studies - P.O. Box 160112, Orlando FL 32816-0112
<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>LOCATION</th>
<th>SOURCE</th>
<th>UNIT COST</th>
<th>TOTAL COST</th>
<th>LIFE SPAN</th>
<th>COST PER SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic design computers (e.g. Apple, Dell)</td>
<td>8</td>
<td>CEM105/OTC500</td>
<td>UCF Computer Store</td>
<td>$1,600</td>
<td>$12,800</td>
<td>5</td>
<td>$1,280.00</td>
</tr>
<tr>
<td>Software (e.g. 3-D Studio Max)</td>
<td>8</td>
<td>CEM105/OTC500</td>
<td>UCF Computer Store</td>
<td>$200</td>
<td>$1,600</td>
<td>3</td>
<td>$266.67</td>
</tr>
<tr>
<td>Large format photo printers (e.g. Epson, Cannon)</td>
<td>2</td>
<td>CEM105/OTC500</td>
<td>B&amp;H Photo</td>
<td>$5,500</td>
<td>$11,000</td>
<td>5</td>
<td>$1,100.00</td>
</tr>
<tr>
<td>Medium format photo printers (e.g. Epson, Cannon)</td>
<td>2</td>
<td>CEM105/OTC500</td>
<td>B&amp;H Photo</td>
<td>$2,000</td>
<td>$4,000</td>
<td>5</td>
<td>$400.00</td>
</tr>
<tr>
<td>Laser printer</td>
<td>1</td>
<td>CEM105/OTC500</td>
<td>UCF Computer Store</td>
<td>$200</td>
<td>$200</td>
<td>1.5</td>
<td>$66.67</td>
</tr>
<tr>
<td>Digital video camera (all ranges, e.g. Nikon, Cannon)</td>
<td>4</td>
<td>CEM105/OTC500</td>
<td>B&amp;H Photo</td>
<td>$600</td>
<td>$2,400</td>
<td>4</td>
<td>$300.00</td>
</tr>
<tr>
<td>Digital camera (stills, all ranges, e.g. Nikon, Cannon)</td>
<td>4</td>
<td>CEM105/OTC500</td>
<td>B&amp;H Photo</td>
<td>$2,000</td>
<td>$8,000</td>
<td>4</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Adobe, (e.g. Creative Cloud subscription)</td>
<td>8</td>
<td>CEM105/OTC500</td>
<td>University License</td>
<td>$103</td>
<td>$824</td>
<td>1</td>
<td>$412.00</td>
</tr>
<tr>
<td>Power tools (e.g. drill, saw, dry vac, bits)</td>
<td>5</td>
<td>CEM110/OTC650</td>
<td>Home Depot</td>
<td>$500</td>
<td>$2,500</td>
<td>5</td>
<td>$250.00</td>
</tr>
<tr>
<td>Tools (e.g. hammer, screwdriver, hand saw)</td>
<td>12</td>
<td>CEM110/OTC650</td>
<td>Home Depot</td>
<td>$200</td>
<td>$2,400</td>
<td>5</td>
<td>$240.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$45,724.00</strong></td>
<td></td>
<td></td>
<td><strong>$5,315.33</strong></td>
</tr>
</tbody>
</table>
College of Graduate Studies

Graduate Equipment Fee Request Form

Forward to your college office.

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Request routing:
1) Department Chair to College Dean’s Office; 2) Dean’s Office; 3) Graduate Council Curriculum Committee;
4) A list of approved requests will be forwarded to the provost for final approval. 5) University Board of Trustees — information only.

Under the rules of the Board of Trustees for the University of Central Florida, equipment fees may be assessed for the purchase, maintenance, and repair of equipment used by students in that graduate program. Fees take effect in the fall semester of each year. Departments must maintain detailed accounting of all expenditures and report them to the Dean of the College of Graduate Studies on July 1 of each year. Equipment Fee maximum per semester: $90.00 Full-time; $45.00 Part-time.

Request Information
Use one form for each program request:

Date Submitted: September 28, 2017

College: College of Education and Human Performance

Department: School of Teaching, Learning & Leadership

Submitted by: Maria Rusch

Degree program: Teacher Education M.A.T programs

Equipment Fees: Use of Teachlive and TeachAARS classroom simulator as well as equipment replacement.

Graduate student enrollment per semester: 40

Fee amount per semester: $1,600

Full-time 10 Part-time 30

Fee amount per semester: $64.00

Full-time Part-time $32.00

Provide detailed Justification for the Request:

Include how the request will impact student learning outcomes. If appropriate, include a list of the courses served.
(Use additional sheet if necessary)

The continuation of the fee will provide teacher candidates or future teachers with an opportunity to focus on best practices in the classroom by working in a safe, real-time, simulated classroom environment, and where immediate feedback is given from a teacher mentor.
**Equipment Information**

Provide information to detail the equipment to be replaced/maintained by the fee, its life span, and its cost. Include details on how the equipment costs are computed, where the equipment is located, and how the equipment is used by students. (Use additional sheet if necessary)

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Cost</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>TeachLive and TeachAARS classroom simulator (3 semesters)</td>
<td>$4,000</td>
<td></td>
</tr>
<tr>
<td>Equipment Replacement (3 semesters)</td>
<td>$800</td>
<td></td>
</tr>
</tbody>
</table>

Total Equipment Cost: $4,800

Any special conditions or exemptions must be identified

---

**Payment Details**

Account Number to Deposit Fees: 14230804

Item Type:  

Contact Person: Missi Feyer

Phone Number: 407-823-0303
Signatures

Recommend Approval (all approval levels must be signed)

Graduate Faculty Program Coordinator:
Print:  
Signature:  
Date:  

Department Chair / Director:
Print:  
Signature:  
Date:  

College Academic Standards:
Print:  
Signature:  
Date:  

College Dean:
Print:  
Signature:  
Date:  

Graduate Council:
Print:  
Signature:  
Date:  

Vice President for Research and Dean of the College of Graduate Studies:
Print:  
Signature:  
Date:  

Approval

Provost and Executive Vice President:
Print:  
Signature:  
Date:  

Distribution: After approval is received from the Provost, distribution will be to:
Department(s); College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
College of Graduate Studies

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Request Information

Use one form for each program request:

Date Submitted: September 28, 2017 College: College of Education and Human Performance

Department: School of Teaching, Learning & Leadership Submitted by: Maria Busch

Degree program: Education Leadership, M.Ed.

Equipment Fee: Services of three technicians for the TeachLive and TeachAARS simulator as well as replacement equipment.

Graduate student enrollment per semester: 154

Fee amount per semester: $2,944

Full-time 30 Part-time 124

Full-time $32.00 Part-time $16.00

Provide detailed justification for the request:

Include how the request will impact student learning outcomes. If appropriate, include a list of the courses served.

(Use additional sheet if necessary)

The continuation of this fee will allow future administrators the opportunity to focus on best practice when supervising their teachers in the classroom or conferencing with parents in a safe, real-time simulated environment, where immediate feedback is provided from a teacher mentor.
### Equipment Information

Provide information to detail the equipment to be replaced/maintained by the fee, its life span, and its cost. Include details on how the equipment costs are computed, where the equipment is located, and how the equipment is used by students. (Use additional sheet if necessary)

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Cost</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three (3) technicians for TeachLive and TeachAARS simulator (3 semesters)</td>
<td>$7,500</td>
<td></td>
</tr>
<tr>
<td>Equipment replacement fee (3 semesters)</td>
<td>$1,332</td>
<td></td>
</tr>
<tr>
<td><strong>Total Equipment Cost:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Maintenance Cost:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total of all Costs:</strong></td>
<td></td>
<td>$8,832</td>
</tr>
</tbody>
</table>

Any special conditions or exemptions must be identified

---

### Payment Details

Account Number to Deposit Fees: 14230804

Item Type: 

Contact Person: Missi Feyer

Phone Number: 407-823-0303
Signatures

Recommend Approval (all approval levels must be signed)

Graduate Faculty Program Coordinator:
Print: Walter J. Doherty Signature: [Signature] Date: 10/25/17

Department Chair / Director
Print: Michael C. Magner Signature: [Signature] Date: 10/11/17

College Academic Standards
Print: Valene A. Horsey Signature: [Signature] Date: 10/10/17

College Dean
Print: J.P. Mander Signature: [Signature] Date: 10/25/17

Graduate Council
Print: [Signature] Date: 

Vice President for Research and Dean of the College of Graduate Studies:
Print: [Signature] Date: 

Approval

Provost and Executive Vice President:
Print: [Signature] Date: 

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Department(s): College; Registrar; Associate Registrar; Institutional Knowledge Management; Academic Services; College of Graduate Studies
1. Course Additions

**College of Arts and Humanities Course Additions**

**ENC 5XXX** CAH-WRITE 0(0,0)

**Seminar for Peer Writing Consultants:** PR: Graduate Standing or C.I. Explore writing center research and practice on a professional level. *Spring, Fall.*

**Abbrev:** (30 of 30 chars) Seminar for Writing Consultant

Repeat For Credit: True Max Times: 3

Discussion with others: This course is part of the peer consultant professional development; there are no conflicts with other departments or discipline.

Rationale: The graduate students who work as peer writing consultants must attend these weekly seminars and focus on a research project. They do not need the additional credits, but the department would like the students to receive recognition for their work on their transcripts.

**ENC 6XXX** CAH-WRITE 3(3,0)

**Rhetoric of Health and Medicine:** PR: Graduate Standing or C.I. How health and medical rhetorics function in society; will study the rhetorical dimensions of clinical care, public health, patient advocacy, and personal health management. *Occasional.*

**Abbrev:** (22 of 30 chars) Rhet Health & Medicine

Discussion with others: This course is specific to the field of rhetoric and there should be no conflicts with other departments. However, English, COHPA, and Communications have been consulted and there are no issues. Emails attached.

Rationale: The rhetoric of health and medicine is a growing and important sub-field in Rhetoric and Writing Studies. Graduate students have successfully defended theses in the sub-field and have networked with COHPA and COM. We would like to make the opportunity to study in this area available to more students.

**College of Engineering and Computer Science Course Additions**

**CAP 5XXX** CECS-CS 3(3,0)

**Medical Image Computing:** PR: MAS 3105 and COP4020 or COT4210. This course provides students with the foundation necessary for understanding, visualizing, and quantifying medical images with computational methods. *Spring.*

**Abbrev:** (23 of 30 chars) Medical Image Computing

Discussion with others: There are no duplications or conflicts with other departments. We consulted with both Biomedical Sciences and Electrical and Computer Engineering, and both had no objections.
Attachment includes Two Syllabus (one from Spring 2016 and one from Spring 2017).

Rationale: This has been taught as a Special Topics (ST) course for the second time. The course fills a gap between biomedical/clinical sciences and computer science. Imaging Science is experiencing tremendous growth. Radiology applications offer unique opportunities to computer scientists such as developing computer algorithms for automated diagnosis systems, decision support systems, visualization algorithms, etc. However, unlike other fields, radiology and nuclear medicine, real clinical imaging applications require extensive knowledge about specific algorithms which are not available in machine learning, image processing, and computer vision courses.

**EEL 5XXX**

Power System Detection and Estimation: PR: EEL 4216. This is an advanced course to power systems engineering, designed to provide students with the knowledge of power system detection and estimation methods. *Occasional.*

Abbrev: (24 of 30 chars) Detection and Estimation

Discussion with others: N/A

Rationale: This course will provide students state-of-the-art knowledge of data-driven detection and estimation methods in power system based on synchrophasor measurements.

**College of Health and Public Affairs Course Additions**

**PAD 6XXX**

Advanced Concepts and Applications in Emergency and Crisis Management: PR: All core courses in Master of Emergency and Crisis Management. Combines knowledge and skills gained and applies them in an integrative manner to challenges facing emergency managers today. Provides foundation to be an effective leader in emergency management. *Spring, Summer, Fall.*

Abbrev: (30 of 30 chars) Adv Concpts and Apps Emer Mgmt

Discussion with others: Contacted Political Science department- No Conflicts - please see attachments.

Rationale: This course provides graduating students with a summative experience allowing them to tie together what they have learned. This course is designed to help students further recognize and develop their knowledge, understanding, and skills for working effectively in organizations and networks. The aim is for students to build on their strengths to be effective leaders and emergency management specialists.

Majors taking course: Master of Emergency and Crisis Management

**College of Medicine Course Additions**

**MDE 8XXX**

Diagnostic and Interventional Radiology Elective: PR: Completion of the M3 year. A fourth year elective for eligible medical students in diagnostic and interventional radiology. *Spring, Summer, Fall.*

Abbrev: (35 of 30 chars) Diagnostic/Interventional Radiology
Majors taking course: none

MDE 8XXX \hspace{1cm} COM-MED \hspace{1cm} 6(6,0)

Pediatric Ultrasound Elective: PR: Completion of the M3 year. This two or four week elective rotation, open to fourth year medical students, will provide a broad learning experience in pediatric ultrasound. \textit{Spring, Summer, Fall.}

Abbrev: (24 of 30 chars) Peds Ultrasound Elective
Majors taking course: none

MDI 8XXX \hspace{1cm} COM-MED \hspace{1cm} 6(6,0)

Acting Internship in Adult Orthopaedic Surgery: PR: Completion of the M3 year. This fourth year medical student rotation is structured to develop clinical skills in the six ACGME competencies as they apply to adult orthopaedic surgical care. \textit{Spring, Summer, Fall.}

Abbrev: (25 of 30 chars) AI in Adult Ortho Surgery
Majors taking course: None

\section*{College of Sciences Course Additions}

\textbf{Split Level Course}

BOT 5XXXL \hspace{1cm} COS-BIOL \hspace{1cm} 2(0,6)

Plant Microtechniques: PR: BOT 4223C or C.I. Introduction to techniques used in the preparation of microscope slides/specimens of vascular plants, including infecting organisms. \textit{Even Spring.}

Abbrev: (21 of 30 chars) Plant Microtechniques
Discussion with others: N/A
Rationale: This hands-on lab course will introduce students to the basics of collecting, fixing, staining, embedding, sectioning or otherwise preparing vascular plant samples for the production of permanent study microscope slides that serve as reference or voucher material specimens for various ecological, morphological, physiological and pathological studies involving plants.

Majors taking course: Biology, Biomedical Sciences, Nanotechnology, Chemistry

PCB 5XXXC \hspace{1cm} COS-BIOL \hspace{1cm} 4(2,3)

Wetland Ecology & Biogeochemistry: PR: Graduate standing in the Department of Biology or C.I. Examination of wetland ecosystems, laws and policy, current research, global biogeochemical cycles, and relevant field and laboratory techniques. \textit{Even Spring.}

Abbrev: (14 of 30 chars) WTL ECOL & BGC
Discussion with others: No similar courses are currently offered.
Rationale: This class provides opportunities for graduate students to learn about wetland ecology and biogeochemical cycling and gain valuable field and laboratory skills.
Majors taking course: Elective for MS or PhD in Biology
MAP 7XXX  COS-MATH  3(3,0)


Abbrev: (23 of 30 chars) Advanced Topics in PDEs

Discussion with others: Mechanical and Aerospace Engineering department was contacted and replied that there are no conflicts.

Rationale: Partial Differential Equations are widely used in mathematical modeling of sciences and engineering. This course will give graduate students in Mathematics the opportunity to gain valuable knowledge and skills in this important field. Majors taking course: Ph.D. in Mathematics

INR 6XXX  COS-POLS  3(3,0)

International Relations of Africa: PR: Graduate Standing or C.I. This seminar investigates international relations in the African context, with an explicit focus on implications for international security. Occasional.

Abbrev: (30 of 30 chars) International Relations Africa

Discussion with others: We have obtained email approval from the departments of History and Anthropology.

Rationale: The course will expand the department's current offerings for both the MA and PhD programs, which currently only offers regional graduate international relations coursework on the Middle East and Caspian Sea States. The course will also directly contribute to the graduate certificate in Intelligence and International Security. Majors taking course: None

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Rosen College of Hospitality Management Course Additions

HMG 6XXX  RCHM-HSP SERV  3(3,0)

Social Media in Hospitality and Tourism: PR: HMG 6446 or Graduate Director Permission. Analysis of hospitality/tourism industry social media marketing and management strategies. Spring.

Abbrev: (30 of 30 chars) Social Media in Hosp & Tourism

Discussion with others: The course syllabus was sent to Dr. Gary T. Leavens, Chair Department of Computer Science. He replied that: "Computer Science has no objection to these two classes: "Digital Marketing and Big Data Management for Hospitality and Tourism" or "Social Media in Hospitality and Tourism". We consider these specialized enough to the hospitality and tourism industry that they do not interfere with offerings in Computer Science, which are about more general principles of big data and social network analysis."

Rationale: Based on the feedback received from Rosen College students, faculty and the Hospitality Management Advisory board, this new course is recommended by the Hospitality Services Department to enrich the graduate curriculum in Hospitality Management. This course will also form part of a new graduate certificate in Hospitality & Tourism Technologies. Majors taking course: MS in Hospitality and Tourism Management
HMG 6XXX RCHM-HSP SERV 3(3,0)

Digital Marketing and Big Data Management for Hospitality and Tourism: PR: HMG 6446 or Graduate Director Permission. Overview of the utilization and application of digital marketing and big data management in the hospitality industry. Fall.

Abbrev: (28 of 30 chars) Dig Mktg Data Mgmt Hosp Tour

Discussion with others: The course syllabus was sent to Dr. Gary T. Leavens, Chair Department of Computer Science. He replied that: "Computer Science has no objection to these two classes: "Digital Marketing and Big Data Management for Hospitality and Tourism" or "Social Media in Hospitality and Tourism". We consider these specialized enough to the hospitality and tourism industry that they do not interfere with offerings in Computer Science, which are about more general principles of big data and social network analysis."

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2. Special Topics Additions

College of Engineering and Computer Science Special Topics Additions

CAP 6938 CECS-CS 3(3,0)

ST: Data Mining in Bioinformatics: PR: MAS 3105. Summarize computational techniques for bridging two fields: data mining and bioinformatics, for successful mining of large-scale biological data. Occasional.

Abbrev: (29 of 30 chars) Data Mining in Bioinformatics

Discussion with others: The Dept. of Statistics looked into this and saw some overlap with their courses in Data Mining Methodology. However, they wrote that "Department of Statistics has no objection to the proposed course."

EEL 5937 CECS-ECE 3(3,0)

Software-Defined Networking: PR: EEL 4781. Principles of internetworking architectures; and their projections on function placement and decomposition as well as various network protocol elements such as routing, naming, and addressing. Implications of network economics on the evolution and practice of network architectures and systems. Multi-provider inter-ISP economics: Pricing, peering, edge-to-edge tussle, neutrality, fairness, and openness. Networking and population effects and their impact on the scale of the network design: power laws and scale-free composition. Occasional.

Abbrev: (27 of 30 chars) Software-Defined Networking

Discussion with others: Engaged a conversation with CS faculty (Drs. Bassiouni, Zhou, Turgut, and Chatterjee) for their feedback. There were no objections (email conversation attached).

EEL 5937 CECS-ECE 3(3,0)

Advanced Memory Systems: PR: EEL 4768. The key goal of this class is to relate the fundamental concepts of computer architecture to current issues and research directions. The
course will study the potentials of new memory technologies, such as NVMs and Die-Stacked DRAM, for building future computing systems. *Occasional.*

**Abbrev: (23 of 30 chars)** Advanced Memory Systems

Discussion with others: Computer Science reviewed and didn't have objections

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEL 5937</td>
<td>CECS-EECS</td>
<td>3(3,0)</td>
<td></td>
</tr>
</tbody>
</table>

**Power System Detection and Estimation:** PR: EEL 4216. This is an advanced course to power systems engineering, designed to provide students with the knowledge of power system detection and estimation methods. *Occasional.*

**Abbrev: (24 of 30 chars)** Detection and Estimation

---

**College of Optics and Photonics Special Topics Additions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
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<td>OSE 6938</td>
<td>OPT-OPT</td>
<td>3(3,0)</td>
<td></td>
</tr>
</tbody>
</table>

**ST: Infrared Systems:** PR: GS, CI. Provides a means for determining infrared system performance. Topics include components, radiometry, diffraction, etc., which are combined to provide system resolution, sensitivity, and visual acuity. *Occasional.*

**Abbrev: (20 of 30 chars)** Detection and Estimation


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### 3. Course Revisions

**College of Arts and Humanities Course Revisions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMH 5566</td>
<td>Colloquium: Women in American History</td>
<td>3(3,0)</td>
</tr>
<tr>
<td>HIS 5XXX</td>
<td>Colloquium: History of Women and Gender</td>
<td>3(3,0)</td>
</tr>
</tbody>
</table>

PR: Graduate standing or senior standing or C.I.

Discussion with others: I have been in touch with Dr. MC Santana and she supports the revision. Email attached.

**Rationale:** We are revising this course so we can offer it regularly to both history MA students and students in the Gender Studies Certificate. Limiting the course to US history prevents many of our faculty from teaching the course. By removing the national specificity, we globalize the course, allowing a range of faculty to offer a transnational approach. We have faculty in Asian, and European history qualified to teach Women and Gender history in addition to Americanists. This revision will be useful for both History and Gender studies certificate MA students.

There are no programs that list AMH 5566.
TPA 5405  
**Theatre Management for Non-Majors** 3(3,0)

**Theatre Management**

PR: THE 2020 or THE 2000, graduate status, Graduate standing or C.I.

Study of university, community, and professional theatre management with special attention to the principles of management to include management skills/function and organizational systems/performance as they relate to theatre organizations/institutions.

**Abbrev (18 of 30): Theatre Mgmt for Non Majors - Theatre Management**

**Term Offered:** Odd Fall

**Rationale:** We are cleaning up the title. The students who are required to take this class are theatre majors, therefore the non-majors part of the form is misleading. **Majors taking course:** Theatre MA and TYA MFA students (elective)

There are no programs that list TPA 5405.

TPP 5754  
**Musical Theatre Voice I** 2(2,0)

PR: Admission to MA or MFA Musical Theatre program.

Introduction to Estill Voice study devoted to the diagnosis and development of Training Systems. Study of the singing voice anatomy and its application physiology of the voice, diction at a distance, and learning compulsory figures. Application of the figures to musical theatre performance placing particular emphasis upon vocal technique. *repertoire (spoken or sung) as a means of problem solving.*

**Term Offered:** Fall Odd Summer

**Rationale:** We are changing the class from performance oriented to pedagogical orientation. Focus on new class will be to train teachers towards certification as an Estill educator rather than performer. This course is up for 5-year review and we wish to continue this course. 

**Majors taking course:** Theatre MA

There are no programs that list TPP 5754.

TPP 6755  
**Musical Theatre Voice II** 2(2,0)

PR: Admission to MA and MFA Musical Theatre program.

Advanced voice study placing particular emphasis upon textual analysis and characterization.

**Term Offered:** Spring Even Summer

**Rationale:** We are changing the class from performance oriented to pedagogical orientation. Focus on new class will be to train teachers towards certification as an Estill educator rather than performer. This course is also up for 5-year review and we wish to continue this course.

**Majors taking course:** Theatre MA

There are no programs that list TPP 6755.
College of Engineering and Computer Science Course Revisions

COT-6600  Quantum Computing  3(3,0)
PR: COT-5405, COP 3503C.
This course introduces basic concepts in quantum circuits and quantum algorithms.
Term Offered: Occasional Spring
Discussion with others: There are no duplications with any departments. Physics said "We have absolutely no objection. In fact, this course should have been taught at the 5000 level all along, ... It’s accessible to undergraduate seniors in physics and computer science." The ECE department had no objections.
Rationale: There are currently two courses in quantum information science at the 6000-level: COT6600 "Quantum Computing" and COT6602 "Introduction to Quantum Information Theory". The instructor asks to change the level of the COT6600 to 5000-level so it can serve as an introductory field to quantum information science that is also available to undergraduates. There are several undergraduate students who are very much interested in this research topic but cannot take any course in this field. Interested graduate students can take the advanced follow-up COT6602.
There are no programs that list COT 6600.

ESI-5419C  Engineering Applications of Linear and Nonlinear Optimization  3(2,2)
ESI 5419  Engineering Applications of Linear and Integer Programming  3(3,0)
PR: ESI 4312 or ESI 5306.
Course: This course covers linear, nonlinear, and nonlinear optimization integer programming applications in production planning, staffing, engineering design, distribution networks, and other engineering areas. Focuses on practicing or analyses.
Term Offered: Occasional Odd Spring
Discussion with others: No conflicts as this is revising a preexisting course.
Rationale: This is a very important course for Industrial Engineering and Management Systems. This class offers student the state of the art applications using IEMS core knowledge, e.g., optimization, operations research, etc.
There are no programs that list ESI 5419C.

BME 5216C  Mechanics of Biostructures I  3(2,3)
PR: Graduate standing or C.I.
Part I of a two semester course. Mechanical analysis of hard and soft tissues and prosection lab on human anatomy and physiology.
There are no programs that list BME 5216C.

BME 5217C  Mechanics of Biostructures II  3(2,2)
PR: BME 5587C 5216C or C.I.
Part II of a two semester course. Cell physiology and engineering principles applied to analysis of cellular processes and prosection anatomy lab on human anatomy and physiology. There are no programs that list BME 5217C.

**BME 5268C**  Applied and Computational Biofluids  3(2,2)
**BME 6XXXC**  3(3,1)

PR: EML 3701 and 3701, EGM 3604 3601, BME 5267, or C.I.

Principles and foundations of applied fluid mechanics and computational methods to the human circulation.

**Rationale:** Increased content to justify move from 5XXX to 6XXX
Majors taking course: Bio-Medical Engineering
There is 1 program that lists BME 5268C: Bioengineering - Minor

**EML 6295**  Sensors and Actuators for Micro Mechanical Systems  3(3,0)
PR: EML 5060, EML 6211, or C.I.

**Rationale:** This course was scheduled to be offered in Spring 2015. However, it eventually was canceled due to the sabbatical leave of the instructor and no other MAE faculty was able to teach this subject. The MAE Department has a plan to offer it in Fall 2018 in order to continue this course on the course catalog.
There are no programs that list EML 6295.

**EML 5572**  Probabilistic Methods in Mechanical Design  3(3,0)
PR: EML 3500, STA 3032, 3032 and EML 3500 or EAS4200.
Uncertainty modeling in design. Use design and analysis of probabilistic mathematics to assess strength, stiffness, toughness, industrial equipment and stability. Applications, engineering systems (data analytics, quality control, and reliability engineering).

**Rationale:** The proposed revision on the course content has no duplications and conflicts with other departments and colleges.
There are no programs that list EML 5572.

**EMA 5108**  Surface Science  3(3,0)
PR: PHY 2049C and EGN 3365 or EMA 3706 or C.I.
Methods: This course focuses on the physics underlying the techniques used to analyze the surface region of chemical and physical analysis materials. This course also addresses the fundamentals of surfaces, with emphasis on ultra-high vacuum spectroscopies utilizing electron, ion and photon probes. These processes.

Rationale: EMA 5108 is an elective course for MSE graduate students. Due to the lack of faculty, it has not been offered in the five-year period. With four new faculty members joined MSE last year, we plan to offer EMA 5504 in Spring 2019. There are no programs that list EMA 5108.

EMA 5415  Electronic Principles of Materials Properties  3(3,0)
PR: EGN 3365 or EMA 3706 or C.I.
The course covers the fundamental concepts of band structure and bonding of materials, electrical and thermal conduction in metals, semiconductors and dielectric. The interaction between light and matter will be addressed and the important concepts such as excitons will be introduced.

Rationale: EMA 5415 is an elective course for MSE graduate students. Due to the lack of faculty, it has not been offered in the five-year period. With four new faculty members joined MSE last year, this course will be in Spring 2018. There is 1 program that lists EMA 5415: Materials Science and Engineering - Minor.

EMA 5504  Modern Characterization of Materials  3(2,2)
PR: EMA 5104 or C.I.
The course overviews the modern characterization instrumentation for contemporary materials science and engineering studies and aims to understand their scientific significance, operation of instrumentation (light, scanning, transmission, principles, and auger microscopy) for the characterization of structure, defects, composition, and surfaces. Technological applications.

Rationale: EMA 5504 is an elective course for MSE graduate students. Due to the lack of faculty, it has not been offered in the five-year period. With four new faculty members joined MSE last year, we plan to offer EMA 5504 in Spring 2019. There are no programs that list EMA 5504.

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**College of Health and Public Affairs Course Revisions**

PAF 7325  Policy and Program Evaluation for Public Affairs  3(3,0)
PR: Admission to Public Affairs Ph.D. or C.I. PR: PAF 7802 and PAF 7804.
The course is designed to use empirical information to assess the effectiveness of policies and programs in public and nonprofit settings. There are no programs that list PAF 7325.

SOW 5538  Full-Time MSW Generalist Field Integrative Seminar I  1(1,0)
PR: Admission to Master of Social Work program or C.I.; CR: SOW 5305, 5305 and SOW 5940.
The field education seminar for full-time MSW generalist students includes seminar and supervised practice of social work in an agency for 200 clock hours. Graded S/U.

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10
There are no programs that list SOW 5538.

**Full-Time MSW Generalist Field Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 5539</td>
<td>and Seminar II</td>
<td>3(3,0)</td>
</tr>
<tr>
<td></td>
<td>Full-Time MSW Generalist Field Integrative Seminar II</td>
<td>1(1,0)</td>
</tr>
</tbody>
</table>

PR: SOW 5538; CR: SOW 5306, 5306 and SOW 5940.

Field education seminar for full-time Master of Social Work generalist students; includes seminar and supervised practice of social work in an agency for 200 clock hours. Graded S/U.

**Rationale:**
The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.

There are no programs that list SOW 5539.

**Part-Time MSW Generalist Field Education**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 5565</td>
<td>and Seminar I</td>
<td>2(2,0)</td>
</tr>
<tr>
<td></td>
<td>Part-Time MSW Generalist Field Integrative Seminar I</td>
<td>1(1,0)</td>
</tr>
</tbody>
</table>

PR: SOW 5305; CR SOW 5306, 5306 and SOW 5940.

Field education seminar for part-time Master of Social Work MSW generalist students; includes seminar and supervised practice of social work in an agency for 150 clock hours. Graded S/U.

**Rationale:**
The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.

There are no programs that list SOW 5565.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 5566</td>
<td>and Seminar II</td>
<td>2(2,0)</td>
</tr>
<tr>
<td></td>
<td>Part-Time MSW Generalist Field Integrative Seminar II</td>
<td>1(1,0)</td>
</tr>
</tbody>
</table>

PR: SOW 5565; CR: SOW 5306, 5940.

Field education seminar for part-time Master of Social Work MSW generalist students; includes seminar and supervised practice of social work in an agency for 150 clock hours.
Graded S/U, students

Abbrev (30 of 30): PT MSW General Field/Seminar 2 PT MSW General Field Seminar 2
Graded SU: Yes No

Rationale: The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.
There are no programs that list SOW 5566.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 5567</td>
<td>2(2.0)</td>
<td>Part-Time MSW Generalist Field and Seminar III</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Part-Time MSW Generalist Field Integrative Seminar III</td>
</tr>
</tbody>
</table>

Field Education seminar course for part-time Master of Social Work MSW generalist students, includes seminar and supervised practice of social work in an agency for 100 clock hours. Graded S/U, students.

Abbrev (30 of 30): PT MSW General Field/Seminar 3 PT MSW General Field Seminar 3
Graded SU: Yes No

Rationale: The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.
There are no programs that list SOW 5567.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 6531</td>
<td>4(4.0)</td>
<td>Full Time MSW Clinical Field and Seminar I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full Time MSW Clinical Field Integrative Seminar I</td>
</tr>
</tbody>
</table>

PR: SOW 6123 and SOW 6424. CR: SOW 6940.
Field education seminar for full-time Master of Social Work students, includes seminar and supervised practice of social work in an agency for 300 clock hours. Graded S/U, students.

Abbrev (29 of 30): FT MSW CLIN Field/Seminar I FT MSW Clinic Field Seminar I
Graded SU: Yes No

Rationale: The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.
There are no programs that list SOW 6531.
Full Time MSW Clinical Field Education and Seminar II 4(4,0)
Full Time MSW Clinical Field Integrative Seminar II 2(2,0)

PR: SOW 6531. CR: SOW 6940.
Field Clinical field education seminar for full-time Master of Social Work clinical students; includes seminar and supervised practice of social work in an agency for 300 clock hours. Graded S/U.

Abbrev (29 of 30): FT MSW Clin Field/Seminar II FT MSW Clinic Field Seminar II
Graded SU: Yes No
Rationale: The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.
There are no programs that list SOW 6536.

Part-Time MSW Clinical Field Education and Seminar I 3(3,0)
Part-Time MSW Clinical Field Integrative Seminar I 2(2,0)

PR: SOW 5567; SOW 6123 and SOW 6424. CR: SOW 6940.
Field education seminar for part-time Master of Social Work students; includes seminar and supervised practice of social work in an agency for 225 clock hours. Graded S/U.

Abbrev (29 of 30): PT MSW Clin Field/Seminar I PT MSW Clinic Field Seminar I
Graded SU: Yes No
Rationale: The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.
There are no programs that list SOW 6561.

Part Time MSW Clinical Field Education and Seminar II 3(3,0)
Part Time MSW Clinical Field Integrative Seminar II 1(1,0)

PR: SOW 6561. CR: SOW 6940.
Field seminar education for part time Master of Social Work clinical students; includes seminar and supervised practice of social work in an agency for 225 clock hours. Graded S/U.

Abbrev (29 of 30): PT MSW Clin Field/Seminar II PT MSW Clinic Field Seminar II
Graded SU: Yes No
Rationale: The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course
was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.

There are no programs that list SOW 6562.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 6563</td>
<td>Part-Time MSW Clinical Field Education and Seminar III</td>
<td>2(2,0)</td>
<td>SOW 6562, CR: SOW 6940</td>
<td>Field education seminar for part-time MSW clinical students; includes seminar and supervised practice of social work in an agency for 150 clock hours. Graded S/U; students.</td>
</tr>
<tr>
<td>SOW 6563</td>
<td>Part-Time MSW Clinical Field Integrative Seminar III 1(1,0)</td>
<td>1(1,0)</td>
<td>SOW 6562, CR: SOW 6940</td>
<td></td>
</tr>
</tbody>
</table>

Abbrev (29 of 30): PT MSW Clin Field/Seminar III  PT MSW Clinic Field Seminar 3
Graded SU: Yes No

Rationale: The current course structure for the Generalist Field courses (Full-time and Part-time) combines the field hours and classroom seminar in one course. A new Generalist Field course was created to separate the field component and allow for pass/fail grading. Therefore, the existing classes are being restructured to remove the field component and change the now Seminar-only course to letter grading.

There are no programs that list SOW 6563.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 5149</td>
<td>Military and Veteran Culture with Historical Frameworks</td>
<td>3(3,0)</td>
<td>Admission to Master of Social Work program or C.I.</td>
<td>Thorough analysis Provides a detailed overview of the practice of social work with these military connected clients, families, and veteran systems. Provides the frameworks to assist social workers in better understanding, communicating and practicing with veterans and their families.</td>
</tr>
<tr>
<td>SOW 6XXX</td>
<td>Military Culture and Social Work Practice</td>
<td></td>
<td>Admission to Master of Social Work program or C.I.</td>
<td>Term Offered: Fall, Spring, Summer</td>
</tr>
</tbody>
</table>

Abbrev (29 of 30): Military & Vet Cult Hist Frame Military Culture and SW Pract

Rationale: The faculty of the School of Social Work has a military certificate. This objectives of this course has been elevated to include more clinical practice material. The name has been changed to reflect the clinical nature of the class. There are no programs that list SOW 5149.

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**College of Sciences Course Revisions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANG 6520C</td>
<td>Advanced Human Osteology</td>
<td>3(2,2)</td>
<td>Admission to Anthropology MA, Maya Studies GC, or C.I.</td>
<td>Advanced seminar on methods and theory pertaining to the study of the human skeleton.</td>
</tr>
</tbody>
</table>

There are no programs that list ANG 6520C.
ANG 6740C  Advanced Forensic Anthropology  3(2,2)
PR: Admission to Anthropology MA, Maya Studies GC, or C.I.
Advanced theory and laboratory methods in forensic anthropology, including forensic skeletal
analysis and interpretation.
There are no programs that list ANG 6740C.

PHY 5817L  Building Physics Apparatus  1(0,3)
PR: Graduate standing or senior standing and C.I.
Hands-on shop course. Focus will be machine shop practice with possible extension to printed
circuit boards and glass work.
Term Offered: Occasional
There are no programs that list PHY 5817L.

4. Course Deletions

**College of Arts and Humanities Course Deletions**

ENC 5225  CAH-ENG  3(3,0)
Theory and Practice of Document Usability  PR: Graduate status or senior standing or C.I.
Presents theory and practice of how document usability is assessed and improved.
Rationale: The class has not been taught since 2011. The faculty member who developed it no
longer works at UCF.
There are no programs that list ENC 5225.

EUH 5595  CAH-HIST  3(3,0)
Colloquium in Czarist Russia  PR: Graduate status or senior standing or C.I. Selected topics on
the literature of Russia under the Czars prior to 1917.
Discussion with others: n/a
Rationale: Course has not been taught. Faculty has no plans to teach it.
There are no programs that list EUH 5595.

LAH 6936  CAH-HIST  3(3,0)
Seminar in Latin American History  PR: Graduate standing or C.I. Research seminar in
selected topics in Latin American history. May be repeated for credit only when course content is
different.
Discussion with others: n/a
Rationale: Course has not been taught. Faculty have no plans to teach it.
There are no programs that list LAH 6936.
SPW 6358  CAH-LANG  3(3,0)
Modernismo  PR: Admission to Spanish M.A. program. The first Spanish American literary
movement (approximately 1880-1910) that impacted the 20th century Spanish language and
culture.
Discussion with others: n/a
Rationale: This is an elective course taught by a faculty member who has retired.
There are no programs that list SPW 6358.

MUE 6349  CAH-MUSIC 3(3,0) Advanced General Music  PR: Basic Teacher Certificate or
C.I. Analysis of current materials, new programs, and teaching techniques in general music, K-
12. Emphasis on practical applications. Examinations of psychological foundations of music
education. Discussion with others: n/a
Rationale: This course is not needed with the current options within the Music MA degree, and
we do not have faculty resources to teach it. There are no programs that list MUE 6349.

MUM 5806  CAH-MUSIC  3(3,0)
Performing Arts Management  PR: Graduate standing or senior standing or C.I. Structure of
nonprofit performing arts organization (PAOs), examining the fundamental elements of
administration, audience development, marketing, and fund-raising. Discussion with others:
n/a
Rationale: This course is not needed for the Music MA degree, and we do not have faculty to
教 teach it.
There are no programs that list MUM 5806.

MUT 5381  CAH-MUSIC  3(3,0)
Arranging and Composing Music  PR: Satisfactory placement tests in theory, sight-singing, and
ear training, and graduate status or senior standing or C.I. Arranging and composing music for
instrumental and vocal ensembles. Some emphasis on compositional techniques of the 20th
century.
Discussion with others: n/a
Rationale: Since we are teaching Composition V and VI, this course is unnecessary.
There are no programs that list MUT 5381.

FIL 6655  CAH-SVAD  3(3,0)
Intellectual Property Issues and Entertainment Law  PR: or CR: GEB 6115 or C.I. Exploration
of evolving intellectual property issues in the digital world, including basic contract requirements
for producing independent film and digital media products.
Discussion with others: n/a
Rationale: This course was developed and taught by a faculty member who no longer works at
UCF. It is not needed in our proposed new graduate curriculum. There are no programs that
list FIL 6655.
FIL 6670  CAH-SVAD  3(3,0)
From Screenplay to Deal  PR: Graduate Standing. Development of a film script to a marketable property, creating a strategy for and assembling the elements necessary to obtain financing.
Discussion with others: n/a
Rationale: This course was developed and taught by a faculty member who no longer works at UCF. It is not needed in our proposed new graduate curriculum. There are no programs that list FIL 6670.

PGY 5108C  CAH-SVAD  3(2,4) Advanced Techniques and Concepts in Photography  PR: PGY 2401C, PGY 3410C and PGY 4420C, or admission into MFA graduate program. Advanced techniques and concepts in photography, introducing historic and contemporary photographic works. May be used in the degree program a maximum of 3 times.
Discussion with others: n/a
Rationale: We haven't taught this course in years and don't plan to. There are no programs that list PGY 5108C.

TPA 6406C  CAH-THEA  3(1,6)
Theatre Management  PR: Admission to MFA graduate program or C.I. Study and application of concepts and tools of theatre management.
Discussion with others: n/a
Rationale: We do not have the personnel to teach this course and we do not have enough graduate students to justify the continuation of offering this course. There are no programs that list TPA 6406C.

College of Business Administration Course Deletions

TAX 6135  BA-ACCT  3(3,0)
Taxation of Corporations and Shareholders  PR: TAX 4001 and graduate standing. Federal taxation relating to corporate organization, distributions, liquidations, accumulations, and reorganizations.
Discussion with others: NA
Rationale: Course has not been offered in over five years There are no programs that list TAX 6135.

TAX 6405  BA-ACCT  3(3,0)
Taxation of Estates and Gifts  PR: TAX 4001 and graduate standing. Federal transfer taxes affecting gifts and estates.
Discussion with others: NA
Rationale: Course has not been offered in over 5 years
There are no programs that list TAX 6405.

ECO 6206  BA-ECON  3(3,0)
Macroeconomic Theory I  PR: ECO 3203 (or equivalent) and ECO 6403 (or equivalent), or C.I. An analysis of aggregate economic conditions including the determination of output, employment, and income levels.
Discussion with others: The Department of Finance is not interested in us teaching the course, and they are the only department that might have an interest in us doing so.
Rationale: The course was part of the core of our PhD program, which no longer exists. The said program will not return for the foreseeable future. There are no programs that list ECO 6206.

ECO 7423  BA-ECON  3(3,0)
**Applied Models** I PR: Acceptance in the PhD Program, and ECO 6416 or equivalent. Advanced coverage of standard regression methods and models plus nonparametric statistics. Discussion with others: The other departments in the College are no longer interested in us offering the course.
Rationale: This was an elective course for other PhD programs in the College of Business Administration.
There are no programs that list ECO 7423.

ECO 7428  BA-ECON  3(3,0)
**Time Series** PR: ECO 6424 (or equivalent) or C.I. Advanced treatment of time series analytical techniques including vector autoregression, cointegration and nonstationarity.
Discussion with others: The Department of Finance is not interested in us teaching the course.
Rationale: This was an elective course in our defunct PhD program. The said program will not be offered for the foreseeable future.
There are no programs that list ECO 7428.

ECP 6405  BA-ECON  3(3,0)
**Industrial Organization** PR: ECO 6118 (or equivalent) and ECO 6403 (or equivalent). An analysis of firm behavior in imperfectly competitive markets, strategic behavior, and economic policy directed at promoting competitive behavior.
Discussion with others: The Department of Finance is not interested in us offering the course.
Rationale: This was an elective course in our defunct PhD program. The said program will not return for the foreseeable future.
There are no programs that list ECP 6405.

MAR 6077  BA-MAR  3(3,0)
**Contemporary Marketing Issues** PR: Master's program of study foundation core or C.I. Investigation of contemporary marketing issues stemming from current social, economic, and political developments.
Discussion with others: NA
Rationale: Course has not been offered in over 5 years
There are no programs that list MAR 6077.

MAR 6151  BA-MAR  3(3,0)
**Global Marketing Strategy** PR: Master's program of study foundation core or C.I. Comprehensive study of marketing management and strategy from a global perspective.
Discussion with others: NA
MAR 6406  BA-MAR  3(3,0)
Sales Force Management  PR: Master’s program of study foundation core or C.I.
Comprehensive study of the analysis, methods and decisions involved in managing a
contemporary sales force. Discussion with others: NA
Rationale: Course has not been offered in over five year.
There are no programs that list MAR 6406.

MAR 6616  BA-MAR  3(3,0)
Marketing Research and Analysis  PR: Master’s program of study foundation core or C.I.
Comprehensive study of primary research methods and analysis tools used to generate
information for marketing decision making.
Discussion with others: NA
Rationale: Course has not been offered in over five years.
There are no programs that list MAR 6616.

**College of Education and Human Performance Course Deletions**

EDH 6044  ED-CFCS  3(3,0)
Career Exploration in Higher Education  PR: C.I. Explore the practical application in career
decision-making in Higher Education through personal and professional analysis.
Rationale: Departmental faculty request deletion of this course.
There are no programs that list EDH 6044.

EEX 6028  ED-CFCS  3(3,0)
Challenges of Poverty in Special Education  PR: C.I. Examines the impact of poverty on
students with disabilities in high poverty schools and the challenges this impact has on teaching
these students.
Rationale: Departmental faculty request deletion of this course.
There are no programs that list EEX 6028.

PEM 5408C  ED-CFCS  3(2,1)
Controlling Classroom Violence  PR: Graduate standing; certified teacher. A hands-on course
dealing with controlling disruption and violence as well as how teachers can protect themselves.
Rationale: Departmental faculty request deletion of this course.
There are no programs that list PEM 5408C.

SPM 5506  ED-CFCS  3(3,0)
Financial Issues in Sports and Fitness  PR: C.I. Examines basic financial concepts including
understanding annual reports, developing budgets, financial analysis, and examining methods for
increasing revenue and controlling cost in the sport industry.
### Rationale:
Departmental faculty request deletion of this course.

There are no programs that list SPM 5506.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Title</th>
<th>C.I. Requirement</th>
<th>Description</th>
<th>Rationale:</th>
<th>Programs</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHS 6433</td>
<td>ED-E&amp;HS</td>
<td>Developmental Process of the Resilient Family</td>
<td>C.I.</td>
<td>This course will examine models that focus on the resiliency of families throughout the life cycle and implications in counseling.</td>
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</tr>
<tr>
<td>PET 6135</td>
<td>ED-E&amp;HS</td>
<td>Historical Aspects of Sport and Physical Education</td>
<td>Graduate standing</td>
<td>This course examines the development of sport and physical education from historic to modern times. The focus will be on US sport development following 1865.</td>
<td></td>
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</tr>
<tr>
<td>SDS 6200</td>
<td>ED-E&amp;HS</td>
<td>Procedures for Group Testing</td>
<td>EGC 5005, EGC 6426, EDF 6481, or EDF 6482</td>
<td>Survey of various educational and psychological objective instruments used in schools to measure achievement, aptitude, interests, ability. Emphasis on administration and score interpretation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARE 5648</td>
<td>ED-TL&amp;L</td>
<td>Contemporary Visual Arts Education</td>
<td>Graduate standing or C.I.</td>
<td>Continued study of current programs and innovations in public school Visual Arts Programs.</td>
<td>DELETE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDM 6235</td>
<td>ED-TL&amp;L</td>
<td>Contemporary Issues of Middle Level Education</td>
<td>Graduate standing or C.I.</td>
<td>Critical analysis of the contemporary educational issues that directly impact middle level schools.</td>
<td>DELETE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

- Rationale: DELETE - This course is not a requirement of any CEDHP program and has no application to current programs.
- There are no programs that list ARE 5648.
- There are no programs that list EDM 6235.

**Programs:**

- MHS 6433
- PET 6135
- SDS 6200
- ARE 5648
- EDM 6235
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Prefix</th>
<th>Title</th>
<th>PR</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDM 6401</td>
<td>ED-TL&amp;L</td>
<td><strong>Principles of Middle Level Education</strong></td>
<td>PR</td>
<td>Development of a professional understanding of middle schools: rationale, organization, instructional strategies and characteristics of exemplary middle schools. Rationale: DELETE - This course is not a requirement of any CEDHP program and has no application to current programs. There are no programs that list EDM 6401.</td>
</tr>
<tr>
<td>LAE 5195</td>
<td>ED-TL&amp;L</td>
<td><strong>CFWP Teacher Consultant</strong></td>
<td>PR</td>
<td>This course is designed for Fellows of the CFWP Summer Institute who will plan, practice, and present writing inservice components to public schools. Rationale: DELETE - This course is not a requirement of any CEDHP program and has no application to current programs. There are no programs that list LAE 5195.</td>
</tr>
<tr>
<td>MAE 6145</td>
<td>ED-TL&amp;L</td>
<td><strong>Mathematics Curriculum, K-12</strong></td>
<td>PR</td>
<td>Development of historical and current issues and forces in mathematics curriculum. New mathematics programs and contemporary curricular issues will be emphasized. Rationale: DELETE - This course is not a requirement of any CEDHP program and has no application to current programs. There are no programs that list MAE 6145.</td>
</tr>
<tr>
<td>SSE 6617</td>
<td>ED-TL&amp;L</td>
<td><strong>Trends in Elementary School Social Studies Education</strong></td>
<td>PR</td>
<td>Historical development and current trends, strategies for inquiry instruction, intellectual, social, and personal dimensions of social studies. Rationale: DELETE - This course is not a requirement of any CEDHP program and has no application to current programs. There are no programs that list SSE 6617.</td>
</tr>
</tbody>
</table>

**College of Engineering and Computer Science Course Deletions**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Prefix</th>
<th>Title</th>
<th>PR</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CES 6910</td>
<td>CECS-CECE</td>
<td><strong>Research in Structural Engineering</strong></td>
<td>PR</td>
<td>Behavior and design of steel, concrete, or composite structures under cyclic, wind, earthquake, impact, or blast loading.</td>
</tr>
<tr>
<td>Course Code</td>
<td>Department</td>
<td>Title</td>
<td>Description</td>
<td>Prerequisites</td>
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</tr>
<tr>
<td>CES 6910</td>
<td>CECS-CS</td>
<td>Real-time Realistic Rendering</td>
<td>PR: CAP 4720 or CAP 5725. GPU Programming; State-of-the-art algorithms for: Real-time rendering of a lighting effects and realistic materials; Real-time volume rendering; real-time simulation and rendering of smoke.</td>
<td></td>
</tr>
<tr>
<td>CAP 6701</td>
<td>CECS-CS</td>
<td>Real-time Realistic Rendering</td>
<td>PR: CAP 4720 or CAP 5725. GPU Programming; State-of-the-art algorithms for: Real-time rendering of a lighting effects and realistic materials; Real-time volume rendering; real-time simulation and rendering of smoke.</td>
<td></td>
</tr>
<tr>
<td>COP 6614</td>
<td>CECS-CS</td>
<td>Operating Systems Techniques</td>
<td>PR: COP 5611. Techniques in the design and implementation of operating systems. Case studies of several experimental and commercial operating systems.</td>
<td></td>
</tr>
<tr>
<td>COT 6415</td>
<td>CECS-CS</td>
<td>Complexity of Parallel Computation</td>
<td>PR: CDA 5110, COT 6410. Theoretical models justification and buildability inherent parallelism and communication costs. Parallel computation thesis. NC, SC classes; paradigms of parallel algorithms.</td>
<td></td>
</tr>
<tr>
<td>EEE 6327</td>
<td>CECS-ECE</td>
<td>Design of Video Coding Systems</td>
<td>PR: EEL 4768C and EEL 4750. VLSI architectures and image/video coding algorithms, image/video coding standards, and architectural issues related with area/power/performance.</td>
<td></td>
</tr>
<tr>
<td>EEE 6508</td>
<td>CECS-ECE</td>
<td>Advanced Topics in Digital Signal Processing</td>
<td>PR: C.I. Advanced and current topics in digital signal processing, such as neural network, spectral analysis, and speech processing.</td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Department</td>
<td>Credits</td>
<td>Title</td>
<td>Prerequisites</td>
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<tr>
<td>EEL 5704</td>
<td>CECS-ECE</td>
<td>3(3,0)</td>
<td>Computer Aided Logical Design</td>
<td>PR: EEL 4742C. Design, analysis and synthesis of sequential logic circuits and systems. Data path and controller design using a hardware description language.</td>
</tr>
<tr>
<td>EEL 5771C</td>
<td>CECS-ECE</td>
<td>3(2,3)</td>
<td>Engineering Applications of Computer Graphics</td>
<td>PR: EGN 3420 or C.I. Computer graphics in engineering applications. Laboratory assignments.</td>
</tr>
<tr>
<td>EEL 5936</td>
<td>CECS-ECE</td>
<td>0(1,0)</td>
<td>Current Topics in EECS</td>
<td>PR: Open to all ECE graduate students. Lectures presented by ECE and national lectures will provide our students a broad view of the state of the art EE and CE fields. Graded S/U.</td>
</tr>
<tr>
<td>EEL 6463</td>
<td>CECS-ECE</td>
<td>3(3,0)</td>
<td>Antenna Analysis and Design II</td>
<td>PR: EEL 5462C. Aperture antennas, reflectors, and microstrip antennas.</td>
</tr>
<tr>
<td>EEL 6488</td>
<td>CECS-ECE</td>
<td>3(3,0)</td>
<td>Electromagnetic Theory II</td>
<td>PR: EEL 6482 or C.I. Scattering, diffraction, Green's function, and method of moments.</td>
</tr>
<tr>
<td>EEL 6823</td>
<td>CECS-ECE</td>
<td>3(3,0)</td>
<td>Image Processing II</td>
<td>PR: EEL 5820 or C.I. Advance topics in image processing: nonlinear and adaptive filtering morphological processing, color image processing, texture analysis, and image encoding.</td>
</tr>
</tbody>
</table>
EEL 6876  
**Current Topics in Artificial Intelligence**  
PR: EEL 4872 or CAP 4630 or C.I. Review of the state-of-the-art research in selected current topics in artificial intelligence. Includes extensive review of current literature and class discussion.  
**Rationale:** Course has not been offered in 5 years and there are not plans to offer in the near future.  
**There are no programs that list EEL 6876.**

EEL 6885  
**Software Engineering Quality Assurance Methods**  
PR: EEL 5881, EEL 6883. Methods for verification and validation of software quality, including software engineering metrics and models.  
**Rationale:** Course has not been offered in 5 years and there are not plans to offer in the near future.  
**There are no programs that list EEL 6885.**

EEL 6886  
**Software Testing Theory**  
PR: Graduate standing or C.I.; and Probability and Statistics; Calculus through Differential Equations; Numerical Methods and Matrix Algebra; Data Structures and Algorithms; C or C++ programming. Issues and current research in testing software-intensive systems. Application of mathematics, statistics, and operations research to software test; test automation; projects and analysis of literature.  
**Rationale:** Course has not been offered in 5 years and there are not plans to offer in the near future.  
**There are no programs that list EEL 6886.**

EEL 6897  
**Software Development for Real-Time Engineering Systems**  
PR: EEL 5881, EEL 6883. Issues associated with developing software for real-time systems, including parallel processing, task synchronization, and task scheduling.  
**Rationale:** Course has not been offered in 5 years and there are not plans to offer in the near future.  
**There are no programs that list EEL 6897.**

EIN 5317  
**Training System Design**  
PR: Seniors, post bac or graduate standing or C.I. How human performance deficiencies should be addressed from a systems design point of view. Manpower, personnel, and training considerations will be examined.  
**Rationale:** Course has not been offered in more than five years, and is not expected to be offered in the near future.  
**There are no programs that list EIN 5317.**
EIN 5392C  CECS-IEMS  3(2,2)
Manufacturing Systems Engineering PR: EIN 4391C or C.I. The integration of manufacturing
technologies and information processing concepts into a system for controlling the manufacturing
enterprise.
Rationale: Course has not been offered in more than five years, and is not expected to be offered
in the near future.
There are no programs that list EIN 5392C.

EIN 6647  CECS-IEMS  3(2,2)
Intelligent Simulation PR: EIN 6645 and EIN 6649C. The range of architectures and
technologies relative to the simulation of intelligent processes.
Rationale: Course has not been offered in more than five years, and is not expected to be offered
in the near future.
There are no programs that list EIN 6647.

EIN 6935  CECS-IEMS  3(3,0)
Advanced Ergonomics Topics PR: C.I. Seminar treatment of selected advanced topics in
ergonomics.
Rationale: Course has not been offered in more than five years, and is not expected to be offered
in the near future.
There are no programs that list EIN 6935.

EMA 6628  CECS-MSE  3(3,0)
Materials Failure Analysis PR: EMA 5104. Comprehensive overview of the general procedures
for failure analysis, failure theories, causes of failure, fractography of different failures, and
modern analytical tools.
Rationale: This course has not been offered in 5 years and is not expected to be offered in the
near future.
There are no programs that list EMA 6628.

**College of Health and Public Affairs Course Deletions**

SOW 5105  HPA-SOWK  3(3,0)
Human Behavior and Social Environment I: Individual PR: Admission to MSW program.
Study of human development and psychosocial functioning of individuals at various life stages
with particular attention to implications of human diversity.
Rationale: During a program review it was determined that having a Human Behavior in the
Social Environment I and Human Behavior in the Social Environment II course is redundant as
the material in Human Behavior in the Social Environment II is covered in Human Behavior in the
Social Environment I and in other classes in the curriculum (5305, 5306, 5235). We would like to
create one Human Behavior in the Social Environment class. There are no programs that list
SOW 5105.
SOW 5106  HPA-SOWK  3(3,0)
Human Behavior and Social Environment II: Social Systems Study of the patterns and
dynamics of families, groups, organizations, and communities from a social work and a systems
perspective.
Rationale: During a program review it was determined that having a Human Behavior in the
Social Environment I and Human Behavior in the Social Environment II course is redundant as
the material in Human Behavior in the Social Environment II is covered in Human Behavior in the
Social Environment I and in other classes in the curriculum (5305, 5306, 5235). We would like to
create one Human Behavior in the Social Environment class. There are no programs that list
SOW 5106.

SOW 6246  HPA-SOWK  3(3,0)
Policy Analysis and Social Change PR: Advanced standing in the Master of Social Work
program. Study of urban problems, policies, and planning from the perspective of their impact on
individuals and families.
Rationale: Course was replaced with SOW 5217 and SOW 6433 in 2018-19 catalog. Course is
no longer needed.
There are no programs that list SOW 6246.

College of Sciences Course Deletions
PCB 6035C  COS-BIOL  4(3,3)
Wetland Ecology PR: Admission to the M.S. in Biology, Ph.D. in Conservation Biology, PSM in
Conservation Biology, or Certificate in Conservation Biology, or C.I. Advanced study of ecological
structure, function, and diversity of wetlands. Lectures, discussions, and field-based labs,
including management, laws, and restoration.
Discussion with others: N/A
Rationale: Elements of this course are included in the curricula of other classes and a
stand-alone course is no longer relevant to the graduate curriculum. There are no
programs that list PCB 6035C.

PCB 6040  COS-BIOL  1(1,0) Methods of Data Collection and Analysis in Behavioral
Ecology PR: Admission to the M.S. in
Biology, Ph.D. in Conservation Biology, PSM in Conservation Biology, or Certificate in
Conservation Biology, or C.I. Discussion of methodology and data analysis in behavioral ecology.
The methods and analyses discussed each semester vary depending on thesis topics and
literature reviewed. Graded S/U. May be used in the degree program a maximum of 4 times.
Discussion with others: N/A
Rationale: This course was taught by a faculty member who is no longer at UCF. The department
does not have a faculty member who can offer this course. There are no programs that list PCB
6040.
PCB 6365  COS-BIOL  3(3,0)
**Environmental Physiology** PR: Admission to the M.S. in Biology, Ph.D. in Conservation Biology, PSM in Conservation Biology, or Certificate in Conservation Biology, or C.I. The effects of major environmental factors on the physiology of plants and animals.
**Discussion with others:** N/A
**Rationale:** The faculty member no longer intends to offer the course.
There are no programs that list PCB 6365.

PCB 6585C  COS-BIOL  4(3,2)
**Advanced Genetics** PR: Admission to the M.S. in Biology, Ph.D. in Conservation Biology, PSM in Conservation Biology, or Certificate in Conservation Biology, or C.I. Recent advances in genetics, stressing molecular and developmental trends.
**Discussion with others:** N/A
**Rationale:** The faculty member teaching the course no longer intends to offer the course.
There are no programs that list PCB 6585C.

PCB 6727  COS-BIOL  3(3,0)
**Comparative Animal Physiology** PR: Admission to the M.S. in Biology, Ph.D. in Conservation Biology, PSM in Conservation Biology, or Certificate in Conservation Biology, or C.I. Comparison of structural and functional adaptations of animal organ systems. Emphasis upon maximization of fitness under given environmental conditions.
**Discussion with others:** N/A
**Rationale:** The faculty member no longer intends to offer the course.
There are no programs that list PCB 6727.

MAP 6507  COS-MATH  3(3,0)
**Wave Propagation through Random Media** PR: MAP 2302, EEE 5542, or C.I. Development of mathematical models for laser communications and laser radar in atmospheric turbulence. Free-space propagation of Gaussian beams and classical theories of propagation. **Discussion with others:** N/A
**Rationale:** The department does not expect to offer this course in the near future due to the core faculties retired or left the department.
There are no programs that list MAP 6507.

PHY 5140C  COS-PHYS  3(3,2)
**Ion-Solid Interactions** PR: PHY 4604 or PHY 4324, graduate status or senior standing, or C.I. Physical principals and related scientific and technological applications of ion-solid interactions.
**Discussion with others:** N/A
**Rationale:** This course has become out of context with the mainstream departmental research areas, thus do not expect enrollment.
There are no programs that list PHY 5140C.
PHY 6353  COS-PHYS  3(3,0)
Accelerator Physics  PR: PHY 6347. Dynamics of charged particles in electromagnetic fields, electron optics, details of the electrostatic accelerator, the linear accelerator, and cyclic accelerators; properties of cavities and orbiting electrons; new accelerator schemes, including the free electron laser.
Discussion with others: N/A
Rationale: This course has become out of context with the mainstream departmental research areas, thus do not expect enrollment.
There are no programs that list PHY 6353.

STA 6207  COS-STAT  3(3,0)
Response Surface and Mixture Experiments  PR: STA 5205. Approximating response functions; first-order and second-order response surfaces; ridge systems; mixture problems, component proportions, and the analysis of mixture data.
Discussion with others: N/A
Rationale: Department does not see the course as being necessary or desirable for Ph.D. students to take. It is a course that would be an elective for a classical Ph.D. in statistics. Even under those circumstances, it would be taught infrequently. There are no programs that list STA 6207.

5. Course Continuations

**College of Arts and Humanities Course Continuations**

ENC 6429  CAH-ENG  3(3,0)
Teaching Writing With Computers  PR: Graduate standing in English or C.I. Immersion in the theories and practices of writing in electronic spaces including current discourse conventions from speech and print media.
Rationale: We are hiring two faculty in Tech Comm this year and one or both may be interested in teaching the pedagogy course.
There are no programs that list ENC 6429.

AFH 5259  CAH-HIST  3(3,0)
Colloquium in African History  PR: Graduate standing or C.I. Readings on selected topics in African History. May be used in the degree program a maximum of 3 times.
Rationale: We are filling for a continuation of this course. Dr. Walker is our only African historian. He teaches regularly in the Graduate Program, but he also teaches other classes, including Historiography of African Slavery. In the past 5 years, he has taught other courses. He will be teaching HIS 5259 in spring 2018.
There are no programs that list AFH 5259.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Department</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Description</th>
<th>Rationale</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPW 6217</td>
<td>CAH-LANG</td>
<td>Spanish American Prose I</td>
<td>Graduate standing or C.I.</td>
<td>A study of the principal characteristics of Spanish American prose from Colonial times to post-independence.</td>
<td>We recently added a new faculty member to teach. It will be taught in Fall 2018.</td>
<td>There are no programs that list SPW 6217.</td>
</tr>
<tr>
<td>MUE 5921</td>
<td>CAH-MUSIC</td>
<td>Music Education Workshop</td>
<td>Graduate standing or C.I.</td>
<td>Variable topics in Music Education to offer hands-on instruction in a workshop format. May be used in the degree program a maximum of 4 times only when course content is different.</td>
<td>The SPA-Music department is currently studying expansion of graduate offerings. We need to keep this course at this time because it may be used in a new concentration of Music Education within the MA degree.</td>
<td>There are no programs that list MUE 5921.</td>
</tr>
<tr>
<td>MUE 6080</td>
<td>CAH-MUSIC</td>
<td>Foundations of Music Education</td>
<td>Graduate standing in music.</td>
<td>Study of significant historical events that have shaped music education along with important research and philosophical writings. Designed for online delivery.</td>
<td>The SPA-Music department is currently studying expansion of graduate offerings. We need to keep this course at this time because it may be used in a new concentration of Music Education within the MA degree.</td>
<td>There are no programs that list MUE 6080.</td>
</tr>
<tr>
<td>MUE 6175</td>
<td>CAH-MUSIC</td>
<td>Teaching Music Performance</td>
<td>Graduate standing in M.A. or M.Ed. in Music Education or C.I.</td>
<td>Techniques and skills for planning, administering and directing performing music organizations. Examination of historical, sociological and philosophical foundations of music education.</td>
<td>The SPA-Music department is currently studying expansion of graduate offerings. We need to keep this course at this time because it may be used in a new concentration of Music Education within the MA degree.</td>
<td>There are no programs that list MUE 6175.</td>
</tr>
<tr>
<td>MUE 6945</td>
<td>CAH-MUSIC</td>
<td>Practicum in Music Education</td>
<td>Basic Teacher Certificate. MUE 6349, MUE 6610 and MUE 6630 or C.I.</td>
<td>Field experience in teaching music. May be repeated for credit.</td>
<td>The SPA-Music department is currently studying expansion of graduate offerings. We need to keep this course at this time because it may be used in a new concentration of Music Education within the MA degree.</td>
<td>There are no programs that list MUE 6945.</td>
</tr>
</tbody>
</table>
DIG 5810 CAH-SVAD 3(3,0)
Ways of Seeing: Cultural and Technological Perspectives PR: Admission to Film and Digital Media master's program or C.I. Cultural and technological perspectives formed by the intersection of media and cultural studies, art history and criticism, and cinema studies.
Rationale: The course is relevant to Digital Media research issues. It is not currently a required course, and given staffing issues cannot be offered as often as we would like. But we would like to retain it, update it, and offer it as soon as we can free up a faculty member to teach an elective graduate course.
There are no programs that list DIG 5810.

THE 5248 CAH-THEA 3(3,0)
Musical Theatre in History PR: Admission to MFA Musical Theatre Program. A chronological study of musical theatre from early Viennese operetta to the musicals of the modern age. Course will emphasize the work of composers, librettists, and lyricists as well as representative masterworks of a variety of genre. Emphasis will be placed upon historical trends and theatrical viability.
Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track.
There are no programs that list THE 5248.

THE 6948 CAH-THEA 4(4,0)
Professional Internship PR: Admission to the MFA Acting program. Field work as company members of the Orlando Shakespeare Theatre.
Rationale: Before revising this course last year, the course description was linked to Seaside Musical Theatre and the number of units didn't match our curriculum requirements. We revised the course last year to reflect the needs of our curriculum and will start offering it next fall. There are no programs that list THE 6948.

TPA 5095C CAH-THEA 1(1,1)
Rendering for Theatre I PR: Admission to the graduate program in Theatre or C.I. Traditional visual communication skills necessary for scenic, costume, and lighting design.
Rationale: This course is part of the MFA in Theatre Design curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep this course until further plans are made regarding this track. There are no programs that list TPA 5095C.

TPA 5175C CAH-THEA 1(1,1)
Rendering for Theatre II PR: TPA 5095C. Software and technology available for visual communication and documentation.
Rationale: This course is part of the MFA in Theatre Design curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep this course until further plans are made regarding this track. There are no programs that list TPA 5175C.
TPA 5946C  CAH-THEA  1(0,20)
Design Practicum I PR: Admission into the MFA Design program. Practical experience as a member of the production team as a prop master or assistant scenic, costume, lighting, or sound designer.
Rationale: This course is part of the MFA in Theatre Design curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep this course until further plans are made regarding this track. There are no programs that list TPA 5946C.

TPA 6087C  CAH-THEA  3(3,2)
Rationale: This course is part of the MFA in Theatre Design curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep this course until further plans are made regarding this track. There are no programs that list TPA 6087C.

TPA 6096C  CAH-THEA  3(2,2)
Advanced Rendering and Modeling for Theatre I PR: TPA 5095C. Technology relating to visual communication as well as 3 dimensional communication tools. May be used in the degree program a maximum of 3 times.
Rationale: This course is part of the MFA in Theatre Design curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep this course until further plans are made regarding this track. There are no programs that list TPA 6096C.

TPA 6947  CAH-THEA  1(0,20) Design Practicum III PR: TPA 5949C. Practical experience as a member of the production team as a scenic, costume, lighting, or sound designer in an area not previously designed.
Rationale: This course is part of the MFA in Theatre Design curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep this course until further plans are made regarding this track. There are no programs that list TPA 6947.

TPA 6948L  CAH-THEA  1(0,20)
Design Practicum IV PR: MFA Design Candidate, Design Practicum III. Practical experience as a member of the production team as a scenic, costume, lighting, or sound designer in an area not previously designed.
Rationale: This course is part of the MFA in Theatre Design curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep this course until further plans are made regarding this track. There are no programs that list TPA 6948L.

TPP 5125C  CAH-THEA  2(2,2)
Improvisation Studio PR: Acting for Youth Theatre. A study of spontaneous dramatic play and theatre exercises designed to develop self-discipline, creative freedom and resources for the stage and classroom.
Rationale: Recent faculty changes have resulted in altered plans for course offerings. For this time, the school would like to keep this option as an option for future course offerings. There are no programs that list TPP 5125C.

TPP 5273 CAH-THEA 2(2,0)
**Musical Theatre Acting I** PR: TPP 5157C. Integrated study in musical theatre acting, singing and movement applied to musical theatre performance, direction and choreography; emphasizing developing skills in textual and musical interpretation.

Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track. There are no programs that list TPP 5273.

TPP 5289C CAH-THEA 2(2,3)
**Acting Methodologies** PR: Admission to the graduate program in Theatre or C.I. Approaches to acting.

Rationale: Recent faculty changes have resulted in altered plans for course offerings. For this time, the school would like to keep this option as an option for future course offerings. There are no programs that list TPP 5289C.

TPP 5554C CAH-THEA 2(2,4)
**Musical Theatre Dance I** PR: MFA Musical Theatre Majors. Advanced dance study with particular emphasis on the development of principles of alignment, coordination, isolation, and sequencing.

Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track. There are no programs that list TPP 5554C.

TPP 5555C CAH-THEA 2(2,4)
**Musical Theatre Dance II** PR: TPP 5554C. Advanced dance study with particular emphasis on the development and expression of characterization in dance.

Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track. There are no programs that list TPP 5555C.

TPP 5935C CAH-THEA 2(2,2)
**Contemporary Practices in Youth Theatre** PR: Admission to MFA graduate program or C.I. Investigation of a particular subject in youth theatre. May be used in the degree program a maximum of 5 times.

Rationale: Recent faculty changes have resulted in altered plans for course offerings. For this time, the school would like to keep this option as an option for future course offerings. There are no programs that list TPP 5935C.
Musical Theatre Acting II  PR: TPP 5273. Advanced and integrated study with emphasis on the development of skills in musical theatre characterization.

Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track.

There are no programs that list TPP 6274.

Musical Theatre Master Class  PR: Admission to Theatre MFA Musical Theatre Track. Master classes conducted by permanent staff members and guest artists of the Seaside Music Theatre Company.

Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track.

There are no programs that list TPP 6279.

Musical Theatre Dance III  PR: TPP 5555C. Advanced dance study with particular emphasis on the development of jazz and tap technique.

Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track.

There are no programs that list TPP 6556C.

Musical Theatre Dance IV  PR: TPP 6556C. Advanced dance study with particular emphasis on the development of musical theater dance style and choreography.

Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track.

There are no programs that list TPP 6557C.

Playwriting for Young Audiences  PR: Dramatic Literature for Children. Practical experience in the creative process of playwriting for young audiences.

Rationale: Recent faculty changes have resulted in altered plans for course offerings. For this time, the school would like to keep this option as an option for future course offerings.

There are no programs that list TPP 6686.

Musical Theatre Voice III  PR: Admission to MFA Musical Theatre program. Continuation of Musical Theatre Voice II placing particular emphasis upon knowledge of musical theatre repertoire and its application to the history of the art form.
Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track. There are no programs that list TPP 6756.

TPP 6757 CAH-THEA 2(2,0)
Rationale: This course is part of the MFA in Musical Theatre curriculum. Since the track has been on hold, this course has not been offered recently. The school would like to keep it until further plans are made regarding this track. There are no programs that list TPP 6757.

College of Education and Human Performance Course Continuations

FLE 6695 ED-TL&L 3(3,0) Professional Development in Foreign Language Education
PR: FLE 4333 Foreign Language
Teaching in the Secondary School or teaching experience. Fluency in the target language and English. Introduction to the professional development of the foreign language educator by means of instruction in action research, grant writing, and writing for publication/conference presentation.
Rationale: Program area faculty have determined to continue this course without revisions. There are no programs that list FLE 6695.

College of Engineering and Computer Science Course Continuations

CES 6220 CECS-CECE 3(3,0)
Wind and Earthquake Engineering PR: CES 6209 or C.I. Wind characteristics; wind effects on structures; dynamic analysis for wind loads; nature of earthquake forces; response spectra and seismic design; wind and seismic codes.
Rationale: The course has not been taught due to limited manpower of teaching in the department. With recent addition of new faculty, the course has a healthy enrollment interest, particularly from non-thesis MS students. There are no programs that list CES 6220.

EEL 6619 CECS-ECE 3(3,0)
Nonlinear Robust Control and Applications PR: EEL 5173 and EEL 6621. Stability, performance and robustness of nonlinear systems with uncertainties, Lyapunov-based designs, recursive designs and nonlinear optimal designs.
Rationale: Department has indicated they intend to offer the course Fall 2018 and would like to have it continued. There are no programs that list EEL 6619.
EEL 6667  CECS-ECE  3(3,0)
Planning and Control for Mobile Robotic Systems  PR: EEL 5173 or EEL 5630.
Non-holonomic systems, kinematics and dynamics, trajectory planning and obstacle avoidance,
canonical terms, control design, stability, performance, and robustness.
Rationale: Department has indicated they intend to offer the course Spring 2019 and would like to
have it continued.
There are no programs that list EEL 6667.

College of Sciences Course Continuations

BOT 6623C  COS-BIOL  4(3,3)
Plant Ecology  PR: Admission to the M.S. in Biology, Ph.D. in Conservation Biology, or
Certificate in Conservation Biology, or C.I.  The study of the abiotic and biotic processes that
control the distribution of terrestrial flora at local, landscape, and global scales.
Rationale: Department wishes to retain this course for a future year (1-2 years) as it grows the
number of faculty with expertise in plant biology.  There are no programs that list BOT 6623C.

PCB 5435C  COS-BIOL  4(2,6)
Marine Ecology of Florida  PR: Admission to the M.S. in Biology, Ph.D. in Conservation Biology,
PSM in Conservation Biology, or Certificate in Conservation Biology, or C.I.  Survey of
experimental methods used in the study of marine communities in central and southern Florida,
combining field manipulation and readings from primary literature.
Rationale: Department plans to offer course in 2019 due to a recently hire faculty member.
There is 1 program that lists PCB 5435C: Biology (B.S.)

PCB 5485  COS-BIOL  3(3,0)
Models in Ecology  PR: PCB 3044, MAC 2311C (or equivalent), and graduate status or senior
standing or C.I.  A survey of how simulation models are applied to ecological questions of both a
theoretical and managerial nature.
Rationale: Department is currently searching for a new faculty hire in Ecoinformatics who would
have appropriate background to offer this course.
There is 1 program that lists PCB 5485: Biology (B.S.)

PCB 6328C  COS-BIOL  4(3,2)
Landscape Ecology  PR: Admission to the M.S. in Biology, Ph.D. in Conservation Biology, PSM
in Conservation Biology, or Certificate in Conservation Biology, or C.I.  Influence of spatial
heterogeneity on ecological processes.  Emphasizes quantitative methods (e.g., GIS, remote
sensing and modeling) to characterize landscape patterns and dynamics.
Rationale: Department is currently searching for new faculty hire in Ecoinformatics who would
have the appropriate background to offer this course.  There are no programs that list PCB
6328C.
ZOO 5486  COS-BIOL  4(4,0)
Mammalogy  PR: Admission to the M.S. in Biology, Ph.D. in Conservation Biology, PSM in Conservation Biology, or Certificate in Conservation Biology, or C.I. Study of the diversity and biology of mammals from an evolutionary perspective.
Rationale: Department plans to offer this course as a split-level with undergraduate Mammalogy. There are no programs that list ZOO 5486.

MAP 6420  COS-MATH  3(3,0)
Generalized Functions  PR: MAA 6506 or C.I. Spaces of test functions and their duals, calculus of distributions, convolution and tempered distributions, Fourier transforms of distributions, and applications to PDEs.
Rationale: Course is mainly offered for math PhD students. Currently several students are working on fields closely related to the topics covered by this course. Department intends to offer the course in Fall 18. There are no programs that list MAP 6420.

CPO 6075  COS-POLS  3(3,0)
Comparative Political Economy  PR: Graduate standing. Seminar in the political economy of advanced industrial societies, dealing with the interplay of citizens, governments, the economy, and political institutions.
Rationale: Offering course in next 2 years. Hired new assistant professor with expertise in this area. There are no programs that list CPO 6075.

EXP 5254  COS-PSYCH  3(3,0)
Human Factors and Aging  PR: Graduate standing, post bac, or senior standing with C.I. An overview of issues related to enhancing quality of life of elderly through the implementation of basic human factors principles in environmental and task design.
Rationale: Department recently hired 3 new faculty members that are experts in aging. It is anticipated the course will be offered in the near future as an elective. There are no programs that list EXP 5254.

INP 7071  COS-PSYCH  3(3,0)
Research Methods in Industrial and Organizational Psychology  PR: Admission to the doctoral Industrial and Organizational Psychology program and PSY 6216C. A review of research methodology in organizational settings, focusing on hypothesis testing, quasi-experimental designed, non-experimental designs, and sampling procedures.
Rationale: Recently added course back into Industrial and Organizational Psychology PhD curriculum. Department has plans to teach in upcoming spring terms. There are no programs that list INP 7071.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Department</th>
<th>Credits</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>STA 6246</td>
<td>Linear Models</td>
<td>COS-STAT</td>
<td>3(3,0)</td>
<td>Theoretical development of full rank linear statistical models, least squares and maximum likelihood estimation, interval estimation, hypothesis testing, and introduction to less than full rank models.</td>
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<td></td>
<td><strong>Rationale:</strong> Course is an elective in new Big Data Analytics PhD program and will be added to schedule in near future based on PhD enrollment. <strong>There are no programs that list STA 6246</strong>.</td>
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<tr>
<td>STA 6329</td>
<td>Statistical Applications of Matrix Algebra</td>
<td>COS-STAT</td>
<td>3(3,0)</td>
<td>Basic theory of determinants, inverses, generalized inverses, eigenvalues and eigenvectors, partitioned matrices. Diagonalization and decomposition theorems, least squares and statistical applications.</td>
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<tr>
<td></td>
<td><strong>Rationale:</strong> Course is required in new Big Data Analytics PhD program and will be added to schedule in near future based on PhD enrollment. <strong>There are no programs that list STA 6329</strong>.</td>
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<tr>
<td>STA 6347</td>
<td>Advanced Statistical Inference II</td>
<td>COS-STAT</td>
<td>3(3,0)</td>
<td>Minimax analysis, invariance, admissibility, maximal invariants, sequential analysis.</td>
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<td><strong>Rationale:</strong> Course is an elective in new Big Data Analytics PhD program and will be added to schedule in near future based on PhD enrollment. <strong>There are no programs that list STA 6347</strong>.</td>
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<tr>
<td>STA 6662</td>
<td>Statistical Methods for Industrial Practice</td>
<td>COS-STAT</td>
<td>3(3,0)</td>
<td>Variance components, PCRs, autocorrelation structures, charting, EVOP, design strategies, calibration, standards, and associated awards.</td>
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<td></td>
<td><strong>Rationale:</strong> Course is an elective in new Big Data Analytics PhD program and will be added to schedule in near future based on PhD enrollment. <strong>There are no programs that list STA 6662</strong>.</td>
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<tr>
<td>STA 6705</td>
<td>Data Mining Methodology III</td>
<td>COS-STAT</td>
<td>3(3,0)</td>
<td>Current topics in data mining.</td>
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<td></td>
<td><strong>Rationale:</strong> Course is an elective in new Big Data Analytics PhD program and will be added to schedule in near future based on PhD enrollment. <strong>There are no programs that list STA 6705</strong>.</td>
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