Agenda

1. Welcome and call to order

2. Review of minutes from October 23, 2019

3. General business

4. Program and Course proposals

5. Adjournment

Members and Administrators of the Graduate Council Curriculum Committee
Patricia Bockelman, Chair, College of Graduate Studies
Terrie Sypolt, Vice Chair, University Libraries
Elsie Olan, College of Community Innovation and Education
Andre Gesquiere, College of Sciences
Sonia Arellano, College of Arts and Humanities
Art Weeks, College of Engineering and Computer Science
Jihe (Jackie) Zhao, College of Medicine
Diane Andrews, College of Nursing
Axel Schülzgen, College of Optics and Photonics
Olga Molina, College of Health Professions and Sciences
Alex Rubenstein, College of Business Administration
Wei Wei, Rosen College of Hospitality Management
Shemeca Smith, Graduate Student Association
Tosha Dupras, College of Sciences, Administrator
Joellen Edwards, College of Nursing, Administrator
Ali Gordon, College of Engineering and Computer Science, Administrator
David Hagan, College of Optics and Photonics, Administrator
Lynn Hepner, College of Arts and Humanities, Administrator
Devon Jensen, College of Graduate Studies, Administrator
Glenn Lambie, College of Community Innovation and Education, Administrator
Saleh Naser, College of Medicine, Administrator
Linda Rosa-Lugo, College of Health Professions and Sciences, Administrator
Sevil Sonmez, College of Business Administration, Administrator
Alan Fyall, Rosen College of Hospitality Management, Administrator
1. College of Community Innovation and Education

College of Community Innovation and Education graduate program suspension

1. Marriage, Couples and Family Therapy Certificate
   - Due to changes in State law, training and licensure in this area is no longer needed. Courses will still be offered through other programs.

2. College of Sciences

College of Sciences course deletions

1. BSC 5332 Invasion Biology
   - Course not offered in 5 yrs, part of 2 suspended programs
2. BSC 5949 Cooperative Education
   - Course not offered in 5 yrs, not part of any programs
3. BSC 6949 Cooperative Education in Biology
   - Course not offered in 5 yrs, not part of any programs
4. PCB 5045 Conservation Biology
   - Course replaced by PCB 6042, part of a suspended program
5. PCB 5485 Models in Ecology
   - Course not offered in 5 yrs, not part of any programs
6. PHZ 5425C Electron Solid Interactions
   - Course not offered in 5 yrs, part of Physics MS & PhD
7. PHZ 5437 Nanoscale Surface Physics
   - Course not offered in 6 yrs, part of Physics MS & PhD

College of Sciences course revisions

1. CHS 6513 Quality Assurance for Forensic Scientists
   - Revision to term offered
2. PHY 5346 Electrodynamics I
   - Revision to course description
3. PHY 6347 Electrodynamics II
   - Revision to term offered and course description
3. Nicholson School of Communication and Media

Nicholson School of Communication and Media course continuation

1. COM 6463 Studies in Intercultural Communication

Nicholson School of Communication and Media course deletion

1. FIL 5853 Independent Cinematic Forms
   - Impact report: course only applies to the Emerging Media M.F.A., Feature Film Production Track as one of the internal restricted elective options.
   - Justification for deletion: Due to recent curriculum changes, some of the content of the course is no longer relevant or is covered in other electives in the program.

Nicholson School of Communication and Media program revision

1. Emerging Media MFA, Feature Film Production Track
   - Revision to delete course from list of internal electives-FIL 5853- course deletion in agenda above.

Nicholson School of Communication and Media course revisions

1. FIL 6614 Domestic and International Models of Distribution
   - Revision to pre-reqs
2. FIL 6640 Microbudget Production Management
   - Revision to pre-reqs

4. College of Engineering and Computer Science

College of Engineering and Computer Science new program

1. Computer Vision MS

College of Engineering and Computer Science course additions

1. BME 6231 Continuum Biomechanics: Modeling Biological Tissues and Structures
2. EEL 5862 Real-Time Systems
3. BME 6938 ST: Continuum Biomechanics (special topic)
4. CAP 5937 ST: Mixed Reality- Virtual Reality (special topic)
5. CAP 6938 ST: Mixed Reality - Augmented Reality (special topic)
6. BME 5740C: Modeling Techniques and Methodologies in Bioengineering
College of Engineering and Computer Science course revisions

1. EML 5228 Modal Analysis
2. EML 5271 Intermediate Dynamics

5. College of Business Administration

College of Business Administration course deletions

1. ACG 6065 Accounting Foundations
   • Course not taught in 10 yrs, not a part of any program curriculum
2. MAN 6244 Organizational Behavior
   • Course not taught in 5 yrs, not a part of any program curriculum
3. MAN 6446 Applied Negotiations in Management
   • Course not taught in 5 yrs, not a part of any program curriculum
4. TAX 6875 Contemporary Tax Topics
   • Course not taught in 5 yrs, course is an elective in Tax MST which has not accepted applications since Fall 2014

College of Business Administration course revision

1. REE 6465 Financial Analysis of Real Estate Firms
   • Revision from FIN 6465 to REE 6465 to reflect changes from general finance course to real estate finance focus
College of Community Innovation and Education - Graduate Program Suspension - Marriage, Couples and Family Therapy Certificate

2020-2021 Graduate Program Suspension

General Catalog Information

Select Program below, unless creating an Acalog Shared Core.

A Shared Core is a set of curriculum set up in the online catalog (Acalog) to serve multiple program pages. For more information, contact the Curriculum Specialist.

Program Type:*  
☐ Program  
☐ Shared Core

**Read before you begin**

TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

IMPORT curriculum data from the Catalog by clicking ⬇ in the top left corner.

FILL IN all fields required marked with an * after importing data. You will not be able to launch the proposal without completing required fields.

LAUNCH proposal by clicking ⬆ in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after proposal is launched.

College:*  
College of Community Innovation and Education

Unit / Department / College:*  
Department of Counselor Education & School Psychology

IMPORTANT NOTE: This form is to be used to SUSPEND graduate degree programs, tracks, or certificates. Please review the following information to determine if Differentiated Admission Cycle, Suspending, or Terminating is the correct curricular proposal at this time.

DIFFERENTIATED ADMISSION CYCLE proposals are used for a temporary halt of all new admission in the relevant degree program or track within a degree program. This serves as the first step in evaluating the health and viability of the program. This form indicates the program is
This form indicates the program is potentially progressing toward suspension. Depending on the type of differentiated admission cycle proposed, programs might still be able to admit new students or transfer in new students. The default admission cycle is admitting students one term per academic year. There are four types of differentiated admission cycles available.

- **Two term hiatus** - Admit students only one time per academic year.
- **One year hiatus** - Take a one year break from admitting students.
- **Two year hiatus** - Take a two year break from admitting students.
- **Three year hiatus** - Take a three year break from admitting students.

After the proposed differentiated admission cycle ends, the program will have to re-apply to continue the differentiated cycle longer otherwise the program will revert back to its original admission cycle. **It is important to note here that the Differentiated Admission Cycle proposal is an internal UCF academic action. No formal request is being made to the BOG.**

**Possible scenarios:**

You have a graduate degree that admits students every term in an academic year. You want to slow down admission because you are considering some curricular changes to the program. So you only want to admit students in one term in the next academic year. This would require the completion of a differentiated admission cycle proposal.

You have a graduate program that admits students once every fall semester. You want to stop admission so you can step back and consider the viability of the degree. So you don’t want to admit any new students for three years as you consider your programmatic options. You would still continue to work with any currently enrolled students. This would require the completion of a differentiated admission cycle proposal.

**Suspension is a curriculum proposal available for degree programs, tracks, or certificate programs.**

**Suspension proposals** are used for a temporary halt of all new enrollment in the relevant program, track, or certificate. In this proposal, you have more serious questions about the viability of the program and are on a more clear path to termination. **Academic units can suspend a program for up to 9 consecutive semesters.** During the "suspension" period, currently enrolled students can continue toward completion of the relevant program or students can be directed toward other programs. A teach-out plan is required. Program suspension paperwork will be required and submitted to the BOG. At the end of the suspension period, programs can move forward with terminating the program or make efforts to re-instate enrollments by submitting a reactivation proposal.

**Termination** of a program means that the program is officially "closed" and the CIP code associated with the program is removed at both the institutional and State University System level. Reasons for terminating a program may include:

1) Enrollments are no longer sufficient to justify the cost of instruction, facilities, and equipment; or the program duplicates offerings at the university.
2) The program is no longer aligned with the mission or strategic goals of the university, or is no longer aligned with the strategic goals of the Board of Governors.
3) The program no longer meets the needs of the citizens of Florida in providing a viable education or occupational objective.
4) Resources are no longer sufficient to deliver a high-quality program.
**Termination is a curriculum proposal available for degree programs, tracks, or certificate programs.**

Prior to requesting the termination of a program, all students must have completed the program, separated from the university, or have enrolled in a different UCF program.

Reasons for these three types of curricular proposals may include:
1) Curriculum is being revised.
2) Key faculty member(s) have left the university and replacements are being recruited for the program.
3) Accreditation standards have changed.
4) The University or program is re-prioritizing its resources and/or efforts.
5) Student demand for the program has diminished over time and the program is re-evaluating its viability.

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

<table>
<thead>
<tr>
<th>Proposal Type:</th>
<th>Graduate Program Suspension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is this a certificate program?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td>Name of program, track and / or certificate:</td>
<td>Marriage, Couples and Family Therapy Certificate</td>
</tr>
<tr>
<td>Unit(s) Housing Program:</td>
<td>Department of Counselor Education and School Psychology</td>
</tr>
<tr>
<td>Proposed Effective Term and Year:</td>
<td>Spring 2020</td>
</tr>
<tr>
<td>Proposed End Term and Year of the Suspension:</td>
<td>Spring 2021</td>
</tr>
<tr>
<td>If the suspension applies to multiple tracks, please list them here:</td>
<td></td>
</tr>
<tr>
<td>Brief description of the program, track, or certificate:</td>
<td>Certificate for advanced knowledge in working with couples and family systems.</td>
</tr>
<tr>
<td>Brief Rationale for the proposed program, track, or certificate suspension:</td>
<td>This training is not needed for licensure based on changes in state laws, therefore not necessary for students to pursue the certificate. Courses are still offered through other programs and students can take as desired and receive the knowledge if desired.</td>
</tr>
<tr>
<td>Type &quot;N/A&quot; in this text box*</td>
<td></td>
</tr>
<tr>
<td>After the Suspension, is the</td>
<td>Re-instate enrollments in the Program, track, or certificate</td>
</tr>
</tbody>
</table>
Suspension is the plan to?*  ☑ Terminate the Program

## Impact on Current Students/Faculty

**Are students currently enrolled in the program?**
- Yes ☑
- No ☐

**If yes, number of current students:** 16

**Last Term and Year students were admitted into the program**
Fall 2019

**Last Term and Year students will be able to graduate**
Will graduate all currently enrolled students by Spring 2021

**Brief description of student notification of the Suspension**
Catalog- Admission to this certificate is currently suspended- This will only apply to new applicants and will state reason as listed above

**Potential Student Costs/Expenses**
None

**External Agency Reporting**

**Affected Faculty**
- No faculty are affected due to courses all being offered in other gradate programs, no effect to any faculty members.

A “teach out” plan is required even if you plan to re-instate enrollment after the suspension period is complete. The “teach out” plan describes how you will handle all currently enrolled students. If you plan to re-instate enrollment, you need to describe how you will insure classes/resources will remain available and be ready once enrollment begins again. If you plan to terminate, this is for all current students specifying how they can finish the program or where students will be placed if moving to another program. The “teach out” plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if yes, when the completion date will be, whether students will be moved to another program, etc. Details about when core or elective course work needs to be completed. Also consider elements such as internships, practicums, key program exams, or thesis/dissertation in your teach out plan. **Please attach your teach out plan in the Attachments Section below.**

## Attachments

Please attach the required files by navigating to the Proposal Toolbox and clicking in the top right corner.

**Support from units involved**
- Attached ☑
- Not Applicable ☐
To suspend a degree program or track at a given level (i.e., master's, specialist, doctorate, professional program), attach the Board of Governors Temporary Suspension of New Enrollments in an Academic Program form, along with all required information. This form is located on the Graduate Council website within the Graduate Curriculum Committee tab at: https://graduatecouncil.ucf.edu/curriculum-committee/.

**Administration Use Only**

<table>
<thead>
<tr>
<th><strong>Catalog Ownership:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Program OID</td>
</tr>
<tr>
<td>Program Type</td>
</tr>
<tr>
<td>Degree Type</td>
</tr>
</tbody>
</table>

**Status**  
- Active-Visible
- Inactive-Hidden
Board of Governors, State University System of Florida
Temporary Suspension of New Enrollments in An Academic Program
In Accordance with BOG Regulation 8.012

UNIVERSITY:
_____UCF________________________________________________________

PROGRAM NAME: __________Marriage, Couples and Family Therapy Certificate
____________________________

DEGREE LEVEL(S): (B, M, S, PhD, etc.) _____M_______________

Does the temporary suspension of new enrollments impact the entire CIP code or just a major? *

If YES, CIP code: ______________________

If NO:

CIP code: ______________________

Name of major/track within the degree program:
___________________________________________

Effective term for temporary suspension: __________Spring 2020________________
(First term when no new students will be accepted into the program)

Effective term for anticipated reactivation:
___________________________________________
(First term when new students will be accepted into the program, if known)

Please use this form to notify the Board of Governors, State University System of Florida that new enrollments in an academic degree program or major/track have been temporarily suspended. This notification will initiate any necessary changes to articulation manuals and online search tools and ensure accurate data tracking and analysis. Please note that new enrollments in an academic program can be temporarily suspended for up to nine (9) consecutive terms, including summer. At the end of the 9th term the university shall notify the Board of Governors of the desired course of action (reactivation of new enrollments in the program or program termination). For more details please review Board of Governors’ regulation 8.012 Academic Program Termination and Temporary Suspension of New Enrollments at www.flbog.edu.
1. **Provide a short rationale for temporarily suspending new enrollments in the program.**

We are considering suspending the MFCT certificate program as we have had low enrollment over the past several years. Further, the initial thoughts were to create something that would help mental health and social work students obtain dual licensure through this certificate, which is not the case, therefore making this certificate not particularly helpful in the students professional development. If you see link below from the state, although the certificate appears to suggest that by taking the courses, students may be eligible for dual licensure, it is not needed. [https://floridasmentalhealthprofessions.gov/licensing/dual-licensure-as-a-marriage-and-family-therapist/](https://floridasmentalhealthprofessions.gov/licensing/dual-licensure-as-a-marriage-and-family-therapist/)

2. **State what steps have been taken to inform native and, in the case of baccalaureate programs, transfer students from the Florida College System of the intent to temporarily suspend new enrollments in the program?**

N/A as this is a graduate program

*NOTE: When the temporary suspension of new enrollments impacts the entire CIP code, the institution is temporarily suspending new student enrollments in the entire program and all of its majors/tracks. In this case the “YES, CIP code” option should be selected. The program is then flagged in the State University Data System (SUDS) and new enrollments cannot be reported. When the temporary*
suspension of new enrollments impacts only one major/track, the CIP code is retained and new students can continue to enroll and be reported in SUDS for the majors/tracks that are not suspended for new enrollments. Therefore, the “NO” option should be selected. For example, university A is offering a Bachelor in Computer Science (11.0101) with two majors: a Bachelor of Arts (BA) in Computer Science and a Bachelor of Science (BS) in Computer Science. When an institution intends to temporarily suspend new student enrollments in the entire program then the “YES, CIP code” option should be selected and no new students can be enrolled in either the BA or the BS majors. Alternatively, when an institution intends to temporarily suspend enrollments in only one major, e.g. the BA, then the program is not suspended and the institution continues to enroll new students in the BS major. When the latter happens, the CIP code is retained and the “NO” option should be selected and the CIP code and name of the major suspended for new enrollments should be provided.
Dear Dr. Barden,

Thank you for letting us know about this development in the College of Education. We will certainly let our students know about this. Will you be taking the description of the program out of the graduate catalog?

Best wishes,

Bonnie
Marriage Couples and Family Therapy Certificate Teach Out Plan

After reviewing the currently enrolled students in the MCFT Certificate, we have developed the following teach out plan.

There are currently 17 students enrolled in the certificate, with 16 of them being active.

<table>
<thead>
<tr>
<th>8 students</th>
<th>Graduating Fall 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 students</td>
<td>Anticipated graduation: August 2020</td>
</tr>
<tr>
<td>6 students</td>
<td>Will have 1 full year to complete the requirements for the certificate after suspension begins, from Spring 2020-Spring 2021</td>
</tr>
<tr>
<td>1 student</td>
<td>Enrolled, but not active and has chosen a different career route</td>
</tr>
<tr>
<td>17 students</td>
<td>TOTAL students</td>
</tr>
</tbody>
</table>

Upon reviewing each of their plan of study, they all are anticipated to graduate before Spring 2021, which is why we selected this date.

Once the decision has been approved to suspend the certificate, we will email all enrolled students to notify them of the changes and provide a list of course offerings of when to take the courses (will remain the same as what is published in the Catalog). Therefore, all students currently in the certificate will be able to successfully complete the requirements. There will be no impact on faculty as all courses will be offered as usual.
College of Sciences - Grad Course Deletion - BSC 5332 Invasion Biology

2020-2021 Graduate Course Deletion

**General Catalog Information**

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking \( \text{I} \) in the top right corner of the heading.

2. FILL IN all fields required marked with an \( * \). You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking \( \text{\downarrow} \) in the top left corner.

**Proposal Type:** Grad Course Deletion

**College:** College of Sciences

**Unit / Department / College:** Department of Biology

**Prefix:** BSC

**Code:** 5332

**Course Title:** Invasion Biology

**Full Title:** BSC 5332 Invasion Biology

**Course Description:** Course examines the causes and consequences of biological invasion.

**Credit Hours:**

**Class Hours:**

**Lab and Field Work Hours:**

**Contact Hours:**

**Prerequisite(s):**

**Corequisite(s):**

**Graded S/U?** Yes

https://ucf.curriculog.com/agenda:249/print
### Split-Level Class

- Yes
- No

### List undergraduate split-level course:

#### Term of Offering

- Odd Fall
- Even Fall
- Odd Spring
- Even Spring
- Odd Summer
- Even Summer
- Every Semester
- Occasional

#### Utilization of Course

- The course was a:
  - Required Course
  - Elective Course

#### Justification for Course Deletion

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking in the top left corner of the form and answer below according to the results.

- Is this course a required course for graduation or prerequisite for another course?
  - Yes
  - No

- If yes, have all relevant units been informed of the deletion?
  - Yes
  - No

If not, explain:

- Notes: course not offered in over 5-years.

#### Attachment

- Supporting documents from impacted units of the deletion:
  - Yes
  - No

### Administration Use Only

#### Catalog Ownership:

#### Course OID

#### Course Type

- Status: Active-Visible
  - Inactive-Hidden
<table>
<thead>
<tr>
<th>PeopleSoft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Group</td>
</tr>
<tr>
<td>Career</td>
</tr>
<tr>
<td>Print in Catalog</td>
</tr>
<tr>
<td>Effective Date</td>
</tr>
<tr>
<td>Lab Fee</td>
</tr>
<tr>
<td>CRSE_ID</td>
</tr>
</tbody>
</table>
Impact Report for BSC 5332

Source: 2020-2021 Graduate Catalog (WORKING COPY)

Full Course Title: BSC 5332 - Invasion Biology
Programs: Conservation Biology Graduate Certificate
Conservation Biology PSM
General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking in the top left corner.

Proposal Type: * Grad Course Deletion

College: * College of Sciences

Unit / Department / College: * Department of Biology

IMPORT COURSE NOW! Please use the import feature to import the course information from the Catalog by clicking in the top left corner of the form. Do not type the course prefix and code.

Prefix: * BSC

Code: * 5949

Course Title: * Cooperative Education

Full Title: * BSC 5949 Cooperative Education

Course Description: * No current syllabus exists.
<table>
<thead>
<tr>
<th>Graded S/U?</th>
<th>Yes ☐ No ☑</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split-Level Class:</td>
<td>Yes ☐ No ☑</td>
</tr>
</tbody>
</table>

**List undergraduate split-level course:**

**Term of Offering**

- **When was the course offered?**
  - ☐ Odd Fall
  - ☐ Even Fall
  - ☐ Odd Spring
  - ☐ Even Spring
  - ☐ Odd Summer
  - ☐ Even Summer
  - ☐ Every Semester
  - ☐ Occasional

**Utilization of Course**

- The course was a:
  - ☐ Required Course
  - ☑ Elective Course

**Justification for Course Deletion**

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking 📊 in the top left corner of the form and answer below according to the results.

- **Is this course a required course for graduation or prerequisite for another course?**
  - Yes ☐ No ☑

- **If yes, have all relevant units been informed of the deletion?**
  - Yes ☐ No ☑

- **If not, explain:**

  **Notes:** Course has not been offered in 5-years.

**Attachment**

- Supporting documents from impacted units of the deletion* ☐ Yes ☑ No

---

**Administration Use Only**

**Catalog Ownership:**

**Course OID**

**Course Type**

**Status**

- Active-Visible ☐
- Inactive-Hidden ☑
<table>
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</tr>
<tr>
<td>Lab Fee</td>
</tr>
<tr>
<td>CRSE_ID</td>
</tr>
</tbody>
</table>
Impact Report for BSC 5949

There are no results for this report.
# College of Sciences - Grad Course Deletion - BSC 6949 Cooperative Education in Biology

2020-2021 Graduate Course Deletion

## General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

2. FILL IN all fields required marked with an * . You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ⬤ in the top left corner.

### Proposal Type:

- Grad Course Deletion

### College:

- College of Sciences

### Unit / Department / College:

- Department of Biology

**IMPORT COURSE NOW!** Please use the import feature to import the course information from the Catalog by clicking ⬤ in the top left corner of the form. Do **not** type the course prefix and code.

#### Prefix:

- BSC

#### Code:

- 6949

#### Course Title:

- Cooperative Education in Biology

#### Full Title:

- BSC 6949 Cooperative Education in Biology

#### Course Description:

- No current syllabus exists.

#### Credit Hours:

#### Class Hours:

#### Lab and Field Work Hours:

#### Contact Hours:

#### Prerequisite(s):

#### Corequisite(s):

---

https://ucf.curriculog.com/agenda:249/print
**Graded S/U?**  
- Yes  
- No

**Split-Level Class?**  
- Yes  
- No

**List undergraduate split-level course:**

**Term of Offering**

When was the course offered?  
- Odd Fall  
- Even Fall  
- Odd Spring  
- Even Spring  
- Odd Summer  
- Even Summer  
- Every Semester  
- Occasional

**Utilization of Course**

The course was a:  
- Required Course  
- Elective Course

**Justification for Course Deletion**

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking in the top left corner of the form and answer below according to the results.

**Is this course a required course for graduation or prerequisite for another course?**  
- Yes  
- No

**If yes, have all relevant units been informed of the deletion?**  
- Yes  
- No

**If not, explain:**

Notes: course not offered in 5-years.

**Attachment**

Supporting documents from impacted units of the deletion*  
- Yes  
- No

**Administration Use Only**

**Catalog Ownership:**

**Course OID**

**Course Type**

**Status**  
- Active-Visible  
- Inactive-Hidden
<table>
<thead>
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<tr>
<td>Lab Fee</td>
</tr>
<tr>
<td>CRSE_ID</td>
</tr>
</tbody>
</table>
Impact Report for BSC 6949

There are no results for this report.
**Read before you begin**

1. TURN ON help text before starting this proposal by clicking ![help icon] in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ![launch icon] in the top left corner.

**Proposal Type:** Grad Course Deletion

**College:** College of Sciences

**Unit / Department / College:** Department of Biology

**Prefix:** PCB

**Code:** 5045

**Course Title:** Conservation Biology

**Full Title:** PCB 5045 Conservation Biology

**Course Description:** n/a

**Credit Hours:**

**Class Hours:**

**Lab and Field Work Hours:**

**Contact Hours:**

**Prerequisite(s):**

**Corequisite(s):**
Graded S/U?  Yes ☐ No ☐

Split-Level Class:  Yes ☐ No ☐

List undergraduate split-level course:

Term of Offering

When was the course offered?
☐ Odd Fall ☐ Even Fall ☐ Odd Spring ☐ Even Spring ☐ Odd Summer ☐ Even Summer
☐ Every Semester ☐ Occasional

Utilization of Course

The course was a:  ☐ Required Course ☐ Elective Course

Justification for Course Deletion

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking ☐ in the top left corner of the form and answer below according to the results.

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

If yes, have all relevant units been informed of the deletion?  Yes ☐ No ☐

If not, explain:

Notes:  This course is now taught as PCB6042.

Attachment

Supporting documents from impacted units of the deletion*  Yes ☐ No ☐

Administration Use Only

Catalog Ownership:

Course OID

Course Type

Status  ☐ Active-Visible ☐ Inactive-Hidden

https://ucf.curriculog.com/agenda:249/print
<table>
<thead>
<tr>
<th>PeopleSoft</th>
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<tbody>
<tr>
<td><strong>Academic Group</strong></td>
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<td><strong>Career</strong></td>
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<tr>
<td><strong>Lab Fee</strong></td>
</tr>
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<td><strong>CRSE_ID</strong></td>
</tr>
</tbody>
</table>
Impact Report for PCB 5045

Source: 2020-2021 Graduate Catalog (WORKING COPY)

Full Course Title: PCB 5045 - Conservation Biology
Programs: Conservation Biology Graduate Certificate
College of Sciences - Grad Course Deletion - PCB 5485 Models in Ecology
2020-2021 Graduate Course Deletion

**General Catalog Information**

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking in the top left corner.

<table>
<thead>
<tr>
<th>Proposal Type:*</th>
<th>Grad Course Deletion</th>
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</thead>
<tbody>
<tr>
<td>College:*</td>
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<tr>
<td>Unit / Department / College:*</td>
<td>Department of Biology</td>
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**IMPORT COURSE NOW!** Please use the import feature to import the course information from the Catalog by clicking in the top left corner of the form. Do not type the course prefix and code.

<table>
<thead>
<tr>
<th>Prefix:*</th>
<th>PCB</th>
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</thead>
<tbody>
<tr>
<td>Code:*</td>
<td>5485</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Title:*</th>
<th>Models in Ecology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Title:*</td>
<td>PCB 5485 Models in Ecology</td>
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<table>
<thead>
<tr>
<th>Course Description:*</th>
<th>This course has no current syllabus.</th>
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<tbody>
<tr>
<td>Credit Hours:</td>
<td></td>
</tr>
<tr>
<td>Class Hours:</td>
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<td>Lab and Field Work Hours:</td>
<td></td>
</tr>
<tr>
<td>Contact Hours:</td>
<td></td>
</tr>
<tr>
<td>Prerequisite(s):</td>
<td></td>
</tr>
<tr>
<td>Corequisite(s):</td>
<td></td>
</tr>
</tbody>
</table>

Graded S/U? [ ] Yes [ ] No
Split-Level Class: Yes ☐ No ☐

List undergraduate split-level course:

Term of Offering

When was the course offered?
- Odd Fall ☐ Even Fall ☐ Odd Spring ☐ Even Spring ☐ Odd Summer ☐ Even Summer ☐
- Every Semester ☐ Occasional ☐

Utilization of Course

The course was a:
- Required Course ☐ Elective Course ☐

Justification for Course Deletion

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking in the top left corner of the form and answer below according to the results.

Is this course a required course for graduation or prerequisite for another course?
- Yes ☐ No ☐

If yes, have all relevant units been informed of the deletion?
- Yes ☐ No ☐

If not, explain:

Notes: course not offered in 5-years.

Attachment

Supporting documents from impacted units of the deletion*
- Yes ☐ No ☐

Administration Use Only

Catalog Ownership:

Course OID

Course Type

Status: Active-Visible ☐ Inactive-Hidden ☐
<table>
<thead>
<tr>
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<tr>
<td>Effective Date</td>
</tr>
<tr>
<td>Lab Fee</td>
</tr>
<tr>
<td>CRSE_ID</td>
</tr>
</tbody>
</table>
Impact Report for PCB 5485

Source: 2020-2021 Graduate Catalog (WORKING COPY)

Full Course Title
PCB 5485 - Models in Ecology
College of Sciences - Grad Course Deletion - PHZ 5425C Electron Solid Interactions

2020-2021 Graduate Course Deletion

**General Catalog Information**

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking in the top left corner.

Proposal Type: *Grad Course Deletion*

College: *College of Sciences*

Unit / Department / College: *Department of Physics*

**IMPORT COURSE NOW! Please use the Import feature to import the course information from the Catalog by clicking in the top left corner of the form. Do not type the course prefix and code.**

Prefix: *PHZ*

Code: *5425C*

Course Title: *Electron Solid Interactions*

Full Title: *PHZ 5425C Electron Solid Interactions*

Course Description: *The physics and applications of electron interactions with solids. Classroom and hands-on laboratory content.*

Credit Hours: 3

Class Hours: 3

Lab and Field Work Hours: 3

Contact Hours: 6

Prerequisite(s): Undergraduate senior or graduate status or C.I. The physics and applications of electron interactions with solids. Classroom and hands-on laboratory content.
**Corequisite(s):**

**Graded S/U?**
- Yes
- No

**Split-Level Class:**
- Yes
- No

**List undergraduate split-level course:**

**Term of Offering**

**When was the course offered?**
- Odd Fall
- Even Fall
- Odd Spring
- Even Spring
- Odd Summer
- Even Summer
- Every Semester
- Occasional

**Utilization of Course**

**The course was a:**
- Required Course
- Elective Course

**Justification for Course Deletion**

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking the button in the top left corner of the form and answer below according to the results.

**Is this course a required course for graduation or prerequisite for another course?**
- Yes
- No

**If yes, have all relevant units been informed of the deletion?**
- Yes
- No

**If not, explain:**
This course is an elective. It was last offered/taught in Spring 2014. We do not plan to teach this course anymore.

**Notes:**

**Attachment**

**Supporting documents from impacted units of the deletion**
- Yes
- No

**Administration Use Only**

**Catalog Ownership:** Department of Physics

**Course OID**

**Course Type:** Physics (Continued)
<table>
<thead>
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</table>

**Status**
- Active-Visible
- Inactive-Hidden
# Impact Report for PHZ 5425C

**Source:** 2020-2021 Graduate Catalog (WORKING COPY)

<table>
<thead>
<tr>
<th><strong>Full Course Title</strong></th>
<th>PHZ 5425C - Electron Solid Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Programs</strong></td>
<td>Physics MS</td>
</tr>
<tr>
<td></td>
<td>Physics PhD</td>
</tr>
</tbody>
</table>
College of Sciences - Grad Course Deletion - PHZ 5437 Nanoscale Surface Physics

2020-2021 Graduate Course Deletion

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ⬇️ in the top left corner.

**Proposal Type:** Grad Course Deletion

**College:** College of Sciences

**Unit / Department / College:** Department of Physics

**IMPORT COURSE NOW!** Please use the Import feature to import the course information from the Catalog by clicking ⬇️ in the top left corner of the form. Do not type the course prefix and code.

**Prefix:** PHZ

**Code:** 5437

**Course Title:** Nanoscale Surface Physics

**Full Title:** PHZ 5437 Nanoscale Surface Physics

**Course Description:** Overview of physical and chemical properties of nanoscale surfaces.

**Credit Hours:** 3

**Class Hours:** 3

**Lab and Field Work Hours:** 0

**Contact Hours:** 3

**Prerequisite(s):** Undergraduate Quantum Mechanics at the level of PHY 4604 or C.I.

**Corequisite(s):**
Graded S/U? Yes No

Split-Level Class: Yes No

List undergraduate split-level course:

Term of Offering

When was the course offered?
- Odd Fall
- Even Fall
- Odd Spring
- Even Spring
- Odd Summer
- Even Summer
- Every Semester (Checked)

Utilization of Course

The course was a:
- Required Course
- Elective Course

Justification for Course Deletion

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking in the top left corner of the form and answer below according to the results.

Is this course a required course for graduation or prerequisite for another course? Yes No

If yes, have all relevant units been informed of the deletion? Yes No

If not, explain: This course is an elective. The course was last offered/taught in Fall 2013. We do not plan to teach this course anymore..

Notes:

Attachment

Supporting documents from impacted units of the deletion* Yes No

Administration Use Only

Catalog Ownership: Department of Physics

Course OID

Course Type Physics (Continued)
<table>
<thead>
<tr>
<th>PeopleSoft</th>
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<td><strong>Academic Group</strong></td>
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<td><strong>Career</strong></td>
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<td><strong>Print in Catalog</strong></td>
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<tr>
<td><strong>Effective Date</strong></td>
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<tr>
<td><strong>Lab Fee</strong></td>
</tr>
<tr>
<td><strong>CRSE_ID</strong></td>
</tr>
</tbody>
</table>
# Impact Report for PHZ 5437

**Source:** 2020-2021 Graduate Catalog (WORKING COPY)

<table>
<thead>
<tr>
<th>Full Course Title</th>
<th>PHZ 5437 - Nanoscale Surface Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs</td>
<td>Physics MS</td>
</tr>
<tr>
<td></td>
<td>Physics PhD</td>
</tr>
</tbody>
</table>
**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after the proposal is launched.

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

**College:** College of Sciences

**Proposal Type:** Grad Course Revision

**Unit / Department / College:** Department of Chemistry

**Prefix:** CHS

**Code:** 6513

**Course Title:** Quality Assurance for Forensic Scientists

**30 Character Abbreviation:** QA for FS

**Full Title:** Grad Course Revision - CHS 6513 Quality Assurance for Forensic Scientists
Complete the remaining required fields and LAUNCH this proposal by clicking in the top left corner! Do not begin revisions until after launch. Course revisions before launch will not be tracked.

**Course Description:** Admission into M. S. Forensic Science program and C. I. Principles and concepts of quality assurance for forensic scientists. Includes a study of national analytical and accreditation standards.

**Prerequisite(s):** Admission into M.S. Forensic Science program or C.I.

**Corequisite(s):** n/a

**Grading Scheme:** ABCDF

Credit Hour Information

As part of UCF's accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

| Credit Hour | 1 | 1 | 1 |
| Formal Instruction Time - Class Hours or Online Module, etc. | 1 | 1 | 1 |
| Lab/Studio/Field work | 0 | 1 | 2 |
| Out-of-Class (homework, course readings, group work, online posts, etc) | 2 | 1 | 0 |
| Total Course Engagement | 3 | 3 | 3 |

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hours = 3 hours of Total Course Engagement

2 Credit hours = 6 hours of Total Course Engagement

3 Credit hours = 9 hours of Total Course Engagement

4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC
definition: [http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf](http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf)

<table>
<thead>
<tr>
<th>Credit Hours:</th>
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<tbody>
<tr>
<td>Instruction Time:</td>
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<td>Lab/Studio/Field Work Hours:</td>
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<tr>
<td>Out-of-Class Hours:</td>
<td>6</td>
</tr>
<tr>
<td>Total Engagement Hours:</td>
<td>9</td>
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</table>

**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.

Repeat for credit?  
- Yes  
- No

If yes, indicate the degree program name and the total times the course may repeated.

If the course you are revising is a split-level class, please note this revision form will only impact the graduate side of the course. The undergraduate component of the course should be revised through the Undergraduate Curriculum Committee. As a reminder, the graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor.

Split-Level Class:  
- Yes  
- No

List undergraduate split-level course:

**Term of Offering**

<table>
<thead>
<tr>
<th>When will the course be offered?</th>
<th>Activity Log</th>
</tr>
</thead>
</table>
| Candice Bridge  
+ Even Fall  |

- Odd Fall  
- Even Fall  
- Odd Spring  
- Even Spring  
- Odd Summer  
- Even Summer  
- Every Semester  
- Occasional

**Intended Utilization of Course**

The course will be used primarily as:  
- Required Course  
- Elective Course

**Justification for Course Revision**

What is the rationale for revising this  
Change term offering from "Odd Fall" to "Fall".
What grad programs/tracks require or recommend this course for graduation? MSFS, MS Chemistry, Ph.D. Chemistry,

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

What is the estimated annual enrollment? 20

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

Detail Discussion No possible duplications. This is the only course in the university that discusses this type of information.

Course Syllabus Policy

The University of Central of Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Core policy statements
  - Academic integrity statement including definition(s) of and consequences for academic misconduct
  - Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
  - Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with actions to take in various types of emergencies
Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf

Course Syllabus Policy* ✓ I have aligned this syllabus per the UCF syllabus policy.

Attachment List

Please attach any required files by navigating to the Proposal Toolbox and clicking in the top right corner.

Check ✓ I have completed all relevant parts of the form.

Attached ✓ I have attached a course syllabus and rationale.

Administration Use Only

Catalog Ownership:

Course OID

Course Type

Status ✓ Active-Visible  ○ Inactive-Hidden

PeopleSoft

Academic Group

Career

Print in Catalog

Effective Date

Lab Fee

CRSE_ID
Quality Assurance for Forensic Scientists

Syllabus
Fall Semester 2016

Instructor Contact

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Dr. Candice Bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office:</td>
<td>Partnership Building I, Room 316D</td>
</tr>
<tr>
<td>Office/Web Hours:</td>
<td>W: 1pm - 4:30pm (For students off campus, I will be available via the chat feature on Webcourses)</td>
</tr>
<tr>
<td>Phone:</td>
<td>407.823.1263</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:cbridge@ucf.edu">cbridge@ucf.edu</a> but all emails pertaining to the class must go through Webcourses inbox. I will not respond to any email directly to my ucf email address.</td>
</tr>
</tbody>
</table>

Course Information

<table>
<thead>
<tr>
<th>Course Name:</th>
<th>Quality Assurance for Forensic Scientists</th>
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</thead>
<tbody>
<tr>
<td>Course ID &amp; Section:</td>
<td>CHS 6513, Section 01</td>
</tr>
<tr>
<td>Credit Hours:</td>
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</tr>
<tr>
<td>Semester/Year:</td>
<td>Fall 2016</td>
</tr>
<tr>
<td>Location:</td>
<td>Online through Webcourses</td>
</tr>
<tr>
<td>Class Duration:</td>
<td>August 22 - December 12, 2016</td>
</tr>
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</table>

Course Description
Principles and concepts of quality assurance for forensic scientists. Includes a study of national analytical and accreditation standards.

Prerequisites:

- Admission into the M.S. Forensic Science Program and C.I.

Course Objectives

Students who successfully complete this course will be able to:

- Understand the principles of Quality Assurance
- Develop and implement quality systems
- Understand quality standards and their applications in forensic laboratories
- Understand accreditation, proficiency testing, quality audits and corrective actions
- Successfully undertake and develop quality assurance protocols

Required Text

There is no required for this course. All readings will come from journal articles.

Supplemental Texts

Journal articles will be accessed through the library depending on the student's research interest.

Missed Assignments/Make-Ups/Extra Credit

All assignments and exams are due when at the deadline. Make-ups will only be allowed for serious events such as familial deaths and hospitalizations. If those events arise, then documentation will be required before a make-up assignment is issued.

Evaluation and Grading

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<th>Assignment</th>
<th>Percentage of Grade</th>
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<td>Quizzes</td>
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<tr>
<td>Final Report</td>
<td>40%</td>
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Discussions | 20%  
---|---  
Total | 100%  

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<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>59 or below</td>
</tr>
</tbody>
</table>

Final Exam: **December 6 - December 12, 2016**

**Exam Topics:** All exams will be comprehensive and cover information presented in the modules, assigned readings, research papers and assigned problems.

**Regrading Policy:** If you feel that an assignment should be regraded, prepare a 3 sentence justification explaining why your exam should be regraded. Bring a copy of your exam, the comments for your exam (located in the essay rubric), and your justification to my office hours. With these documents we will discuss your exam and its associated grade.

**Attendance Policy**

Students are expected to participate in each assigned module, discussion and exam.

**Federal Financial Aid Requirement**

As of Fall 2014, all faculty are required to document students’ academic activity at the beginning of each course. In order to document that you began this course, please complete the following activity by the end of the first week or classes or as soon as possible after adding the course, but no later than the first Friday of the semester. Failure to do so may result in a delay in the disbursement of your financial aid.

To fulfill this requirement, all students must take the Syllabus Quiz on Webcourses. This quiz will be based on information from the syllabus.
Email Policy

If you have any questions regarding the course or need to email me for any reason, please use the email system through Webcourses. Emails sent directly to me, outside of the Webcourse system, will not be answered.

Academic Honesty

Plagiarism and cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

Plagiarism includes any attempt to take credit for another person’s work. This includes quoting directly from a book or web site, without crediting the source. Sources should always be referenced or a link to the website added and, where direct quotes have been used, quotation marks must be placed around the quoted material. However, we expect more than simply cutting and pasting in an undergraduate level course. Students are expected to review, evaluate and comment on material they research, rather than simply copying relevant material. Your work will be graded accordingly.

Any online quiz or exam assignments are to be completed by you. No student collaboration is allowed.

Disability 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, Ferrell Commons, 7F, Room 185, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.
Copyright

This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

Third-Party Software and FERPA

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need not make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identity-sensitive information. If you have any concerns about this, please contact your instructor.
General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking 📦 in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after the proposal is launched.

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

**Proposal Type:** Grad Course Revision

**College:** College of Sciences

**Unit / Department / College:** Department of Physics

**Import Course NOW!** Please use the import feature to import the course information from the Catalog by clicking 🔄 in the top left corner of the form. Do not type the course prefix and code.

**Prefix:** PHY

**Code:** 5346

**Course Title:** Electrodynamics I

**Abbreviation:** ED Electrodynamics I

**Full Title:** PHY 5346 Electrodynamics I
Complete the remaining required fields and LAUNCH this proposal by clicking ➤ in the top left corner! Do not begin revisions until after launch. Course revisions before launch will not be tracked.


Prerequisite(s): PHY 4324, and graduate status or senior standing or C.I.

Corequisite(s):

Does this proposal include revisions to prerequisites? * Yes ☰ No

Grading Scheme:

Credit Hour Information

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

<table>
<thead>
<tr>
<th>Credit Hour Design Options</th>
<th>1</th>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Formal) Instruction Time - Class Hours or Online Module, etc.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lab/Studio/Field work</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Out-of-Class (homework, course readings, group work, online posts, etc)</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total Course Engagement</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.
1 Credit hours = 3 hours of Total Course Engagement

2 Credit hours = 6 hours of Total Course Engagement

3 Credit hours = 9 hours of Total Course Engagement

4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC definition: [http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf](http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf)

<table>
<thead>
<tr>
<th>Credit Hours:*</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction Time:*</td>
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</tr>
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</tr>
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</tr>
<tr>
<td>Total Engagement Hours:*</td>
<td>3 9</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Repeat for credit?</th>
<th>Activity Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonya Walker</td>
<td>+ No</td>
</tr>
<tr>
<td></td>
<td>Yes No</td>
</tr>
</tbody>
</table>

If yes, indicate the degree program name and the total times the course may repeated.

If the course you are revising is a split-level class, please note this revision form will only impact the graduate side of the course. The undergraduate component of the course should be revised through the Undergraduate Curriculum Committee. As a reminder, the graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor.

<table>
<thead>
<tr>
<th>Split-Level Class:*</th>
<th>Yes No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes No</td>
</tr>
</tbody>
</table>

List undergraduate split-level course:

**Term of Offering**

https://ucf.curriculog.com/proposal:3026/print
When will the course be offered?

<table>
<thead>
<tr>
<th>Activity Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonya Walker</td>
</tr>
<tr>
<td>✅ Odd Fall</td>
</tr>
<tr>
<td>✅ Even Fall</td>
</tr>
<tr>
<td>□ Odd Spring</td>
</tr>
<tr>
<td>□ Even Spring</td>
</tr>
<tr>
<td>□ Odd Summer</td>
</tr>
<tr>
<td>□ Even Summer</td>
</tr>
<tr>
<td>□ Every Semester</td>
</tr>
<tr>
<td>□ Occasional</td>
</tr>
</tbody>
</table>

Intended Utilization of Course

The course will be used primarily as:

- [ ] Required Course
- [ ] Elective Course

Justification for Course Revision

What is the rationale for revising this course?*

Correction to The course description requires a revision for Electrodynamics I is currently not correct in the graduate catalog and requires a revision.

What grad programs/tracks require or recommend this course for graduation?

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

What is the estimated annual enrollment?

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

Detail Discussion  n/a

Course Syllabus Policy

The University of Central Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
Explicit, public description of the course
Student learning outcomes
Sequence of course activity
Assessment and grading procedures
Course Materials and Resources
Core policy statements

- Academic integrity statement including definition(s) of and consequences for academic misconduct
- Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
- Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with actions to take in various types of emergencies
- Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: https://policies.ucf.edu/documents/4-403.pdf

**Course Syllabus Policy**

- ✔️ I have aligned this syllabus per the UCF syllabus policy.

**Attachment List**

Please attach any required files by navigating to the Proposal Toolbox and clicking ✦ in the top right corner.

- ✔️ I have completed all relevant parts of the form.

**Activity Log**

- ✔️ I have attached a course syllabus and rationale.

**Administration Use Only**

- Catalog Ownership: Department of Physics

- Course OID

- Course Type: Physics

- Status: Active-Visible Inactive-Hidden
<table>
<thead>
<tr>
<th>PeopleSoft</th>
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</thead>
<tbody>
<tr>
<td>Academic Group</td>
</tr>
<tr>
<td>Career</td>
</tr>
<tr>
<td>Print in Catalog</td>
</tr>
<tr>
<td>Effective Date</td>
</tr>
<tr>
<td>Lab Fee</td>
</tr>
<tr>
<td>CRSE_ID</td>
</tr>
</tbody>
</table>
Basics
Instructor: Prof. Robert E. Peale
Office location: PS423
Email: Robert.peale@ucf.edu
Phone: None. Physics faculty lack desk phones. Please communicate via email.
Class website: https://physics.ucf.edu/~rep/EDI/EDI.html
Class time: TuTh 3:00-4:15 p.m.
Class location: BA1 O209
Office hours/Discussion: The times M 12:30-1:30, W 1:30-2:30, F 12-1:30. The location will be in front of the East Elevator on the 4th floor of the physical sciences building, where a white board will be set up. You may wish to bring a chair from your GTA office. Discussion sections will be public problem solving. If you have a private matter to discuss, please make an appointment by email.

Course information
Credits: 3(3,0).

Prerequisites: PHY3323 & PHY4324 Electricity and Magnetism I & II, or equivalent, and graduate status or senior standing or consent of instructor.

Course Description: This required core graduate course for the MS and PhD programs in physics will cover relativistic electrodynamics of point charges in vacuum and classical field theory.

Goals and objectives: Learn theory of, and develop problem solving tools for, Special Relativity, Relativistic Mechanics, Charges in Electromagnetic Fields, Electromagnetic Field Equations, Constant Electromagnetic Fields, Electromagnetic Waves, Propagation of Light, Fields of Moving Charges, and Radiation of Electromagnetic Waves. Specific subtopics are listed in the course schedule below.


Note: The graduate catalog description for EDI says "Boundary value problems in electrostatics and magnetostatics. Maxwell’s equations. EM fields in matter, wave generation and propagation; wave guides, resonant cavities,” and for EDII “Dynamics of charged particles in electromagnetic fields. Antennas; radiation by moving charges; magnetohydrodynamics; multipole radiation and electrodynamics of materials.” These descriptions differ somewhat from what is indicated above, which is what has been taught at UCF for the past 12 years. Considering EDI and EDII as a single required sequence, most of the topics indicated in the catalog will be covered during the two-semester sequence, but in a different order, and many topics not indicated in the catalog will be
covered. The catalog description dates from 20 years ago, when most physics PhD students were at CREOL and required to take only EDI, with EDII as an elective. The catalog description needs to be updated.

Course calendar

<table>
<thead>
<tr>
<th>Date</th>
<th>Section/Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 27</td>
<td>Section 1 Velocity of propagation of interaction</td>
</tr>
<tr>
<td></td>
<td>Section 2 Intervals</td>
</tr>
<tr>
<td>Aug 29</td>
<td>Football game</td>
</tr>
<tr>
<td>Sep 3</td>
<td>Section 3 Proper time</td>
</tr>
<tr>
<td></td>
<td>Section 4 The Lorentz transformation</td>
</tr>
<tr>
<td>Sep 5</td>
<td>Section 5 Transformation of velocities</td>
</tr>
<tr>
<td></td>
<td>Section 6 Four-vectors</td>
</tr>
<tr>
<td>Sep 10</td>
<td>Section 6 Four-vectors</td>
</tr>
<tr>
<td>Sep 12</td>
<td>Section 7 Four-dimensional velocity</td>
</tr>
<tr>
<td></td>
<td>Section 8 The principle of least action</td>
</tr>
<tr>
<td></td>
<td>Section 9 Energy and momentum</td>
</tr>
<tr>
<td>Sep 17</td>
<td>Section 15 Elementary particles in the theory of relativity</td>
</tr>
<tr>
<td></td>
<td>Section 16 Four potential of a field</td>
</tr>
<tr>
<td>Sep 19</td>
<td>Section 17 Equations of motion of a charge in a field</td>
</tr>
<tr>
<td></td>
<td>Section 18 Gauge invariance</td>
</tr>
<tr>
<td><strong>Sep 24</strong></td>
<td><strong>Exam 1</strong></td>
</tr>
<tr>
<td>Sep 26</td>
<td>Section 19 Constant electromagnetic field</td>
</tr>
<tr>
<td></td>
<td>Section 20 Motion in a constant uniform electric field</td>
</tr>
<tr>
<td>Oct 1</td>
<td>Section 21 Motion in a constant uniform magnetic field</td>
</tr>
<tr>
<td></td>
<td>Section 22 Motion in constant uniform electric and magnetic fields</td>
</tr>
<tr>
<td>Oct 3</td>
<td>Section 23 The electromagnetic field tensor</td>
</tr>
<tr>
<td></td>
<td>Section 24 Lorentz transformation of the field</td>
</tr>
<tr>
<td>Oct 8</td>
<td>Section 25 Invariants of the field</td>
</tr>
<tr>
<td></td>
<td>Section 26 The first pair of Maxwell's equations</td>
</tr>
<tr>
<td>Oct 10</td>
<td>Section 27 The action function of the electromagnetic field</td>
</tr>
<tr>
<td></td>
<td>Section 28 The four-dimensional current vector</td>
</tr>
<tr>
<td>Oct 15</td>
<td>Section 29 The equation of continuity</td>
</tr>
<tr>
<td></td>
<td>Section 30 The second pair of Maxwell equations</td>
</tr>
<tr>
<td>Oct 17</td>
<td>Section 31 Energy density and energy flux</td>
</tr>
<tr>
<td></td>
<td>Section 32 The energy-momentum tensor</td>
</tr>
<tr>
<td>Oct 22</td>
<td>Section 33 Energy momentum tensor of the electromagnetic field</td>
</tr>
<tr>
<td></td>
<td>Section 34 The virial theorem</td>
</tr>
<tr>
<td><strong>Oct 24</strong></td>
<td><strong>Exam 2</strong></td>
</tr>
<tr>
<td>Oct 29</td>
<td>Section 35 The energy momentum tensor for macroscopic bodies</td>
</tr>
<tr>
<td></td>
<td>Section 36 Coulomb's law</td>
</tr>
<tr>
<td>Oct 31</td>
<td>Section 37 Electrostatic energy of charges</td>
</tr>
<tr>
<td></td>
<td>Section 38 The field of a uniformly moving charge</td>
</tr>
<tr>
<td>Nov 5</td>
<td>Section 41 Multipole moments</td>
</tr>
<tr>
<td></td>
<td>Section 42 System of charges in an external field</td>
</tr>
</tbody>
</table>
Nov 7  
Section 43 Constant magnetic field  
Section 44 Magnetic moments  
Section 45 Larmor’s theorem  

Nov 12  
Section 46 The wave equation  
Section 47 Plane waves  

Nov 14  
Section 48 Monochromatic plane waves  
Section 49 Spectral resolution  

Nov 19  
Section 50 Partial polarization of light  
Section 51 The Fourier resolution of the electrostatic field  

Nov 21  
**Exam 3**  

Nov 28  
**No class (Thanksgiving)**  

Nov 26  
Section 62 The retarded potentials  
Section 63 The Lienard-Wiechert potentials  

Dec 2  
Section 66 The field of a system of charges at large distances  
Section 67 Dipole radiation  

Dec 5  
**Thursday**  
**Final Exam 1-3:50 pm**  

**Course assignments (assignments and exams):** Homework will be assigned weekly. There will be three exams, including the final, based on a set of problems that will be posted on the course webpage. You will be allowed to use your textbook, mathematical tables, and a calculator, but no other books or notes, during exams.

**Methods of evaluation:** Homework will be graded and will count for 20% of the final grade. Exams count for 18% of the final grade each. Participation will count for 8%, the score for which will be determined by best effort attempt to answer questions in class when called on by name and by participation in on-board problem solving during discussion sessions. + and – grades will be given. The final course grade will be available on myucf. Assignments and grades will be posted on webcourses.

**Other Policies**  
**Missed work policy:** It is the policy of the Department of Physics that making up missed work will only be permitted for University-sanctioned activities and bona fide medical or family reasons. Authentic justifying documentation must be provided in every case (and in advance for University-sanctioned activities). At the discretion of the instructor, the make-up may take any reasonable and appropriate form including (but not limited to) the following: giving a replacement exam, replacing the missed work with the same score as a later exam, allowing a dropped exam, replacing the missed work with the homework average.

Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at http://policies.ucf.edu/documents/4-401.2MakeUpAssignmentsorAuthUnivEventrorsCocurricularActivities.pdf.

Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see the UCF policy at
Late homework: Homework that is handed in late for reasons other than an excusable absence will receive zero points and will be counted toward the average. An excusable absence is one that can be documented to be caused by illness, death in the immediate family, serious family emergencies, travel related to your graduate work, court-imposed legal obligations, or observation of a religious holiday. In case of an excusable absence, late homework will be accepted by the instructor no more than one week after the official due time.

Academic Integrity: UCF’s Rules of Conduct: <http://osc.sdes.ucf.edu/process/roc>. Many incidents of plagiarism result from students’ lack of understanding about what constitutes plagiarism. However, they are expected to familiarize themselves with UCF’s policy. Please read this information at the website http://goldenrule.sdes.ucf.edu UCF Creed: Please read this information at the website http://creed.sdes.ucf.edu

Disabilities and 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, before requesting accommodations from the professor. Student Accessibility Services (SAS) <http://sas.sdes.ucf.edu/> (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371).

Collaboration policy: Students may discuss assignments and form study groups. However, they must develop and write their own solutions to problems and questions. It must be obvious on that paper that the result has not been copied from another source. In particular, if a student collaborates with someone to work on problem sets, the onus is on the student to prove to the grader that he/she wrote down his/her derivations and answers independently. Since everyone must eventually understand the subject in their own way, and since there is no collaboration on exams, students are encouraged to do as much of their work as possible by themselves.

For up-to-date policy statements, see https://fctl.ucf.edu/teaching-resources/course-design/syllabus-statements/
The following statements are included by reference

Campus Safety Statement: See fctl link above.

Deployed Active Duty Military Students: Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.
College of Sciences - Grad Course Revision - PHY 6347 Electrodynamics II
2020-2021 Graduate Course Revision

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after the proposal is launched.

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

Proposal Type: * Grad Course Revision

College: * College of Sciences

Unit / Department / College: * Department of Physics

IMPORT COURSE NOW! Please use the import feature to import the course information from the Catalog by clicking in the top left corner of the form. Do not type the course prefix and code.

Prefix: * PHY

Code: * 6347

Course Title: * Electrodynamics II

30 Character Abbreviation: * ED Electrodynamics II

Full Title: * PHY 6347 Electrodynamics II
Course Instructor (Must be Approved)  
Robert Peale

Graduate Faculty/Scholars:

Department Chair  
Phone Number:*  407-823-1882

Dept Chair Email*  Eduardo.Mucciolo@ucf.edu

Complete the remaining required fields and LAUNCH this proposal by clicking in the top left corner! Do not begin revisions until after launch. Course revisions before launch will not be tracked.


Prerequisite(s):  PHY 5346, or C. I.

Corequisite(s):  n/a

Does this proposal include revisions to prerequisites?*  Yes  No

Grading Scheme:

Credit Hour Information

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

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</tr>
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</tr>
</tbody>
</table>

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Repeat for credit? Yes ☑ No

If yes, indicate the degree program name and the total times the course may repeated.

If the course you are revising is a split-level class, please note this revision form will only impact the graduate side of the course. The undergraduate component of the course should be revised through the Undergraduate Curriculum Committee. As a reminder, the graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor.

Split-Level Class: Yes ☑ No

List undergraduate split-level course:

**Term of Offering**

<table>
<thead>
<tr>
<th>When will the course be offered?</th>
<th>Activity Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonya Walker</td>
<td>Activity Log</td>
</tr>
<tr>
<td>Odd Spring</td>
<td>Activity Log</td>
</tr>
</tbody>
</table>
**Intended Utilization of Course**

The course will be used primarily as:  
- [ ] Required Course  
- [x] Elective Course

**Justification for Course Revision**

What is the rationale for revising this course?*  
**Correction:** The course description and term taught are currently not correct in the graduate catalog and require a revision.

What grad programs/tracks require or recommend this course for graduation?

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

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

**Detail Discussion**  
- n/a

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  Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: https://policies.ucf.edu/documents/4-403.pdf

---

**Course Syllabus Policy**

I have aligned this syllabus per the UCF syllabus policy.

---

**Attachment List**

Please attach any required files by navigating to the Proposal Toolbox and clicking in the top right corner.

- **Check**
  - I have completed all relevant parts of the form.

- **Attached**
  - Activity Log
    - Esperanza Soto Arcino
      - I have attached a course syllabus and rationale.
  - I have attached a course syllabus and rationale.

---

**Administration Use Only**

- **Catalog Ownership**: Department of Physics

- **Course OID**

- **Course Type**: Physics

- **Status**: Active-Visible

---

**PeopleSoft**

- **Academic Group**

- **Career**
<table>
<thead>
<tr>
<th>Print in Catalog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Date</td>
</tr>
<tr>
<td>Lab Fee</td>
</tr>
<tr>
<td>CRSE_ID</td>
</tr>
</tbody>
</table>
Basics
Instructor: Prof. Robert E. Peale
Office location: PS423
Office hours: MW 3:30-4:30.
Email: Robert.peale@ucf.edu
Class website: https://physics.ucf.edu/~rep/EDII/EDII.html
Class time: TuTh 10:30-11:50 p.m.
Class location: BA1 O218
Discussion session: TBD

Course information
Credits: 3(3,0).
Prerequisites: PHY5346 Electrodynamics I
Course Description: This required core graduate course for the MS and PhD programs in physics will cover electrodynamics of conductors and dielectrics.

Goals and objectives: Learn theory of, and develop problem solving tools for, Electrostatics of Conductors, Electrostatics of Dielectrics, Steady Current, Static Magnetic Field, Superconductivity, Quasi-static Electromagnetic Field, Electromagnetic Wave Equations, and Propagation of Electromagnetic Waves. Specific subtopics are listed in the course schedule below.


Course calendar
Date   Section/Event
Jan 9   Section 1 The electrostatic field of conductors
        Section 2 The energy of the electrostatic field of conductors
Jan 11  Section 3 Methods of solving problems in electrostatics
Jan 16  Section 5 The forces on a conductor
Jan 17  Section 6 The electric field in dielectrics
        Section 7 The permittivity
Jan 23  Section 10 Thermodynamic relations for dielectrics in an electric field
Jan 25  Section 11 The total free energy of a dielectric
Jan 30  Exam 1
Feb 1   Section 21 Current density and conductivity
        Section 22 The Hall effect
Feb 6   Section 29 Static magnetic field
Course assignments (assignments and exams): Homework will be assigned every class to be turned in during the next class. There will be four evenly spaced exams, including the final, based on a set of problems that will be posted on the course webpage. You will be allowed to use your textbook, mathematical tables, and a calculator, but no other books or notes, during exams. Participation in the class is expected and will be recorded. Questions will be asked during class to individuals by name with the expectation of best effort to answer them.

Methods of evaluation: Homework presentations will be graded and will count for 30% of the final grade. Exams count for 15% of the final grade each. In class participation counts as 10%. + and – grades will be given. The final course grade will be available on myucf.

Other Policies
Missed work policy: It is the policy of the Department of Physics that making up missed work will only be permitted for University-sanctioned activities and bona fide medical or family reasons. Authentic justifying documentation must be provided in every case (and in advance for University-sanctioned activities). At the discretion of the instructor, the make-up may take any reasonable and appropriate form including (but not limited to) the following: giving a replacement exam, replacing the missed work with the same score as
a later exam, allowing a dropped exam, replacing the missed work with the homework average.

**Late homework:** Homework that is handed in late for reasons other than an excusable absence will receive zero points and will be counted toward the average. An excusable absence is one that can be documented to be caused by illness, death in the immediate family, serious family emergencies, travel related to your graduate work, court-imposed legal obligations, or observation of a religious holiday. In case of an excusable absence, late homework will be accepted by the instructor no more than one week after the official due time.

**Golden Rule:** Many incidents of plagiarism result from students’ lack of understanding about what constitutes plagiarism. However, they are expected to familiarize themselves with UCF’s policy. Please read this information at the website: http://goldenrule.sdes.ucf.edu

**UCF Creed:** Please read this information at the website: http://creed.sdes.ucf.edu

**Disabilities and 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.

**Collaboration policy:** Students are encouraged to discuss assignments and form study groups, but must develop and write their own solutions to problems and questions. It must be obvious on that paper that the result has not been copied from another source. In particular, if a student collaborates with someone to work on problem sets, the onus is on the student to prove to the grader that he/she wrote down his/her derivations and answers independently. Copying from another student’s paper is very obvious in a class of this size, and will immediately result in zeros on the assignment for all parties involved.
**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.
2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.
3. LAUNCH proposal by clicking in the top left corner.

Course continuations must be accompanied by justification and an updated course syllabus.

<table>
<thead>
<tr>
<th>Proposal Type*</th>
<th>Grad Course Continuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>College:*</td>
<td>Nicholson School of Communication and Media</td>
</tr>
<tr>
<td>Unit / Department / College:*</td>
<td>Department of Communication (NSCM)</td>
</tr>
</tbody>
</table>

**IMPORT COURSE NOW!** Please use the Import feature to import the course information from the Graduate Catalog by clicking in the top left corner of the form. Do not type the course prefix and code.

<table>
<thead>
<tr>
<th>Prefix:*</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code:*</td>
<td>6463</td>
</tr>
<tr>
<td>Name:*</td>
<td>Studies in Intercultural Communication</td>
</tr>
<tr>
<td>Full Title:*</td>
<td>COM 6463 Studies in Intercultural Communication</td>
</tr>
<tr>
<td>Course Description:*</td>
<td>Comprehensive survey of methodological and theoretical issues and concepts in intercultural and cross-cultural research.</td>
</tr>
<tr>
<td>Prerequisite(s):</td>
<td>Graduate standing or C.I.</td>
</tr>
<tr>
<td>Corequisite(s):</td>
<td></td>
</tr>
</tbody>
</table>

**Credit Hour Information**

As part of UCF's accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.
The institution with a standard approach in this determination.

**Credit Hour Design Options**

<table>
<thead>
<tr>
<th>Credit Hour</th>
<th>1</th>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Formal) Instruction Time - Class Hours or Online Module, etc.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lab/Studio/Field work</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Out-of-Class (homework, course readings, group work, online posts, etc)</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Course Engagement</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hours = 3 hours of Total Course Engagement
2 Credit hours = 6 hours of Total Course Engagement
3 Credit hours = 9 hours of Total Course Engagement
4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

<table>
<thead>
<tr>
<th>Credit Hours:*</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction Time:*</td>
<td>3</td>
</tr>
<tr>
<td>Lab/Studio/Field Work Hours:*</td>
<td>0</td>
</tr>
<tr>
<td>Out-of-Class Hours:*</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Engagement Hours:</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

**Justification for Course Continuation**

What is the rationale for continuing this course?*

We are offering this course in Fall, 2020. In the past five years, we’ve proposed and started a Strategic Communication PhD, and worked on the core classes in the MA program. The program's curriculum work has had other priorities. Intercultural Communication represents critical competencies in our discipline. Under the current leadership, this course will be offered every other Fall or more frequently.

**Course Syllabus Policy**

The University of Central of Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
Explicit, public description of the course
Student learning outcomes
Sequence of course activity
Assessment and grading procedures
Course Materials and Resources
Core policy statements

- Academic integrity statement including definition(s) of and consequences for academic misconduct
- Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
- Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with actions to take in various types of emergencies
- Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: [https://policies.ucf.edu/documents/4-403.pdf](https://policies.ucf.edu/documents/4-403.pdf)

**Course Syllabus Policy**
- ☑️ I have aligned this syllabus per the UCF syllabus policy.

**Attachment List**

Please attach the required updated syllabus by navigating to the Proposal Toolbox and clicking in the top right corner.

- ☑️ I have completed all relevant parts of the form.

- ☑️ I have attached an updated course syllabus.

**Administration Use Only**

**Catalog Ownership:**

**Course OID:**

**Course Type**
- Communication

**Status**
- ☀️ Active-Visible ☋ Inactive-Hidden
Course Description & Note from Dr. Sandoval:
In this seminar, we will explore the existing and emerging issues, theories, and questions in intercultural communication. The goal of this course is to critically investigate and reflect on the key theoretical perspectives, concepts, and methodologies that are relevant to the scholarship on culture and communication. We will broaden our understanding of culture from more traditional views (i.e. culture as nation, ethnicity, or race) to the views that are reflexive of the contemporary global conditions and local practices. We will unpack the debates and conversations among scholars in order to understand what is at stake and what is being contested when it comes to theorizing communication from a cultural point of view. The readings in this course will address the concepts and contexts that shape intercultural encounters, including race, gender, sexuality, identity, ideology, discourse, globalization, and postcolonialism. Finally, as an instructor of this course, my goal is to facilitate your intellectual and scholarly efforts to develop the ways in which you approach your questions (academic or otherwise), articulate your ideas and arguments, and relate to others in the society with cultural diversity and differences.

Course Materials & Resources:
All readings will be available here on webcourses through the library or download. If you are completely new to this topic you may wish to check out the additional textbooks:


Many of your readings will be taken from *The Handbook of Critical Intercultural Communication* edited by Thomas K. Nakayama and Rona Tamiko Haluanlani.
Student Learning Outcomes:

1) To understand theoretical perspectives and methodological approaches in intercultural communication scholarship.
2) To develop our awareness, self-reflexivity, and capacities as intercultural communicators.
3) To understand, critique, and raise awareness of the essential questions, problems, and issues addressed in the field of intercultural communication.
4) To introduce theories and research methods with attention to the epistemological and ontological assumptions associated with various research paradigms.
5) To complete a research proposal using appropriate theoretical concepts, methodology, and analysis.

Course Policies:

Academic Integrity

Students should familiarize themselves with UCF’s Rules of Conduct at <http://osc.sdes.ucf.edu/process/roc>. According to Section 1, “Academic Misconduct,” students are prohibited from engaging in

1. Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
2. Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else’s efforts and used as part of an examination, course assignment, or project.
3. Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor’s PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
4. Falsifying or misrepresenting the student’s own academic work.
5. Plagiarism: Using or appropriating another’s work without any indication of the source, thereby attempting to convey the impression that such work is the student’s own.
6. Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
7. Helping another violate academic behavior standards.

For more information about Academic Integrity, consult the International Center for Academic Integrity <http://academicintegrity.org>.


Responses to Academic Dishonesty, Plagiarism, or Cheating

Students should also familiarize themselves with the procedures for academic misconduct in UCF’s student handbook, The Golden Rule <http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf>. UCF faculty members have a responsibility for students’ education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a “Z Designation” on a student’s official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see <http://goldenrule.sdes.ucf.edu/zgrade>.

Course Accessibility Statement
The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need access to course content due to course design limitations should contact the professor as soon as possible. Students should also connect with Student Accessibility Services (SAS) <http://sas.sdes.ucf.edu/> (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). For students connected with SAS, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential course access and accommodations that might be necessary and reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student. Further conversation with SAS, faculty and the student may be warranted to ensure an accessible course experience.

**Campus Safety**

Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide’s physical location and review the online version at <http://emergency.ucf.edu/emergency_guide.html>.
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see <http://www.ehs.ucf.edu/AEDlocations-UCF> (click on link from menu on left).
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <https://my.ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.
- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (<https://youtu.be/NIKYajEx4pk>).

**Deployed Active Duty Military Students**

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

**Right to Privacy (FERPA):** The Family Educational Rights and Privacy Act ensures that your student records (for any students over 18 years of age) are kept confidential. I will not release your grades to anyone other than you or school officials who are given permission to view your progress. Anyone other than you (or an approved school official) may not request any information (beyond simple directory information) about you, your progress, or your status as a student in my class – this includes parents, partners, and other students.

**Make-up/ Missed Assignments**

Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at <https://policies.ucf.edu/documents/4-401.pdf> No other late work is accepted.
Attendance policy – attendance and participation is a critical part of this course. However, I will not keep track officially. You do not need to provide reasons for absences – You are an adult who has to make your own choices based on individual circumstances and priorities. This is a seminar style course where discussion and lecture will be core to your comprehension of material and ability to carry out your final assignment. In addition, you will be asked to lead discussion on at least one occasion. **Please note that you will be personally responsible for catching up on any work you miss in class and should get notes from a classmate.**

**Participation** - While I recognize we all come from different cultural backgrounds and have unique learning styles I encourage you to stretch yourself and be an active member of the class. I am not here to make you uncomfortable, but it is my goal that you learn as much as possible and this may require you to move outside of your comfort zone at times. Participation is not measured by simply noting how often you speak up in class. Consistent attendance, alert attention, question asking, and general respect to the instructor and your peers are important factors as well.

**Cell phones & computers** – your cell phone must be silent during class. Please respect your instructor and your classmates by avoiding distracting technology usage. You may take notes on a computer if you desire, but watch out for Facebook temptation!

**Emergencies** – life is unpredictable and occasionally true emergencies (e.g. hospitalization, injury of a child, catastrophic loss, etc.) do occur. Please contact me as soon as possible to alert me to any of these events so I can work with you. Communication is key to making sure you do not fall behind or lose your current standing in the class.

**Respect** - The classroom climate will be supportive and tolerant with all students participating at the highest level of professional, ethical and moral conduct. All discussions will be held with maturity, integrity with a goal of understanding. Make the most of your education and allow others to as well!

**Fun** – after all of that you may think it’s impossible but I do want us to enjoy our time together this semester!

**Important Grading Information:**

Extra Credit- **There is no extra credit.** An ‘A’ grade cannot be earned by turning in more ‘C’ level work than the rest of the students. It is possible that a unique opportunity may arise during the semester due to research or special events and if so I will let you know. Do not request extra credit. If you are struggling with material please make an effort to meet with me early on to give optimal opportunity for improvement

**Tips for communicating with Dr. Sandoval 😊**

1. Call her Dr. Sandoval, Jennifer, Jen, Dr. J, Dr. S, Professor Sandoval, P Sandy, DO NOT call her Jenny or Mrs. Sandoval.
2. The very first e-mail you write her should include appropriate greeting, punctuation, grammar and spelling. Do not treat it like a txt to ur bff.
3. Read the syllabus before asking questions about an assignment. There is a lot of information available to you that will help you prepare more thorough questions that will get you farther in your work.
4. Don’t communicate passive-aggressively through Rate-My-Professor.com (she won’t read it anyway). If you need help, have questions, concerns, are frustrated or just not getting it – PLEASE put the communication skills we discuss into practice and be proactive, open, honest, respectful and she will do the same.
5. Don’t take her sarcasm personally (she’s a bit of a smart ass at times). If it makes you feel uncomfortable – let her know.
6. Don’t make an appointment outside of office hours and then not show up without a phone call or e-mail (or an apology skinny cinnamon dolce latte the next time you see her).
7. Remember she’s a person who definitely cares about your learning and probably likes you! She’s not an emotionless, alien life form sent to Earth to maliciously drain your life of fun and happiness.

**Valuable Resources Just for You:**

**Disability Resource Services:** Students needing academic accommodation please contact me as soon as possible so we can work together to ensure your needs are met. In addition, please make arrangements with Disability Resource Center. They are located in Ferrell Commons 7F, Room 185
*Website:* [http://sds.sdes.ucf.edu/](http://sds.sdes.ucf.edu/), *Email* sds@ucf.edu
*Hours (M-F)* 8:00am - 5:00pm *Testing (M-Th)* 7:30am - 9:00pm *Phone* (407) 823-2371

**The Writing Center:** Free tutoring and resources are available to you at the University Writing Center. You can drop in or make an appointment for assistance. – they even have online appointments available. Look at their resources today – your grade will thank you!! They are located in Colbourn Hall

**Advising Resource Center:** The Nicholson Academic Student Services Center (NSC 143) is home to wonderful advisors that can work with you in planning your short time here. Take advantage of the very helpful and knowledgeable staff when you can.
*Website:* [http://communication.cos.ucf.edu/](http://communication.cos.ucf.edu/), *Email:* nassc@ail.ucf.edu, *Phone:* 407-823-2681

**Health Center and Psychological Counseling Services:** Grad school is stressful and managing your personal, professional and student lives can take a toll on your body and your emotional health. Don’t forget to take care of yourself and seek help from the resources available right here on campus.

**Grading Procedures**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points Possible</th>
<th>Your Score</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion Facilitation</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumption Paper</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concept Papers</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research Proposal/Presentation</td>
<td>125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation/Attendance</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>400</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exams (75 points each)
There will be two exams covering the readings, lectures, presentations etc. They will be a combination of multiple choice and essay questions.

Discussion Facilitation (25 points)
In a graduate seminar participation is critical. You and one other student will present a brief summary of one of the articles assigned and lead us through a couple of discussion questions. Sign-ups will be the first night. You will turn in a one page summary of the article selected including the main points, your thoughts/critique and two discussion questions for the class.
Each student will select a day from the course schedule and present the major themes, issues, and concepts from the readings on the designated date. You are asked to provide a summary of each article, your response or critique, and questions for discussion. Please provide a typed outline of your presentation to me BEFORE you present. I’m available to help you plan your presentation and discussion facilitation. I expect your presentation to be well-prepared and thought-provoking.

*All papers will be submitted on webcourses and run through turnitin.com

Assumption Paper (25 points)
This paper is 3-5 pages in length, including references. All communication scholars work from a set of assumptions, which are articulated clearly in some cases and unspoken quite often. However, the theories and methods scholars subscribe to and their chosen topics of study are often indicative of their assumptions. You will start this paper by stating your taken-for-granted beliefs about culture and individuals. Discuss how your assumptions were formed, and how they shape your scholarship. You will benefit from writing this paper from your own standpoint or lived experience. The goal of this assignment is to enhance your ability to think through the beliefs and values that shape the topics you choose to investigate during your coursework and your graduate studies, your chosen methods for collecting data, and your theoretical foci. This assignment will be evaluated for clarity of ideas, structure of arguments, and quality of writing. Use APA style.

Concept Papers (25 points each)
You will write short papers (3-4 pages each) on two key theoretical concepts. You will write an extended definition—or conceptualization—of the terms in order to articulate how the concepts emerged, how they are used in research, and how the concepts are situated within the broader system of knowledge. You may also provide your critique or limitation of the concepts. In your second concept paper, also address how the two concepts relate to each other. Note: Select your concepts with your final project in mind. You will apply, critique, and/or extend these theoretical concepts in your final project. Use APA style.

Participation (25 points)
Attendance, participation, and discussion will be monitored throughout the course. I may choose to take attendance, utilize in-class assignments, administer quizzes, start online discussions, or assign homework as an indicator of attendance and participation. Participation consists of paying attention in class (e.g., no texting or unrelated computer use), asking productive questions, and participating in class discussion and activities. If students are always present, pay attention, and participate in discussions and activities, they will receive full credit.
Research Proposal

Research Proposal (25 points for literature review, 100 points for final paper)

The research proposal consists of two separate assignments: the literature review and the final paper. Students will pick an intercultural communication topic of their choice and propose a study. The literature review will provide appropriate background on the issue of interest. The final paper will include a revised literature review, hypotheses/research questions, a complete method section, planned analysis, and any relevant appendices (e.g., measures). All assignments must adhere to APA style and peer reviewed references will be required. Students will be required to give a conference style presentation at the end of the course so that we may all benefit from the perspective you are taking.

Basic Guidelines

- **12-15 pages**
  Quality is more important than quantity, however a good literature review is exhaustive and can be quite lengthy when done well. This is a good guideline for the number of text pages – that does not include a cover page, bibliography, or appendices.

- **APA style**
  If you are not familiar with this – get familiar! Writing styles are used for important reasons, not the least of which so that other readers can find your sources easily. In short, it matters – do it correctly!

- **Introduction**
  Engage the reader. Present the problem you are going to address/study. Preview the paper and give us a good indication of why this topic/project matters.

- **Literature Review**
  Cover all the major concepts/topics relevant to your study. Don’t just provide simple summaries, but rather synthesize the information in an organized and useful pattern. Apply the theories and information to the study you are proposing.

- **Method**
  You will provide a detailed description of how you would investigate this question/problem you propose. Include rationale for the methodology, the method, the population, data collection process, ethical considerations and researcher reflexivity.

- **Tools of Analysis**
  Explain how you would conduct an in depth and sophisticated analysis of this data. It will vary based on method and topic, but you should have a very clear picture of what you would do with the data in order to answer your question.

- **Bibliography**
  You should have approximately 20-25 scholarly sources in APA style

- **Presentation**
  You will have the chance to present your proposal to the class in an informal/conference style setting. Be creative, engaging, and professional.
  Provide a one page handout for the class about your project.
Week 1:  Introduction to the Course


Reference Online.

Week 2:  Historical Foundations and Key Concepts

Due: Sign up for Discussion Facilitation

Service Institute and the mandate for intercultural training. Quarterly Journal of Speech,  
76, 262-281.

Communication Quarterly, 44, 70-84.

87-93). New York: Oxford University.

Week 3:  Paradigmatic Approaches

Due: Assumption Paper

Communication theory, 9 (1), 1-25

representation with the functionalist bathwather in critical intercultural communication. 
In W. J. Starosta & G.-M. Chen (Eds.), Taking stock in intercultural communication: 

Williams, R. (1985). Ideology. Keywords: A vocabulary of culture and society (Revised 

Discussion Facilitation 1: ____________________
Week 4: Identity as Politics, Identity as Performance


Discussion Facilitation 3: _______________________

---

Week 5: Race, Gender, & Sexuality

Due: Concept Paper 1


Discussion Facilitation 4: _______________________

---

Week 6: Unpacking Whiteness


**Discussion Facilitation 5:________________________**

**Week 7:**  
**Beyond Representation: Body and Embodiment**


**Discussion Facilitation 6:____________________________**

**Week 8:**  
**The Politics of Institutional Diversity**


**Discussion Facilitation 7:________________________**

**Week 9:**  
**The Health Context**
Due: Concept Paper 2


Discussion Facilitation 8:____________________

---

**Week 10:** Challenging Eurocentrism and Ethnocentrism

Due: Concept Paper 2


Discussion Facilitation 9:____________________

---

**Week 11:** Popular Culture and Media Representation

November 6

Film: Race-o-rama

Due: Literature Review


Discussion Facilitation 9:____________________
Week 12: Historical Trauma and Community
TBD

Week 13: Globalization, Immigration & Transnationalism

Due:


Discussion Facilitation 10:____________________

Week 14: Presentations

Due: Final Paper

Week 15: Final Exam
Starting List of Journals Relevant to Culture and Communication

Please note that each journal and edited volume has a different take and focus and thus reviewing one will give you a different perspective than another.

Journal of International and Intercultural Communication
The Handbook of Critical Intercultural Communication
Communication, Culture, and Critique
Journal of Intercultural Communication Research
The Howard Journal of Communication
Handbook of International and Intercultural Communication (2nd Edition)
International and Intercultural Communication Annual
International Journal of Intercultural Relations
Journal of Communication
Communication Theory
Human Communication
Gazette: The International Journal for Communication Studies
Western Journal of Communication
World Communication
Journal of Cross-cultural Psychology
Critical Studies in Media Communication
Critical and Cultural Studies
Discourse and Society

Starting List of Theories/Concepts Relevant to Culture and Communication

Agenda setting
Anxiety and uncertainly management theory
Co-culture
Postcolonialism
Communication accommodation theory
Community capacity
Cultivation
Cultural adaptation
Cultural dialectics
Cultural diversity
Cultural imperialism
Cultural types theories
Ethnocentrism
Ethnography
Face
Health disparities
Hegemony
Hybridity
Identity
Ideology
Intercultural communication competence
Orientalism
Social identity theory
Uncertainty reduction theory
“Be the change you wish to see in the world…” Ghandi

I believe Ghandi’s statement has great insight into the world of teaching and learning. So often we find ourselves saying, but not doing. This is where we must enter into a good faith partnership to explore the world of communication from as many perspectives as possible. Each and every one of you has much to bring to the classroom and it is my desire to motivate you to engage in this exchange. The classroom is not an exercise in monologue, but rather a challenge to create a new community dedicated to the art of dialogue.

The world around you is becoming increasingly complex and diverse. It is impossible to be successful without understanding how to effectively interact with a variety of people in a number of environments. Gaining the knowledge, skills and abilities in the communication field will not only be critical in a pragmatic, material sense, but it will also increase esteem and satisfaction in your personal lives and in contribution to the greater global community.

On a personal note:

You do not need an academic reason to come see me. You are welcome to contact me any time and I am happy to discuss your major, your college experience, challenges, career choices or anything else that is on your mind. If you are unable to come by at posted hours never hesitate to call or email to make other arrangements.
NAME/NICKNAME: ________________________________

Contact Information:

Current career/job:

Future aspirations:

Stage of the MA program you are at:

What do you hope to get out of this course?

What do you hope to get out of grad school?

Is there anything you would like for me to know? (personal circumstances that impact your academics, learning style, anxieties about class/grad school, favorite color – whatever 😊)
Nicholson School of Communication and Media - Grad Course Deletion - FIL 5853 Independent Cinematic Forms
2020-2021 Graduate Course Deletion

General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.
2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.
3. LAUNCH proposal by clicking ⏩ in the top left corner.

<table>
<thead>
<tr>
<th>Proposal Type:*</th>
<th>Grad Course Deletion</th>
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</thead>
<tbody>
<tr>
<td>College:*</td>
<td>Nicholson School of Communication and Media</td>
</tr>
<tr>
<td>Unit / Department / College:*</td>
<td>Department of Film and Mass Media (NSCM)</td>
</tr>
</tbody>
</table>

**IMPORT COURSE NOW!** Please use the Import feature to import the course information from the Catalog by clicking 🔄 in the top left corner of the form. Do **not** type the course prefix and code.

<table>
<thead>
<tr>
<th>Prefix:*</th>
<th>FIL</th>
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<tbody>
<tr>
<td>Code:*</td>
<td>5853</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Title:*</th>
<th>Independent Cinematic Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Title:*</td>
<td>FIL 5853 Independent Cinematic Forms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Description:*</th>
<th>Evolution of low budget independent cinematic films through the works of modern and classical filmmakers within and beyond the studio system.</th>
</tr>
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<tbody>
<tr>
<td>Credit Hours:</td>
<td>3</td>
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<td>Lab and Field Work Hours:</td>
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<tr>
<td>Contact Hours:</td>
<td>3</td>
</tr>
<tr>
<td>Prerequisite(s):</td>
<td>Admission to MFA Film and Digital Media/Entre Dig Cin track, or C.I.</td>
</tr>
</tbody>
</table>
### Corequisite(s):

- [ ] Yes
- [ ] No

### Graded S/U?

- [ ] Yes
- [ ] No

### Split-Level Class?

- [ ] Yes
- [ ] No

### List undergraduate split-level course:

#### Term of Offering

- [x] Odd Fall
- [x] Even Fall
- [x] Odd Spring
- [x] Even Spring
- [ ] Odd Summer
- [ ] Even Summer
- [x] Every Semester
- [ ] Occasional

#### Utilization of Course

- [ ] Required Course
- [x] Elective Course

#### Justification for Course Deletion

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking ⬇️ in the top left corner of the form and answer below according to the results.

- [ ] Yes
- [ ] No

If not, explain:

#### Notes:

Completed impact report: course only applies to the Emerging Media M.F.A., Feature Film Production Track as one of the internal restricted elective options.

Justification for deletion: Due to recent curriculum changes, some of the content of the course is no longer relevant or is covered in other electives in the program.

#### Attachment

- [ ] Yes
- [x] No

#### Administration Use Only

Catalog Ownership:
| Course OID | Course Type | Status
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Film</td>
<td><img src="on" alt="Active-Visible" /> <img src="off" alt="Inactive-Hidden" /></td>
</tr>
</tbody>
</table>

**PeopleSoft**

- **Academic Group**: Nicholson School of Communication and Media
- **Career**: 
- **Print in Catalog**: 
- **Effective Date**: 
- **Lab Fee**
- **CRSE_ID**: 043512
Impact Report for FIL 5853

Source: 2020-2021 Graduate Catalog (WORKING COPY)

<table>
<thead>
<tr>
<th>Full Course Title</th>
<th>FIL 5853 - Independent Cinematic Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs</td>
<td>Emerging Media MFA, Feature Film Production Track ♦♦</td>
</tr>
</tbody>
</table>
Nicholson School of Communication and Media - Graduate Program Revision - Emerging Media MFA, Feature Film Production Track ♦♦

2020-2021 Graduate Program Revision/ Reactivation

**General Catalog Information**

This form is to be used to REVISE graduate degree programs, tracks, or certificate programs. If there are tracks being revised or added to a program, one form must be submitted for EACH program and the track(s).

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

Select *Program* below.

**Program Type:**
- Program
- Shared Core

**Proposal Type:**
- Graduate Program Revision

**Read before you begin**

TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

IMPORT curriculum data from the Catalog by clicking ⬇️ in the top left corner.

FILL IN all fields required marked with an * after importing data. You will not be able to launch the proposal without completing required fields.

LAUNCH proposal by clicking ⬇️ in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after proposal is launched.

College: Nicholson School of Communication and Media

Unit / Department / College: Department of Film and Mass Media (NSCM)
**Type of Action:**  
- Program  
- **Track**  
- Certificate

**IMPORT PROGRAM NOW!** Please use the Import feature to import the program information from the Catalog by clicking in the top left corner of the form.

- **Name of program, track and / or certificate:**  
  Emerging Media MFA, Feature Film Production Track

- **Are you revising the name of the program, track, or certificate?**  
  Yes  
  No

- **Proposed Effective Term / Year:**  
  Summer 2020

- **If you will be submitting other revision forms for tracks or course actions, please list them here:**

- **Is the CIP code being updated?**  
  Yes  
  No

- **If yes, please provide the new CIP code:**

- **Rationale for revision:**  
  Requested deletion of FIL 5853 Independent Cinematic Forms course, therefore need to delete course from list of internal electives.

**Complete the remaining required fields and LAUNCH this proposal!** Do not begin revisions until after launch. Program revisions before launch will not be tracked.

**Informational Description Chart - this will import.**

- **College:** Nicholson School of Communication and Media  
- **Degree:** MFA

- **Department:** Film and Mass Media  
- **Option:** Thesis

- **Program Websites:** https://communication.ucf.edu/degree/film-production-mfa/

- **Graduate Program Handbook**

**Revise catalog copy here!** After you revise courses, click on the Curriculum Schema button below to revise the catalog copy. Please note: this information is what will flow directly to the graduate catalog. Any attached documents to this proposal will not be used for catalog purposes.
Follow these steps to propose courses to the revised program curriculum:

**Step 1**

There are two options for adding courses: "Add Course" and "Import Course." For courses already in the catalog, click on "Import Course" and find the courses needed. For new classes going through a Curriculog Approval Process click on "Add Course"—a box will open asking you for the Prefix, Course Number and Course Title.

**Step 2**

Click on "View Curriculum Schema." Click on the area/header of the program where you would like to add courses. When you click on "Add Courses" it will bring up the list of courses available from Step 1. Select the courses you wish to add. For removing courses click on the ‘X’ and proceed.

---

**Track Description**

The Emerging Media MFA – Feature Film Production is a terminal degree, the highest degree awarded to filmmakers or film artists. It is a highly selective and rigorous professional film production program for visual artists and film practitioners who demonstrate exceptional artistic and intellectual prowess, evidence of significant professional promise and a commitment to the expressive potential of digital filmmaking and the exploration of non-traditional modes of distribution. The MFA in Feature Film Production produces graduates with mastery of storytelling through the digital medium as it encourages the candidate to find his or her personal style. Entrepreneurial in spirit, the program emphasizes story, performance, aesthetic choice, business, and creative thinking. When participation is committed and complete, the program develops graduates who can compete in the worlds of national and international independent filmmaking.

While students may make a thesis film outside the narrative feature film model (i.e., an experimental or documentary film), all MFA candidates are required to take the core required courses that teach the customs and skills required of the narrative model. Upon completion of the degree, each student will have produced a microbudget digital feature film or long-form equivalent body of work and prepared a marketing strategy for its distribution and exhibition. The budgetary limitation is designed to encourage the student to move away from more traditional modes of production toward an approach that minimizes crew size, cast size, shooting time and production costs in favor of more careful planning, more personal filmmaking and more creative use of the means of production.

We welcome innovative approaches within the digital cinema paradigm that reimagine how new technologies can create alternative performances to exploit the tension between narrative and experimental storytelling, creating a new agency for actors and new expectations for
audiences.

Curriculum

Total Credit Hours Required: 63 Credit Hours Minimum beyond the Bachelor's Degree

Required Courses—30 Credit Hours

FIL 5406 Theories of Film Production
FIL 5800 Research Methods in Film and Digital Media
FIL 5924 Graduate Seminar
FIL 6454 Microbudget Production Design
FIL 6596 Advanced Directing Workshop for Film and Digital Media
FIL 6619 Guerilla Marketing and Models of Distribution
FIL 6644 Microbudget Pre-Production
FIL 6649 Microbudget Post-Production
FIL 6673 Arts and Media Entrepreneurship

[After]

Note: FIL 5924 Graduate Seminar is 1 Credit Hour to be taken each semester for a total of 6 credits

Internal Elective Courses—9 Credit Hours

Students select a minimum of 9 credit hours of internal electives that reflect their mode of filmmaking interest (narrative, documentary, or experimental). More than 9 credit hours of internal electives may be taken to substitute for external electives if approved by the graduate program coordinator.

FIL 5141C Feature/TV Writing
FIL 5371C Documentary Production
FIL 5419 Developing the Film Screenplay
FIL 5422C Experimental Cinema
FIL 5853 Independent Cinematic Forms
FIL 6146 Screenplay Refinement

[After]
Note: FIL 5907 Independent Study and FIL 5917/5918 Directed Research may be taken for a total of no more than six semester hours each.

External Electives—12 Credit Hours

Students select a minimum of 12 credit hours of external electives that align with their particular interests, outside the MFA in Feature Film Production. Choice of external electives should be made after discussion with the thesis advisor or graduate coordinator. Other electives related to the thesis topic may be approved by the graduate coordinator. Not all of these courses are offered every term, prerequisites and consent of instructor may be required.

ADV 6209 Advertising and Society
ARH 5897 Advanced Seminar in Art History
ART 5280 Serial Content
ART 5910 Studio Concentration I
ART 6683 Time Arts
ART 6911C Studio Concentration
COM 5932 Topics in Communication Theory and Research
COM 6046 Interpersonal Communication
COM 6047 Interpersonal Support in the Workplace
COM 6048 Communication in Close Relationships
COM 6121 Communication Management
COM 6145 Organizational Communication
COM 6463 Studies in Intercultural Communication
COM 6466 Persuasion in the Media
COM 6467 Studies in Persuasion
COM 6468 Communication and Conflict
COM 6525 Communication Strategy and Planning
DIG 5366C Animation and Visual Effects Production II
DIG 5378C Editing for Animation and Visual Effects I: Theory and Production
DIG 5386C Animation and Visual Effects Production I
DIG 5439C Script and Story Development for Animation and Visual Effects
DIG 5487 Media Aesthetics
DIG 5810 Ways of Seeing: Cultural and Technological Perspectives
DIG 5865 The History of Animation and Visual Effects  
DIG 6099 Media Distribution  
DIG 6136 Design for Interactive Media  
DIG 6365C Media and Music for Animation and Visual Effects  
DIG 6379C Editing for Animation and Visual Effects II: Practical Editing  
DIG 6432 Transmedia Story Creation  
DIG 6546 Previsualization and Concept Development  
DIG 6551 Theory and Practice of Interactive Storytelling  
ENT 5016 New Venture Design  
ENT 5206 New Venture Implementation  
ENT 5619 Creativity and Entrepreneurship  
MMC 6202 Legal and Ethical Issues for Communication  
MMC 6266 Communications Convergence and Media Planning  
MMC 6307 International Communication  
MMC 6407 Visual Communication Theory  
MMC 6567 New Media  
MMC 6600 Media Effects and Audience Analysis  
MMC 6607 Communication and Society  
MMC 6612 Communication and Government  
MMC 6735 Social Media as Mass Communication  
PUR 6215 Communicating Corporate Social Responsibility  
PUR 6405 Communication and Public Relations in Politics and Government  
SPC 6340 Teaching Communication  
SPC 6442 Small Group Communication

Thesis—12 Credit Hours

Before undertaking the thesis project, candidates must meet with the thesis advisory committee to submit and discuss the proposed project and obtain the committee's approval. The thesis requires intensive applied learning in order to complete a feature-length project and/or body of work. The student cannot enroll in thesis hours until the thesis advisory committee has been selected and approved.

Additionally, the thesis project has a strong research component both in the initial development phase and in the creation of the distribution and marketing plan for the project. In addition to creating the feature film or body of work, the student must write an accompanying thesis paper that meets all university requirements (see ETD Requirements). The final
stage of the curriculum serves as a bridge to the professional world and supports the entrepreneurial philosophy of the program. The thesis project must be reviewed by the faculty adviser throughout the production process, and meet agreed upon criteria within a stated time frame. Once the thesis project is completed, candidates must have a screening or exhibition of the work and meet with the thesis advisory committee for final approval and oral defense.

**FIL 6971 - Thesis 12 Credit Hours**

**Equipment Fee**

Students in the Emerging Media MFA program pay a $90 equipment fee each semester that they are enrolled.

**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](https://admissions.ucf.edu) section of the Graduate Catalog. Applicants must [apply online](https://apply.ucf.edu). All requested materials must be submitted by the established deadline.

In addition to the [Admissions](https://admissions.ucf.edu), applicants to this program must provide:

- One official transcript from each college/university attended.
- A BA or BFA in film production is preferred, however, degrees in the following areas are acceptable if accompanied by a strong video portfolio:
  - Animation
  - Art
  - Cinema Studies
  - Communication
  - English/Creative Writing
  - Game Design
  - Graphic Design
  - Illustration
  - Journalism
Journalism
Photography
Radio/TV

Personal Statement: In 750-words or less, provide an Artist’s Statement that reflects your vision for a feature film, or equivalent body of cinematic work, that explains your vision using a microbudget production process. Please describe how the critical thinking and technical expertise acquired in our program will support the successful execution of your vision.

Portfolio: Submit 1 - 3 complete short films (each being 15 minutes or less) that the applicant has participated in as a principle creative collaborator (i.e. as writer, director, producer, director of photography, production designer, and/or editor).

Provide a document with links to YouTube, Vimeo, or similar platform.
All submitted online links to film samples must include:

- The film’s title
- The applicant’s role in the making of the film
- The date the film was completed

Other materials in the portfolio may include, but are not limited to:

- screenwriting samples,
- photography, documentation of work in other media, critical media analysis, and any other materials which reflect the applicant's experience with moving image scholarship and practice

Writing Sample: Please submit one of the following writing samples based off which film genre is your interest.

Narrative Feature Film:

Provide a treatment for a proposed feature film.
Provide a script sample of another work that he/she has written.

The applicant does not have to be the author of the script
that he/she plans to
direct as the thesis
film if accepted into
the program.
Students may use a
script that is in the
public domain and
direct his/her
interpretation of it,
or someone else
may write a script
that the student will
direct.

Documentary Feature Film:

Provide a written treatment for a
proposed feature documentary.

The treatment
should define the
subject of the film
and how it
addresses the
following items and
your professional
goals:

- Rationale/Thesis
- Style
- Content
- Approach

Experimental Feature Film, Series of Short
Films, or Body of Work:

The treatment/proposal should
describe the subject of the film
and express the filmmaker's
intentions regarding approach
and style. The length of the
treatment/proposal should reflect
the scope of the project.

- Rationale/Thesis

Address why this
topic was selected
and why this film
should be made.

This portion of the
This portion of the treatment/proposal should demonstrate the filmmaker's knowledge and sense of context for the significance of the work. It can also state a "challenge" or question - one the project will address, explore, or attempt to answer.

**Approach**

The filmmaker should express the style in which the film(s) or project will be made and how this style will enhance and express the nature of the subject and the meanings, thoughts, or impressions the filmmaker intends to reveal. The filmmaker may choose to describe specific techniques with shooting on film or video, or experimenting with other forms of cinematic digital media, that will form the basis of inquiry or aesthetic and technical exploration within the thesis project.

**Résumé**

Provide two letters of recommendation, with at least one from an industry professional or college/university professor. 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.

Please submit all materials, with the exception of official transcripts, electronically as part of the online application. Applicants may be asked to participate in an admissions interview.

Meeting minimum UCF admission criteria does not guarantee program admission. Final admission is based on the evaluation of the applicant's abilities, past performance, recommendations, match of this program and faculty expertise to the applicant's career/academic goals, the applicant's potential for completing the degree and the current applicant pool.

### Application Deadlines

<table>
<thead>
<tr>
<th>Feature Film Production</th>
<th><em>Fall Priority</em></th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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</thead>
<tbody>
<tr>
<td>Domestic Applicants</td>
<td>Jan 15</td>
<td>Jul 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Applicants</td>
<td>Jan 15</td>
<td>Jan 15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*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.
Fellowsips

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.

Contact Info

Graduate Program

Kelsey Loftus

NSCM Graduate Admissions Specialist

nicholsongrad@ucf.edu

Telephone: 407-823-5595

NSCM 238/CMB 203

Graduate Admissions

Keri Corbett

gradadmissions@ucf.edu

Telephone: 407-823-2766

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 PPI: 5233

Graduate Fellowships

Grad Fellowships

Telephone: 407-823-0127

gradfellowship@ucf.edu

https://graduate.ucf.edu/funding/

Graduate Financial Aid

UCF Student Financial Assistance

Millican Hall 120

Telephone: 407-823-2827

Appointment Line: 407-823-5285

Fax: 407-823-5241

finaid@ucf.edu

http://finaid.ucf.edu

Impact on Current Students

Will students be moved from an existing program, track, or certificate into this revised 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? One less internal elective in list of courses to choose from.

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.

Year 1

Headcount:  
SCHs:  

Year 2

Headcount:  
SCHs:  

Year 3

Headcount:  
SCHs:  

Indicate likely career or student outcomes upon completion:

Please complete the following section on financial support:

(Specify all forms of support – assistantships, fellowships, and tuition remission.)

Year 1

Number of assistantship students:  
Source of funds:  

Number of fellowship students (specify
<table>
<thead>
<tr>
<th>Year 2</th>
<th>Year 3</th>
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<tbody>
<tr>
<td><strong>Number of assistantship students:</strong></td>
<td><strong>Number of assistantship students:</strong></td>
</tr>
<tr>
<td><strong>Number of tuition remissions:</strong></td>
<td><strong>Number of tuition remissions:</strong></td>
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<tr>
<td><strong>Source of funds:</strong></td>
<td><strong>Source of funds:</strong></td>
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<tr>
<td><strong>Number of fellowship students (specify fellowship):</strong></td>
<td><strong>Number of fellowship students (specify fellowship):</strong></td>
</tr>
<tr>
<td><strong>Source of funds:</strong></td>
<td><strong>Source of funds:</strong></td>
</tr>
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</table>

**Attachments**

Please attach the required files by navigating to the Proposal Toolbox and clicking on the top right corner of the form.

- **Faculty List**<br>Attached: , Not Applicable

- **Support from involved units that no duplication exists**<br>Attached: , Not Applicable

**Administration Use Only**

- **Catalog Ownership:**
- **Program OID**: 7626
- **Program Type**: Master of Fine Arts
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<td>Active-Visible</td>
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</table>
Nicholson School of Communication and Media - Grad Course Revision- FIL 6614 Domestic and International Models of Distribution

2020-2021 Graduate Course Revision

General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 📖 in the top right corner of the heading.

2. FILL IN all fields required marked with an * . You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ⬅️ in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after the proposal is launched.

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

<table>
<thead>
<tr>
<th>College:*</th>
<th>Nicholson School of Communication and Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit / Department / College:*</td>
<td>Department of Film and Mass Media (NSCM)</td>
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</tbody>
</table>

IMPORT COURSE NOW! Please use the Import feature to import the course information from the Catalog by clicking ⬅️ in the top left corner of the form. Do not type the course prefix and code.

<table>
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<tr>
<th>Prefix:*</th>
<th>FIL</th>
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<tbody>
<tr>
<td>Code:*</td>
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<table>
<thead>
<tr>
<th>Course Title:*</th>
<th>Domestic and International Models of Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Character Abbreviation:*</td>
<td>Models of Distribution</td>
</tr>
<tr>
<td>Full Title:*</td>
<td>Grad Course Revision- FIL 6614 Domestic and International Models of Distribution</td>
</tr>
</tbody>
</table>

Course Instructor: Katherine Shultz
Complete the remaining required fields and LAUNCH this proposal by clicking ▶️ in the top left corner! Do not begin revisions until after launch. Course revisions before launch will not be tracked.

**Course Description:**
Global media distribution business models, with emphasis on independent film distribution in a variety of markets, including theatrical, home video, and internet.

**Prerequisite(s):**
School of Admission to Film and or Digital Media master’s-student graduate program or C. I

**Corequisite(s):**

**Does this proposal include revisions to prerequisites?**
- Yes
- No

**Grading Scheme:** ABCDF

---

**Credit Hour Information**

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

**Credit Hour Design Options**

<table>
<thead>
<tr>
<th>Credit Hour</th>
<th>ABCDF</th>
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<tr>
<td>(Formal) Instruction Time - Class Hours or Online Module, etc.</td>
<td>1</td>
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<tr>
<td>Lab/Studio/Field work</td>
<td>0</td>
</tr>
<tr>
<td>Out-of-Class (homework, course readings, group work, online posts, etc)</td>
<td>2</td>
</tr>
<tr>
<td>Total Course Engagement</td>
<td>3</td>
</tr>
</tbody>
</table>

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

- 1 Credit hours = 3 hours of Total Course Engagement
- 2 Credit hours = 6 hours of Total Course Engagement
- 3 Credit hours = 9 hours of Total Course Engagement
4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC definition:  http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf

<table>
<thead>
<tr>
<th>Credit Hours:*</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction Time:*</td>
<td>3</td>
</tr>
<tr>
<td>Lab/Studio/Field Work Hours:*</td>
<td>0</td>
</tr>
<tr>
<td>Out-of-Class Hours:*</td>
<td>6</td>
</tr>
<tr>
<td>Total Engagement Hours:*</td>
<td>9</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Repeat for credit?</th>
<th>Yes ☐ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Log</td>
<td></td>
</tr>
<tr>
<td>Kim Tuorto</td>
<td></td>
</tr>
<tr>
<td>+ No</td>
<td></td>
</tr>
</tbody>
</table>

If yes, indicate the degree program name and the total times the course may repeated.

If the course you are revising is a split-level class, please note this revision form will only impact the graduate side of the course. The undergraduate component of the course should be revised through the Undergraduate Curriculum Committee. As a reminder, the graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor.

<table>
<thead>
<tr>
<th>Split-Level Class:*</th>
<th>Yes ☐ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>List undergraduate split-level course:</td>
<td></td>
</tr>
</tbody>
</table>

**Term of Offering**

When will the course be offered?

- Odd Fall
- Even Fall
- Odd Spring
- Even Spring
- Odd Summer
- Even Summer
- Every Semester
- Occasional

**Intended Utilization of Course**
The course will be used primarily as:

<table>
<thead>
<tr>
<th>Activity Log</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kim Tuorto</td>
</tr>
<tr>
<td>+ Elective Course</td>
</tr>
</tbody>
</table>

Required Course  
Elective Course

**Justification for Course Revision**

**What is the rationale for revising this course?**

Recent and ongoing changes in curriculum coupled with lapses in faculty resources contributed to the inactivity with regard to this course. However, it is still included in future plans for the program and we are making a slight modification to the prerequisites.

**What grad programs/tracks require or recommend this course for graduation?**

Emerging Media MFA, Feature Film Production Track or Digital Media M.A.

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

**What is the estimated annual enrollment?**

20

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

**Detail Discussion**

N/A

**Course Syllabus Policy**

The University of Central of Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Reference(s)
Core policy statements

- Academic integrity statement including definition(s) of and consequences for academic misconduct
- Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
- Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with actions to take in various types of emergencies
- Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: [https://policies.ucf.edu/documents/4-403.pdf](https://policies.ucf.edu/documents/4-403.pdf)

**Course Syllabus Policy**

- I have aligned this syllabus per the UCF syllabus policy.

**Attachment List**

Please attach any required files by navigating to the Proposal Toolbox and clicking 📄 in the top right corner.

**Check**

- Kim Tuorto
- I have completed all relevant parts of the form.
- I have completed all relevant parts of the form.

**Attached**

- Kim Tuorto
- I have attached a course syllabus and rationale.
- I have attached a course syllabus and rationale.

**Proposal Type:**

- Grad Course Revision

---

**Administration Use Only**

- **Catalog Ownership:**
  - 

- **Course OID:**
  - 

- **Course Type:**
  - Film

- **Status:**
  - Active-Visible
  - Inactive-Hidden
<table>
<thead>
<tr>
<th>PeopleSoft</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Organization</strong></td>
</tr>
<tr>
<td><strong>Academic Group</strong>  Nicholson School of Communication and Media</td>
</tr>
<tr>
<td><strong>Career</strong></td>
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<tr>
<td><strong>Print in Catalog</strong></td>
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<tr>
<td><strong>Effective Date</strong></td>
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<tr>
<td><strong>Lab Fee</strong></td>
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<tr>
<td><strong>CRSE_ID</strong>  043834</td>
</tr>
</tbody>
</table>
FIL 6614: Domestic & International Models of Distribution
Nicholson School of Communication and Media
College of Arts and Humanities, University of Central Florida

COURSE SYLLABUS

Instructor: Katherine (Kate) Shults
Office: NSC 221
E-Mail: Katherine.Shults@ucf.edu

I. Welcome!
If you are beginning your final year in the MFA Film program or taking this course early to get a jump on your distribution plans, welcome! I hope we are able to work together this semester to generate a practical and relevant plan for releasing your thesis film and launching your career as an independent filmmaker.

II. University Course Catalog Description (CAH - 3 credits)
Global media distribution business models, with emphasis on independent film distribution in a variety of markets, including theatrical, home video, and internet.

III. Course Overview
Students will read, research and critically reflect on the work of contemporary film and New Media marketing/distribution experts and independent filmmakers. From these resources, students will craft the most effective strategies for the distribution of their thesis film. In addition, this emphasis on research will equip students to continue to meet the ever-changing demands of the New Media industry, as new models of distribution are tested every day, around the world.

IV. Course Objectives
• Critically engage with contemporary models of marketing & distribution, tailoring these practices to fit the vision and scope of the Student's thesis project.
• Design a thorough and practical plan for carrying out marketing & distribution goals, with achievable short term & long term benchmarks.
• Develop career-long habits for staying current with industry trends and identifying useful new resources in all aspects of independent filmmaking/content creation.

V. Course Prerequisites
• Admission to Film or Digital Media graduate program or C.I.

VI. Required Texts and Materials
Students are required to purchase the following books or acquire PDF copies:
Think Outside the Box Office: The Ultimate Guide to Film Distribution and Marketing for the Digital Era by Jon Reiss http://www.thinkoutsidetheboxoffice.com/store.html
How to Sell Your Film Without Selling Your Soul by Sheri Candler, Jon Reiss, and the Film Collaborative
http://www.sellingyourfilm.com/store/

Other Requirements:
• Access to Knight Mail & Twitter on a weekly basis
• Creation and maintenance of a Twitter account (if set to private, share with the entire class)

VII. Supplementary (Optional) Texts and Materials
These texts won’t be used in this course but are relevant to independent filmmaking and New Media distribution. They are highly recommended for your personal library:

The Art of Immersion by Frank Rose http://www.artofimmersion.com/

Digital Filmmaking by Mike Figgis http://www.amazon.com/dp/0571226256

Hamlet on the Holodeck: The Future of Narrative in Cyberspace by Janet H. Murray
http://www.amazon.com/dp/0262631873

http://mitpress.mit.edu/sites/default/files/titles/free_download/9780262513623_Confronting_the_Challenges.pdf

VIII. Basis for Final Grade

<table>
<thead>
<tr>
<th>Assessment</th>
<th>% of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation/Twitter account</td>
<td>20%</td>
</tr>
<tr>
<td>Blog Post Assignments (3-4)</td>
<td>10%</td>
</tr>
<tr>
<td>Chandler Checklist</td>
<td>10%</td>
</tr>
<tr>
<td>Social Media Survey</td>
<td>10%</td>
</tr>
<tr>
<td>Festival Strategy</td>
<td>10%</td>
</tr>
<tr>
<td>Distribution Strategy</td>
<td>10%</td>
</tr>
<tr>
<td>ETD Marketing Draft</td>
<td>10%</td>
</tr>
<tr>
<td>ETD Marketing Final</td>
<td>20%</td>
</tr>
</tbody>
</table>

Grading Scale (%)

<table>
<thead>
<tr>
<th>Grading Scale (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>94-100</td>
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</tr>
<tr>
<td>87-89</td>
<td>B+</td>
</tr>
<tr>
<td>84-86</td>
<td>B</td>
</tr>
<tr>
<td>80-83</td>
<td>B-</td>
</tr>
<tr>
<td>Grading Scale (%)</td>
<td></td>
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<tr>
<td>77-79</td>
<td>C+</td>
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<td>74-76</td>
<td>C</td>
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<tr>
<td>70-73</td>
<td>C-</td>
</tr>
<tr>
<td>67-69</td>
<td>D+</td>
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<tr>
<td>64-66</td>
<td>D</td>
</tr>
<tr>
<td>60-63</td>
<td>D-</td>
</tr>
<tr>
<td>0 - 59</td>
<td>F</td>
</tr>
</tbody>
</table>

IX. Grade Dissemination
Graded tests and materials in this course will be returned individually as applicable. Student grades are available upon request and will not be posted on MyUCF grades. Students have the right to know their grades at any time during the semester, so don’t hesitate to ask!

X. Course Policies: Grades

Late Work Policy: Assignments turned in late will be assessed a penalty: a half-letter grade if it is one day late, or a full-letter grade for 2-7 days late. Assignments will not be accepted if overdue by more than seven days.

Extra Credit Policy: There will be no extra credit offered in this course.

Grades of "Incomplete": The current university policy concerning incomplete grades will be followed in this course. Incomplete grades are given only in situations where unexpected emergencies prevent a student from completing the course and the remaining work can be completed the next semester. Your instructor is the final authority on whether you qualify for an incomplete. Incomplete work must be finished by the end of the subsequent semester or the “I” will automatically be recorded as an “F” on your transcript.

XI. Course Policies: Technology and Media

Email: This is the best way to reach the instructor outside of class or office hours. Please email Katherine.Shults@ucf.edu to reach the instructor.

Twitter: In order to develop habits for staying current with industry trends and news, each student must create and maintain a Twitter account. We will review how to use the site and the instructor will provide a list of suggested accounts to follow. Part of the participation grade will be based on students’ actively tweeting news or info relevant to their thesis project at least once a week. Twitter accounts may kept be public or private, but private accounts must follow all members of the class.

Course Blog: As a class, we will post all assignments and research in a communal, online space - the course blog. Since class meetings will be minimal, contributing to this online space will be the primary method of submitting assignments and sharing information with your classmates. Participation in the course blog is mandatory.

XII. Course Policies: Student Expectations

Disability Access: 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 who need accommodations must be registered with Student Disability Services, Ferrell Commons Room 185,
Attendance Policy: Because class meetings will be infrequent, attendance to these meetings is required. Students will be informed of required meetings at least 2 weeks in advance. Failure to attend these sessions without prior notice will result in a 1/2 letter-grade deduction in the overall course grade.

Professionalism Policy: Per university policy and classroom etiquette; mobile phones, iPods, etc. must be silenced during all classroom and lab lectures. Those not heeding this rule will be asked to leave the classroom/lab immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings. Students who habitually disturb the class by talking, arriving late, etc., and have been warned may suffer a reduction in their final class grade.

Academic Conduct Policy: Academic dishonesty in any form will not be tolerated. If you are uncertain as to what constitutes academic dishonesty, please consult The Golden Rule, the University of Central Florida’s Student Handbook (http://www.goldenrule.sdes.ucf.edu/) for further details. As in all University courses, The Golden Rule Rules of Conduct will be applied. Violations of these rules will result in a record of the infraction being placed in your file and receiving a zero on the work in question AT A MINIMUM. At the instructor’s discretion, you may also receive a failing grade for the course. Confirmation of such incidents can also result in expulsion from the University.

XIII. Important Dates to Remember

Religious Observances
Students are expected to notify their instructor in advance if they intend to miss class to observe a holy day of their religious faith.

XIV. Academic Integrity

Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

XV. Course Accessibility Statement

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need specific access in this course, such as accommodations, should contact the professor as soon as possible to discuss various access options. Students should also connect with Student Accessibility Services (Ferrell Commons, 7F, Room 185, sas@ucf.edu, phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable.

XVI. Campus Safety Statement

Emergencies on campus are rare, but if one should arise in our class, we will all need to work together. Everyone should be aware of the surroundings and familiar with some basic safety and security concepts.
- In case of an emergency, dial 911 for assistance.
• Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Please make a note of the guide’s physical location and consider reviewing the online version at http://emergency.ucf.edu/emergency_guide.html.

• Familiarize yourself with evacuation routes from each of your classrooms and have a plan for finding safety in case of an emergency. (Insert class-specific details if appropriate)

• If there is a medical emergency during class, we may need to access a first aid kit or AED (Automated External Defibrillator). To learn where those items are located in this building, see http://www.ehs.ucf.edu/workplacesafety.html (click on link from menu on left). (insert class specific information if appropriate)

• To stay informed about emergency situations, sign up to receive UCF text alerts by going to my.ucf.edu and logging in. Click on “Student Self Service” located on the left side of the screen in the tool bar, scroll down to the blue “Personal Information” heading on your Student Center screen, click on “UCF Alert”, fill out the information, including your e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”

• If you have a special need related to emergency situations, please speak with me during office hours.

• Consider viewing this video (https://youtu.be/NIKYajEx4pk) about how to manage an active shooter situation on campus or elsewhere.

XVII. Deployed Active Duty Military Students Statement

If you are a deployed active duty military student and feel that you may need a special accommodation due to that unique status, please contact your instructor to discuss your circumstances.

XVIII. Final Exam Date and Time

TBA
XIV. Schedule - *The Schedule is subject to revision - expect more readings to be added!*

Details of all assignments will be posted on the course blog and emailed.

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC / CONTENT</th>
<th>READINGS</th>
<th>ASSIGNMENT / [DUE]</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIT 1: Audience Engagement / Marketing Review</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/19</td>
<td>Audience Engagement: Reiss videos</td>
<td>Box Office: p. 7-72, How to Sell: p. 4-26</td>
<td>Reiss video follow up questions</td>
</tr>
<tr>
<td>8/26</td>
<td>Audience Engagement (cont.): Chandler/Wong videos</td>
<td></td>
<td>Chandler checklist [Blog post: Reiss Q's]</td>
</tr>
<tr>
<td>9/2</td>
<td>NO CLASS - LABOR DAY</td>
<td></td>
<td>[Chandler checklist]</td>
</tr>
<tr>
<td>9/9</td>
<td>Social Media: videos</td>
<td>Box Office: p.213-249</td>
<td>Social media survey</td>
</tr>
<tr>
<td>9/16</td>
<td>Read/comment on classmates’ blog posts</td>
<td></td>
<td>[Social media survey, Twitter account active by now]</td>
</tr>
<tr>
<td>UNIT 2: Distribution Platforms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/23</td>
<td>Theatrical/Semi theatrical/Live events</td>
<td>Box Office: p.133-211, Burns article</td>
<td></td>
</tr>
<tr>
<td>9/30</td>
<td>Film Festivals: video</td>
<td>Raindance article</td>
<td>Festival strategy</td>
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<tr>
<td>10/7</td>
<td>Merchandise/Direct DVD: video</td>
<td>Box Office: p.251-281,</td>
<td>[Fest strategy]</td>
</tr>
<tr>
<td>10/14</td>
<td>VOD, Cable, PPV</td>
<td>VOD article, google+ conversation</td>
<td></td>
</tr>
<tr>
<td>10/21</td>
<td>Transmedia: Screen Australia podcast</td>
<td></td>
<td>Blog post: Podcast response</td>
</tr>
<tr>
<td>UNIT 3: Rights/Sales/Markets</td>
<td></td>
<td></td>
<td></td>
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<td>Hybrid/Split Rights</td>
<td>Peter Broderick articles, Box Office: p. 283-341</td>
<td>Distribution strategy</td>
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<tr>
<td>11/4</td>
<td>Foreign Sales</td>
<td>cont. Box Office reading</td>
<td>[Distro strategy] Work on ETD Marketing chapter</td>
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<tr>
<td>11/11</td>
<td>NO CLASS - VETERANS DAY</td>
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<td>Work on ETD Marketing chapter</td>
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<td>11/18</td>
<td>Read/comment on classmates’ blog posts</td>
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<td>[Marketing chapter draft]</td>
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<td>11/25</td>
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<td></td>
<td>Blog post: Short/long term goals</td>
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<tr>
<td>12/2</td>
<td>Work on ETD Marketing chapter - Meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATE</td>
<td>TOPIC / CONTENT</td>
<td>READINGS</td>
<td>ASSIGNMENT / [DUE]</td>
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<tr>
<td>------</td>
<td>----------------</td>
<td>----------</td>
<td>--------------------</td>
</tr>
<tr>
<td>12/9</td>
<td>PDF of Final ETD Marketing Chapter Due @ 7pm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nicholson School of Communication and Media - Grad Course Revision- FIL 6640 Microbudget Production Management

2020-2021 Graduate Course Revision

General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ⬆️ in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after the proposal is launched.

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

**College:** Nicholson School of Communication and Media

**Unit / Department / College:** Department of Film and Mass Media (NSCM)

**IMPORT COURSE NOW!** Please use the Import feature to import the course information from the Catalog by clicking ⬇️ in the top left corner of the form. Do **not** type the course prefix and code.

**Prefix:** FIL

**Code:** 6640

**Course Title:** Microbudget Production Management

**30 Character Abbreviation:** Microbudget Production Mgmt.

**Full Title:** Grad Course Revision- FIL 6640 Microbudget Production Management

**Course Instructor (Must be Approved Graduate Faculty/Scholars):** Lisa Peterson
Complete the remaining required fields and LAUNCH this proposal by clicking ⬇️ in the top left corner! Do not begin revisions until after launch. Course revisions before launch will not be tracked.

**Course Description:**
Strategies for budgeting and scheduling low-budget films and digital media products.

**Prerequisite(s):**
Admission to Film and or Digital Media graduate program or C. I.

**Corequisite(s):**

**Does this proposal include revisions to prerequisites?**
- Yes
- No

**Grading Scheme:**
ABCDF

### Credit Hour Information
As part of UCF's accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

#### Credit Hour Design Options

<table>
<thead>
<tr>
<th>Credit Hour Design Options</th>
<th>1</th>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Formal) Instruction Time - Class Hours or Online Module, etc.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lab/Studio/Field work</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Out-of-Class (homework, course readings, group work, online posts, etc)</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total Course Engagement</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

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**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.

**Repeat for credit?**  
☐ Yes ☐ No

If yes, indicate the degree program name and the total times the course may repeated.

If the course you are revising is a split-level class, please note this revision form will only impact the graduate side of the course. The undergraduate component of the course should be revised through the Undergraduate Curriculum Committee. As a reminder, the graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor.

**Split-Level Class:**  
☐ Yes ☐ No

**List undergraduate split-level course:**

**Term of Offering**

When will the course be offered?  
☐ Odd Fall ☐ Even Fall ☐ Odd Spring ☐ Even Spring ☐ Odd Summer  
☐ Even Summer ☐ Every Semester ☐ Occasional

**Intended Utilization of Course**

The course will be used primarily as:  
☐ Required Course ☐ Elective Course

**Justification for Course Revision**
What is the rationale for revising this course?*

Recent and ongoing changes in curriculum coupled with lapses in faculty resources contributed to the inactivity with regard to this course. However, it is still included in future plans for the program and we have made a slight modification to the prerequisites.

What grad programs/tracks require or recommend this course for graduation?

Emerging Media - Feature Film Production Track and Digital Media students.

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

Emerging Media - Feature Film Production Track and Digital Media students.

What is the estimated annual enrollment?

20

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

Detail Discussion

N/A - does not affect other departments or colleges.

Course Syllabus Policy

The University of Central of Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Core policy statements

  Academic integrity statement including definition(s) of and consequences for academic misconduct
  Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
  Statement regarding emergency procedures and campus safety,
encouraging students to be aware of their surroundings and familiar with actions to take in various types of emergencies

Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: [https://policies.ucf.edu/documents/4-403.pdf](https://policies.ucf.edu/documents/4-403.pdf)

| Course Syllabus Policy | ✔️ I have aligned this syllabus per the UCF syllabus policy. |

**Attachment List**

Please attach any required files by navigating to the Proposal Toolbox and clicking ✐ in the top right corner.

| Check | ✔️ I have completed all relevant parts of the form. |
| Attached | ✔️ I have attached a course syllabus and rationale. |

**Proposal Type:** Grad Course Revision

---

**Administration Use Only**

<table>
<thead>
<tr>
<th>Catalog Ownership:</th>
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<table>
<thead>
<tr>
<th>Course OID</th>
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<table>
<thead>
<tr>
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| Status | Active-Visible ✗ Inactive-Hidden |

**PeopleSoft**

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<table>
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<table>
<thead>
<tr>
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</thead>
</table>
CRSE_ID 043516
Course Description:

This course is the analysis of strategies for scheduling and budgeting low budget films and digital media projects. The best way to demonstrate these strategies is to schedule and budget your own script for production. Each student will come to the class with a completed script for their project. The course will consist of one-on-one consulting and development of the schedule and budget for that script and the plan for managing the project through preproduction and production. There will be occasional group meetings to share ideas and resources.

Prerequisites: Admission to Film or Digital Media graduate program or C.I.

Objectives of the Course:

Each student is expected to identify and apply the main theories of scheduling and budgeting, and have a working knowledge of EP Scheduling, EP Budgeting, and Excel.

Required and Optional Texts and Materials: None

Course Method of Evaluation:

Specific activities and assignments that will be included in the final grade include:

  Attendance and participation
  (This means that you arrive on time, have fully prepared for the class, stay engaged throughout the class, and remain until the end of class on the occasions that we meet as a group.)

  Demonstrate ability to write responses to questions that reflect thorough preparation and writing ability at a level expected of a MFA student.

  Completion of all assignments in a professional and timely manner.
Create a final production book that includes all the pertinent information on the project and demonstrates that it is ready to go into preproduction.

Assessment

We believe in self-evaluation and self-regulation. You will play a role in your own evaluation process. You will be asked to self-evaluate your performance in relationship to this class. You will be expected to justify your self-evaluation. Please be aware that simply meeting the expectations does not justify a grade of "A" at this level of education. An "A" is justifiable only if you have excelled in meeting the expectations and have gone beyond doing only what is required.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-93</td>
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<tr>
<td>A-</td>
<td>92-90</td>
</tr>
<tr>
<td>B+</td>
<td>89-87</td>
</tr>
<tr>
<td>B</td>
<td>86-83</td>
</tr>
<tr>
<td>B-</td>
<td>82-80</td>
</tr>
<tr>
<td>C+</td>
<td>79-77</td>
</tr>
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<td>76-73</td>
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<td>D+</td>
<td>67-69</td>
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<td>D</td>
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<tr>
<td>D-</td>
<td>62-60</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
</tr>
</tbody>
</table>

Make-Up Exam Policy

The Grades on rendered online plus class attendance serves as permanent exams

Late Work Policy:

Materials/assignments turned in late will be assessed a penalty: a half-letter grade if it is one day late, or a full-letter grade for 2-7 days late. Essays will not be accepted if overdue by more than seven days.
Academic Integrity

Plagiarism and Cheating of any kind on an examination, quiz, or assignment will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information. I will assume for this course that you will adhere to the academic creed of this University and will maintain the highest standards of academic integrity. In other words, don’t cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

Course Accessibility Statement

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need specific access in this course, such as accommodations, should contact the professor as soon as possible to discuss various access options. Students should also connect with Student Accessibility Services (Ferrell Commons, 7F, Room 185, sas@ucf.edu, phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable.

Campus Safety Statement

Emergencies on campus are rare, but if one should arise in our class, we will all need to work together. Everyone should be aware of the surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Please make a note of the guide’s physical location and consider reviewing the online version at http://emergency.ucf.edu/emergency_guide.html.
- Familiarize yourself with evacuation routes from each of your classrooms and have a plan for finding safety in case of an emergency. (Insert class-specific details if appropriate)
- If there is a medical emergency during class, we may need to access a first aid kit or AED (Automated External Defibrillator). To learn where those items are located in this building, see http://www.ehs.ucf.edu/workplacesafety.html (click on link from menu on left). (Insert class specific information if appropriate)
- To stay informed about emergency situations, sign up to receive UCF text alerts by going to my.ucf.edu and logging in. Click on “Student Self Service”
located on the left side of the screen in the tool bar, scroll down to the blue “Personal Information” heading on your Student Center screen, click on “UCF Alert”, fill out the information, including your e-mail address, cell phone number, and cell phone provider, click ”Apply” to save the changes, and then click “OK.”

- If you have a special need related to emergency situations, please speak with me during office hours.
- Consider viewing this video (https://youtu.be/NIKYajEx4pk) about how to manage an active shooter situation on campus or elsewhere.

**Deployed Active Duty Military Students Statement**

If you are a deployed active duty military student and feel that you may need a special accommodation due to that unique status, please contact your instructor to discuss your circumstances.

**Final Exam Date and Time**

TBA
General Catalog Information

**Read before you begin**

TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

FILL IN all fields required marked with an * after importing data. You will not be able to launch the proposal without completing required fields.

LAUNCH proposal by clicking in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after proposal is launched.

Important: A pre-proposal must have been submitted and approved by the Council of Academic VPs before this proposal can proceed any further.

Select Program below.

Program Type:*
- Program
- Shared Core

Proposal Type: Graduate Program Addition-New

This form is to be used to ADD graduate degree programs. If there are tracks being added to the program, one form must be submitted for EACH program and the track(s).

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

Name of program:* Computer Vision MS

College:* College of Engineering and Computer Science

Proposed Effective Term / Year:* Fall 2020

Unit / Department / College:* Department of Computer Science

Unit(s) Housing Program:
- Center for Research in Computer Vision

Delivery:*
- [ ] Face to Face
- [ ] UCF Online
- [ ] Mixed Delivery
If you will be submitting other forms for tracks or course actions, please list them here:

New Equipment Fee?  ☐ Yes  ☐ No  
If yes, also complete the 2020-2021 Graduate Equipment Fee form.

Will the program be a market tuition rate program?*  ☐ Yes  ☐ No  
Will the program be a cost recovery program?*  ☐ Yes  ☐ No  

Rationale:*  The Master of Computer Vision Program (MSCV) aims to provide technical skills and domain knowledge to the future professionals in acquiring, processing, analyzing, and understanding images, videos, 3D data, and other types of high-dimensional data of the real world. The fast-growing interests and investments in Artificial Intelligence (AI) have to be powered by a well-prepared workforce. This program meets the need created by the United States' shortage of AI personnel.

Is this a Doctoral program?*  ☐ Yes  ☐ No  

For the Informational Description Chart, please copy and paste the example and format below:

<table>
<thead>
<tr>
<th>College: Link to College website</th>
<th>Degree: PHD, MS, MA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Websites: Link to program website</td>
<td></td>
</tr>
</tbody>
</table>

Informational Description Chart:*  
College: http://www.cecs.ucf.edu/  Degree: MS  
Program Websites: https://www.crcv.ucf.edu/  

Add complete catalog copy here! Must include description, curriculum, contact information, application requirements, and application deadlines. After you add/import courses, click on the View Curriculum Schema button below to add the catalog copy. Please note: this information is what will flow directly to the graduate catalog. Any attached documents to this proposal will not be used for catalog purposes.

Tip: You can import a similar program to use as a template instead of starting from scratch. Use the Import button at the top of the proposal.

Follow these steps to propose courses to the new program curriculum:

Step 1  
There are two options for adding courses: "Add Course" and "Import Course." For courses already in the catalog, click on "Import Course" and find the courses needed. For new classes going through a Curriculog Approval Process click on "Add Course"-- a box will open asking you for the Prefix, Course Number and Course Title.
Step 2

Click on “View Curriculum Schema.” Click on the area/header of the program where you would like to add courses. When you click on ”Add Courses” it will bring up the list of courses available from Step 1. Select the courses you wish to add. For removing courses click on the X and proceed.

Program Description

The Master of Computer Vision Program (MSCV) aims to provide technical skills and domain knowledge to the future professionals in acquiring, processing, analyzing, and understanding images, videos, 3D data, and other types of high-dimensional data of the real world. The fast-growing interests and investments in Artificial Intelligence (AI) have to be powered by a well-prepared workforce. This program meets the need created by the United States’ shortage of AI personnel.

Curriculum

The curriculum for this degree program includes 6 required classes (18 credit hours) which form the backbone of graduate study for the field.

The remaining 12 credit hours can be selected from the list of elective courses. Electives outside of the provided list require approval from the student's adviser and program coordinator.

Total Credit Hours Required: 30 Credit Hours Minimum beyond the Bachelor's Degree

Prerequisites

An undergraduate degree in Computer Science is desirable but not required. Applicants without a strong undergraduate background in Computer Science must demonstrate an understanding of the material covered in the following upper-division undergraduate courses:

EEL 4768C Computer Architecture
COP 4020 Programming Languages I
COP 4600 Operating Systems
COT 4210 Discrete Computational Structures

Required Courses: 18 Credit Hours

CAP 5415 Computer Vision
CAP 6411 Computer Vision Systems
CAP 6412 Advanced Computer Vision
CAP 6419 3D Computer Vision
CAP 5516 Medical Image Computing
Elective Courses: 12 Credit Hours

All students are required to complete 12 credit hours of electives that are selected after consultation with the student's adviser.

At least half of the credit hours of students must be at the 6000 level. Approval may be granted for no more than 6 credit hours of electives to be taken outside of Computer Science, and such approval must occur prior to taking any classes outside of the four listed below.

- CAP 5908 Independent Study
- CAP 6908 Independent Study
- COT 6505 Computational Methods/Analysis I
- STA 6106 Statistical Computing I

Equipment Fee

Students in the Computer Vision MS program pay a $34 equipment fee each semester that they are enrolled. Part-time students pay $17 per semester.

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.

The College of Engineering and Computer Science strongly encourages prospective applicants to request a free pre-screening (www.cecs.ucf.edu/prescreen) of their qualifications prior to submitting an online application for graduate admission. However, a pre-screening is not required; rather, it is offered as a courtesy to all prospective applicants before they commit to submitting a complete online application and paying an application processing fee.

Admissions decisions are made on the basis of a complete online application only, and not on the basis of any pre-screening. Prospective applicants who are encouraged to apply to their intended graduate program based on the information provided for their pre-screening are not assured of admission or financial assistance when they submit a complete online application. Although it is possible, it is not likely, that prospective applicants who are discouraged from formally applying to a graduate program at the pre-screening stage will be admitted if they elect to submit a complete online application anyway.

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

- One official transcript (in a sealed envelope) from each college/university attended.
attended.

Official, competitive GRE score taken within the last five years.

Resume
Letters of recommendation (encouraged but not required)

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Application Deadlines

All application materials must be submitted by the appropriate deadline listed below.

<table>
<thead>
<tr>
<th>Computer Vision MS</th>
<th>*Fall Priority</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Applicants</td>
<td>Jan 15</td>
<td>Jul 1</td>
<td>Dec 1</td>
<td>-</td>
</tr>
<tr>
<td>International Applicants</td>
<td>Jan 15</td>
<td>Jan 15</td>
<td>Jul 1</td>
<td>-</td>
</tr>
</tbody>
</table>

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

Contact Info

Graduate Program

Mubarak Shah, Professor
shah@crcv.ucf.edu
Telephone: 407-823-1119
HEC 245

Graduate Admissions

Khue Duong Rymer
gradadmissions@ucf.edu
Telephone: 407-823-2766
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 PPI: 5233

Graduate Fellowships

Grad Fellowships
Telephone: 407-823-0127
gradfellowship@ucf.edu
https://funding.graduate.ucf.edu

Graduate Financial Aid

UCF Student Financial Assistance
Millican Hall 120
Telephone: 407-823-2827
Appointment Line: 407-823-5285
fax: 407-823-5241
finaid@ucf.edu
http://finaid.ucf.edu

Impact on Current Students

Will students be moved from an existing program, track, or certificate into this new program?

- 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 this program?
**Future Students**

**Indicate likely career or student outcomes upon completion:**

As evidence of explosive growth of this field we present data from the recent Computer Vision and Pattern Recognition Conference, held June 2018. Attendance was 6,586 compared to 5000 in 2007 and 3700 in 2016. Corporate sponsorship funding was $850,000 representing a 79% increase over 2016, and compared to several thousands in 2007. The number of industry sponsors in 2017 increased by 40% over 2016. Graduates from this program will continue their careers in 3 primary tracks: those who were already employed will continue their employment with stronger qualifications for advanced positions; those who were not employed will now access new employment opportunities that required the stronger credentials; those who will advance to higher learning in doctoral programs around the nation.

**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.**

This program is for any students who aim to acquire technical skills and domain knowledge needed by future professionals in acquiring, processing, analyzing, and understanding images, videos, 3D data, and other types of high-dimensional data of the real world. The fast-growing interests and investments in Artificial Intelligence (AI) have to be powered by a well-prepared workforce. This program would give students the ability to go straight into the workforce after completing the program. Enrollees will come from several sources: employees in industry, current undergrads, some international students, and out-of-state US citizens. These students will enroll due to their interest in getting expertise necessary for employment in certain projects.

**Year 1**

| Headcount: | 20 |
| SCHs: | 360 |

**Year 2**

| Headcount: | 25 |
| SCHs: | 450 |

**Year 3**

| Headcount: | 30 |
| SCHs: | 540 |

Please complete the following section on financial support:

( Specify all forms of support – assistantships, fellowships, and tuition remission.)

**Year 1**

| Number of assistantship students: | N/A |
| Source of funds: |

| Number of fellowship students (specify fellowship): | N/A |
| Source of funds: |

| Number of tuition remissions: | 10 |
| Source of funds: Industry |

**Year 2**

| Number of assistantship students: | N/A |
| Source of funds: |
Number of fellowship students (specify fellowship): N/A

Number of tuition remissions: 12
Source of funds: Industry

Year 3

Number of assistantship students: N/A

Number of fellowship students (specify fellowship): N/A

Number of tuition remissions: 15
Source of funds: Industry

Attachments

Please attach the required files by navigating to the Proposal Toolbox and clicking in the top right corner.

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<thead>
<tr>
<th>Faculty List*</th>
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<td>Library Assessment of Resources*</td>
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Administration Use Only

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List of Professors who will teach

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<tr>
<th>Name</th>
<th>Position</th>
<th>Tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mubarak Shah, Ph.D.</td>
<td>Professor</td>
<td>Tenured</td>
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<tr>
<td>Center for Research in Computer Vision</td>
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<tr>
<td>Abhijit Mahalanobi, Ph.D.</td>
<td>Assistant Professor</td>
<td>Tenured Track</td>
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<td>Center for Research in Computer Vision</td>
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<td>Ulas Bagci, Ph.D.</td>
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<td>Tenured Track</td>
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<tr>
<td>Forecasted Hire, Ph.D.</td>
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<td>Tenured Track</td>
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<tr>
<td>Center for Research in Computer Vision</td>
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<tr>
<td>Niels Lobo, Ph.D.</td>
<td>Associate Professor</td>
<td>Tenured</td>
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<tr>
<td>Computer Science</td>
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<td>Brian Moore, Ph.D.</td>
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<tr>
<td>Mathematics</td>
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<tr>
<td>Nazanine Rhanavard, PhD</td>
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<td>Tenured</td>
</tr>
<tr>
<td>ECE</td>
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<tr>
<td>Gita Sukathankar PhD</td>
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<tr>
<td>Computer Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hassan Foroosh</td>
<td>Professor</td>
<td>Tenured</td>
</tr>
</tbody>
</table>
Memo

To:  Dr. Niels da Vitoria Lobo, Associate Professor, Computer Science  
Dr. Gary T. Leavens, Department Chair, Computer Science  
Dr. Michael Georgiopoulos, Dean, College of Engineering & Computer Science  
Mr. Barry Baker, Director of Libraries  
Ms. Selma Jaskowski, Assoc. Director, Technology Services & Resource Management  
Ms. Ying Zhang, Dept. Head, Acquisitions & Collections  
Dr. Liz Klonoff, Dean, College of Graduate Studies  
Dr. John Weishampel, Senior Associate Dean, College of Graduate Studies

From: Buenaventura (Ven) Basco, Associate Librarian, Research and Information Services

Subj: Library Assessment for the Proposal to add a Master’s Program for Computer Vision in Computer Science Department

Date: October 5, 2018

In consultation with the faculty for the proposed Computer Vision MS. degree, the following institutions were selected for comparison:

- University of Massachusetts Amherst
- Rice University
- University of Florida

Summary and Projected Costs for New Library Resources:

Each of these institutions offers a Master of Science degree in Computer Science with various areas of specialization. In comparing the library collections at the selected aspiring programs, UCF Libraries has sufficient resources to start the proposed Master’s program, except for the two journals, *Cognitive Computation* and *International Journal of Neural Systems*, two titles listed among the top 25 highest impact factor e-journals in Computer Science, Artificial Intelligence. At the Master’s level, the proposed program as described may start without them. No additional funding for books, databases or journals is requested in this analysis.

*Should the program expand in scope or decide to offer a Ph.D. degree in the future, essential resources including the above mentioned two journals, as well as databases and books, may become critical, and therefore additional funds will be requested at that point.*

<table>
<thead>
<tr>
<th>Databases</th>
<th>UCF</th>
<th>UF</th>
<th>U Mass Amherst</th>
<th>Rice University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association for Computing Machinery (ACM) Digital Library</td>
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<td>IEEE Xplore</td>
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<tr>
<td>Compendex (Ei Village)</td>
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<td>x</td>
</tr>
<tr>
<td>Web of Science</td>
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<tr>
<td>Science Direct</td>
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<td>x</td>
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<tr>
<td>Electronics &amp; Communications Abstracts</td>
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<td>NO</td>
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<tr>
<td>Database Name</td>
<td>UCF</td>
<td>UF</td>
<td>U Mass Amherst</td>
<td>Rice University</td>
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<td>Inspec</td>
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<tr>
<td>Computer and Information Systems Abstracts</td>
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<td>Synthesis Digital Library of Engineering and Computer Science</td>
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<tr>
<td>arXiv.org (Open access articles for physics, mathematics, computer science, quantitative biology, statistics, and more provided by Cornell University)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

**Databases:** The UCF Libraries journal list compares favorably with the chosen institutions. **We have the databases needed to support Computer Vision.**

**Key Journals**

<table>
<thead>
<tr>
<th>Top 25 Electronic Journals in Computer Science, Artificial Intelligence - as determined by Thomson Reuters Journal Impact Factor 2017 Rankings</th>
<th>UCF</th>
<th>UF</th>
<th>U Mass Amherst</th>
<th>Rice University</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Journal of Computer Vision</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IEEE Transactions on Pattern Analysis and Machine Intelligence</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IEEE Transactions on Cybernetics</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IEEE Transactions on Fuzzy Systems</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IEEE Transactions of Evolutionary Computation</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IEEE Transactions on Neural Networks and Learning Systems</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Neural Networks</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Information Fusion</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IEEE Computational Intelligence Magazine</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Medical Image Analysis</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IEEE Transactions on Image Processing</td>
<td>x</td>
<td>X</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>IEEE Transactions on Affective Computing</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>International Journal of Neural Systems</strong></td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>x</td>
</tr>
<tr>
<td>Knowledge-Based Systems</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Neural Computing &amp; Applications</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Pattern Recognition</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Applied Soft Computing</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Swarm and Evolutionary Computation</td>
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<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Artificial Intelligence Review</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Integrated Computer-Aided Engineering</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Journal of Intelligent Manufacturing</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Decision Support Systems</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>Cognitive Computation</strong></td>
<td>NO</td>
<td>x</td>
<td>x</td>
<td>NO</td>
</tr>
<tr>
<td>International Journal of Intelligent Systems</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
**Journals:** By comparing the title by title list, UCF Libraries journal list compares favorably with the chosen institutions. Only two journals, *Cognitive Computation* and *International Journal of Neural Systems* are not available at UCF. Because this is a Master’s program proposal, the department can postpone the subscription to these two until a Ph.D. is proposed.

**Books – Combined Print and E-Books** *(by the Subject headings, keywords provided or LC ranges)*

<table>
<thead>
<tr>
<th>Subject Heading</th>
<th>UCF</th>
<th>UF</th>
<th>U Mass Amherst</th>
<th>Rice University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computational Intelligence</td>
<td>2976</td>
<td>481</td>
<td>2488</td>
<td>449</td>
</tr>
<tr>
<td>Computer Imaging, Vision, Pattern Recognition and Graphics</td>
<td>897</td>
<td>85</td>
<td>892</td>
<td>19</td>
</tr>
<tr>
<td>Computer Vision</td>
<td>1212</td>
<td>954</td>
<td>625</td>
<td>965</td>
</tr>
<tr>
<td>Image Processing</td>
<td>4566</td>
<td>2147</td>
<td>2579</td>
<td>2010</td>
</tr>
<tr>
<td>Image Processing and Computer Vision</td>
<td>1963</td>
<td>179</td>
<td>1734</td>
<td>31</td>
</tr>
<tr>
<td>Machine Learning</td>
<td>709</td>
<td>669</td>
<td>462</td>
<td>662</td>
</tr>
<tr>
<td>Machine Vision</td>
<td>51</td>
<td>277</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>Supervised Learning (Machine Learning)</td>
<td>13</td>
<td>11</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total books</strong></td>
<td><strong>12,387</strong></td>
<td><strong>4,803</strong></td>
<td><strong>8,793</strong></td>
<td><strong>4,176</strong></td>
</tr>
</tbody>
</table>

**Books:** The analysis of the book collection shows that UCF Libraries compares favorably well with all three schools when compared.
APPENDIX B

Please include the signature of the Equal Opportunity Officer and the Library Director.

[Signature]
Signature of Equal Opportunity Officer

Date: 12-20-18

[Signature]
Signature of Library Director

Date: 10/5/18

This appendix was created to facilitate the collection of signatures in support of the proposal. Signatures in this section illustrate that the Equal Opportunity Officer has reviewed section II.E of the proposal and the Library Director has reviewed sections X.A and X.B.
College of Engineering and Computer Science - Grad Course Addition - BME 6231 Continuum Biomechanics - Modeling Biological Tissues and Structures

2020-2021 Graduate Course New

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking ☰ in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ➡️ in the top left corner.

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

Please note: If your proposal is for a new split level course, do not complete this form. Please complete the 2020-2021 Graduate Course Split-Level Class form.

<table>
<thead>
<tr>
<th>Proposal Type:</th>
<th>Grad Course Addition</th>
</tr>
</thead>
<tbody>
<tr>
<td>College:</td>
<td>College of Engineering and Computer Science</td>
</tr>
<tr>
<td>Unit / Department / College:</td>
<td>Department of Mechanical and Aerospace Engineering</td>
</tr>
</tbody>
</table>

For the Full Title box below, please type the course information in the following format: Prefix, Course Number, and Title. For example: IDS 6000 Creative Education

<table>
<thead>
<tr>
<th>Full Title:</th>
<th>Grad Course Addition - BME 6231 Continuum Biomechanics - Modeling Biological Tissues and Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Instructor</td>
<td>Dr. Luigi Perotti</td>
</tr>
<tr>
<td>(Must be Approved Graduate Faculty/Scholars):</td>
<td>Yoav Peles</td>
</tr>
<tr>
<td>Department Chair Phone Number:</td>
<td><a href="mailto:Yoav.Peles@ucf.edu">Yoav.Peles@ucf.edu</a></td>
</tr>
<tr>
<td>Dept Chair Email*</td>
<td><a href="mailto:Yoav.Peles@ucf.edu">Yoav.Peles@ucf.edu</a></td>
</tr>
</tbody>
</table>

Please Note: Originators of New Course Proposals are responsible for designating the new course number. Instructions can be found at https://graduatecouncil.ucf.edu/curriculum-committee/ The file is Course Number Guide in the Other Resources section of this webpage. New Course forms submitted with a 5/6/7 XXX designation will not be accepted.

<table>
<thead>
<tr>
<th>Prefix:</th>
<th>BME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number:</td>
<td>6231</td>
</tr>
</tbody>
</table>
Course Title: Continuum Biomechanics

Course Type: Graduate Course

Course Description (25 word limit): Material laws for biological tissues, with or without microstructure and/or an incompressibility constraint. Models of damage, growth, remodeling, and electro-mechanical coupling. Introduction to multiscale modeling.

Grading Scheme: ABCDF

Prerequisite(s): EGM 3601.

Credit Hour Information

As part of UCF's accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

<table>
<thead>
<tr>
<th>Credit Hour</th>
<th>1</th>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Formal) Instruction Time - Class Hours or Online Module, etc.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lab/Studio/Field work</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Out-of-Class (homework, course readings, group work, online posts, etc)</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total Course Engagement</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hours = 3 hours of Total Course Engagement

2 Credit hours = 6 hours of Total Course Engagement

3 Credit hours = 9 hours of Total Course Engagement

4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC definition: [http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf](http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf)

Credit Hours: 3

Instruction Time: 3
Lab/Studio/Field Work Hours:* 0
Out-of-Class Hours:* 6
Total Engagement Hours:* 9
Variable Credit (0-99):

NOTE: In determining if a course is repeatable for credit, the concept is that the content is the same, but the student experience with that content will be different each time it is taken.

For a repeatable course, indicate in the syllabus what will remain the same and what will change when the course is repeated.

Repeat for credit?*  
☐ Yes  ☐ No

If yes, indicate the total times the course may be used toward completion of the degree.

Term of Offering

When will the course be offered?*
☐ Odd Fall ☐ Even Fall ☑ Odd Spring ☑ Even Spring ☐ Odd Summer ☐ Even Summer ☐ Every Semester ☐ Occasional

Intended Utilization of Course

The course will be used primarily as:*  
☐ Required Course ☐ Elective Course

Materials and Supply Fee

New Materials and Supply Fees?*  
☐ Yes  ☐ No

If yes, also complete the 2020-21 Graduate Materials and Supply Fee form.

Justification for Course Addition

What is the rationale for adding this course?*  
The goal of this course is to introduce the theoretical and computational tools necessary to characterize the deformation and the material response of biological tissues. In this context, several specialized topics in continuum mechanics will be presented including damage, growth, remodeling, materials with a microstructure, incompressibility, electro-mechanical coupling, and multi-scale modeling. A unified view of these tools is not presented in currently offered courses and is key to model the response of biological tissues and simulate organs’ function and disease.

There are 5 faculty members in the Mechanical and Aerospace Engineering department who are able to teach this course.

There are no special resources required to offer the course, but students will need access to a computer lab with finite element code and Matlab to carry out the course project.

What grad  Master’s Biomedical Engineering - MSBME
programs/tracks require or recommend this course for graduation?

What will be the source of students?* Master's Biomedical Engineering - MSBME

What is the estimated annual enrollment?* 25

Possible duplications and conflicts with other departments or colleges should be discussed with appropriate parties. Please detail any discussions you have had or attach relevant documents like email threads in the Attachment List Section.

Detail Discussion No overlap or conflict we can think of.

Course Syllabus Policy

The University of Central Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Core policy statements
  - Academic integrity statement including definition(s) of and consequences for academic misconduct
  - Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
  - Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with actions to take in various types of emergencies
  - Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: https://policies.ucf.edu/documents/4-403.pdf

Course Syllabus Policy

I have aligned this syllabus per the UCF syllabus policy.

Attachment List

Please attach any required files by navigating to the Proposal Toolbox and clicking in the top right corner.

Check* I have completed all relevant parts of the form.

https://ucf.curriculog.com/agenda:249/print
I have completed all relevant parts of the form. 

**Attached**
- I have attached a course syllabus and rationale.

**Support from involved units that no duplication exists**
- Duplication support materials attached

### Administration Use Only

**Catalog Ownership:**

**Course Type**

**Status**
- Inactive-Hidden
- Active-Visible

### PeopleSoft

- **Academic Organization**
- **Academic Group**
- **Career**
- **Print in Catalog**
- **Effective Date**
- **Lab Fee**
- **CRSE_ID**
BME 6XXX Continuum Biomechanics - modeling biological tissues and structures (3, 0)
Semester, YEAR

Prerequisites: EGM 3601, EML 5237 or Consent from Instructor

Co-requisites: NONE

Class Time and Location:
  Time: XX T, Th
  Location: XXX

Instructor and GTA Contact Information:
  Dr. Luigi E. Perotti, Mechanical and Aerospace Engineering
  Email: Luigi.Perotti@ucf.edu
  Office Location: ENG1-339
  Phone: 407-823-4445
  Office Hours: XXX

Catalog description:
Definition of motion and strain in the finite kinematics regime. Conservation laws. Material laws for biological tissues, with and without microstructure and/or an incompressibility constraint. Models of damage, growth and remodeling, and electro-mechanical coupling. Introduction to multiscale modeling.

Course content:
Modeling the mechanics of soft and hard biological tissues is necessary to simulate organs’ function and dysfunction, understand disease mechanisms and progression, and test interventional and pharmacological therapies in silico. The goal of this course is to introduce the theoretical and computational tools necessary to characterize the deformation and the material response of biological tissues.
To achieve this goal, we will first define motion and strain in the finite kinematics regime, which is necessary to properly describe the large displacements and deformations generally observed in biological tissues. Subsequently, we will introduce the concept of stress tensor and conservation of energy principles.
In the second part of the class, we will use the introduced mathematical description to model the relation – or material law – between stresses and strains in biological materials. In particular we will focus on hyperelastic materials for which the stress-strain relation is defined through an energy density. We will discuss and derive isotropic and anisotropic (e.g., myocardium and arterial walls) materials, with or without an incompressibility constraint — the incompressibility constraint is often necessary to describe biological tissues. Moreover, we will consider growth and remodeling (e.g., due to changes in tissue loading conditions as in an infarcted heart), damage (e.g., due to trauma or disease), and electro-mechanical coupling (e.g., cardiac contraction and peristalsis in the digestive tract).
Finally, we will introduce how to use the derived material laws to compute the response of biological tissues in different geometries and under different loading conditions. In this context, the Finite Element Method is the most commonly used modeling tool and we will briefly discuss its formulation and implementation to solve non-linear, finite kinematics, hyperelastic examples.

Student Learning Outcomes:
Upon completion of this course, students will be able to
  • Define and apply several definitions of large strain to describe tissue deformation.
  • Define and apply conservation of energy principles to model the mechanical response of biological tissues.
  • Define and apply material energy laws to describe hyperelastic materials with and without a microstructure, an incompressibility constraint, and/or damage.
- Describe the electro mechanical coupling in skeleton and cardiac muscles.
- Describe how to apply energy laws derived at the material point to full organ models.
- Present and apply classic models reported in research papers (final project).


Sequence of Course Activity (*Subject to Change):
HW Assignments are due on Fridays.

- **Week 1:**
  - Course Introduction.
  - Review of Vectors and Tensors, including indicial notation and matrix representation.
    Holzapfel Ch 1
- **Week 2:**
  - Kinematics description: displacement and deformation mapping.
  - Material and spatial derivatives.
  - HW #1 Due
    Holzapfel Ch 2.1 to 2.3
- **Week 3:**
  - Deformation gradient.
  - Strain tensors.
  - Rotation and stretch tensors.
  - HW #2 Due
    Holzapfel Ch 2.4 to 2.8
- **Week 4:**
  - The concept of stress, traction vectors, and stress tensors.
  - Several representations of the stress tensor.
  - HW #3 Due
  - Quiz #1
    Holzapfel Ch 3
- **Week 5:**
  - Conservation of Mass.
  - Conservation of linear and angular momentum.
  - Energy balance.
  - HW #4 Due
    Holzapfel Ch 4.1 to 4.5
- **Week 6:**
  - Entropy inequality.
  - Objectivity: rigid body motion and frame indifference.
  - HW #5 Due
    Holzapfel Ch 4.6 to 5.4
- **Week 7:**
  - Hyperelastic materials constitutive equations.
  - Incompressibility.
  - Examples of strain energy functions.
  - Isotropic and anisotropic materials.
  - HW #6 Due
  - Quiz #2
    Holzapfel Ch 6.1 to 6.7
- **Week 8:**
  - Biological materials with a microstructure.
  - Growth and remodeling.
  - HW #7 Due
• Quiz #2
  Holzapfel Ch 6.8 to 6.10

• Week 9:
  o Materials with internal damage.
  o Viscoelastic materials in large strains (if time allows.)
  o HW #8 Due
    Holzapfel Ch 6.10 to 6.11

• Week 10:
  o Electro-Mechanical coupling.
  o Active strain.
  o Active stress.
  o HW #9 Due
  o Quiz #3

• Week 11:
  o Uniaxial and biaxial tissue stretch experiments.
  o The Newton-Raphson method in 1D.
  o Application of the Newton-Raphson method to simulate material tests.
  o Term project discussion (during office hours).
  o HW #10 Due

• Week 12:
  o From a material point to tissue samples and organs.
  o An overview of the finite element method.
  o Term project discussion (during office hours).
  o Quiz #4

• Week 13:
  o Application1: understanding cardiac kinematics.
  o Application2: modeling muscle contraction.
  o Term project discussion (during office hours).

• Week 14:
  o Term project presentation.

• Week 15:
  o Term project presentation.
  o Review.

Final Exam:
Exam Format and Time - (Comprehensive, open books, open notes) at XX on XX

Assessment and Grading Procedures:
  - Grading Scale: A-F (+/-)
  - Homework* 20%
    Each homework consists in several exercises. Only one problem per each homework will be graded and will determine the grade for that homework. The problem to be graded will be known ahead of time. Students may not collaborate on or discuss the graded problem but are strongly encouraged to collaborate on every other problem in the assignment. Solution for all problems will be posted after the homework is due.
  - Quizzes 20%
    Each quiz will consist in one problem chosen from past homework assignments. Any problem (graded or ungraded can be chosen).
    Quizzes are closed books and will be held at the beginning of class, time limit 15 minutes.
  - Midterm 20%
    Open books, open notes. Time limit 1 hour and 15 minutes.
  - Term project paper and presentation 20% (more details will be given in class)
Term project will be a group project. Each group will choose among several papers proposed by the instructor and, based on the material learned in class, prepare a 15-20 minutes presentation (time duration will also depend on number of students in the class). This presentation will contain two parts:
1) A summary of the paper main contribution.
2) An application of the model presented in the paper. This second part of the project will require finite element simulations in a commercial finite element software (e.g., Abaqus) and/or programming simple subroutines in Matlab (or Python).

- Final 20 %
  Open books, open notes.

Course Materials and Resources:
Required:
2. Introduction to Continuum Biomechanics, Kyriacos A. Athanasiou and Roman M. Natoli, Morgan & Claypool (available free as PDF).
3. Journal articles for term project – all available freely online (more details will be given in class)

Optional:
1. The Elements of Continuum Biomechanics, M. Epstein, John Wiley and Sons.
3. The finite element method: linear static and dynamic finite element analysis. Hughes, J.R. Thomas
Make-up Exam and Assignment Policy:
Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied.
For more information, see the UCF policy at: <http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsFor AuthorizedUniversityEventsOrCocurricularActivities.pdf>
Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see the UCF policy at: <http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf>.
No partial credits for late submission

Course Policy Statement:

Academic Integrity:
Students should familiarize themselves with UCF’s Rules of Conduct. According to Section 1, “Academic Misconduct,” students are prohibited from engaging in

1. Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
2. Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else’s efforts and used as part of an examination, course assignment, or project.
3. Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor’s PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
4. Falsifying or misrepresenting the student’s own academic work.
5. Plagiarism: Using or appropriating another’s work without any indication of the source, thereby attempting to convey the impression that such work is the student’s own.
6. Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
7. Helping another violate academic behavior standards.

For more information about Academic Integrity, students may consult The Center for Academic Integrity [http://www.academicintegrity.org/icai/assets/FVProject.pdf]. For more information about plagiarism and misuse of sources, see “Defining and Avoiding Plagiarism: The WPA Statement on Best Practices.”

Students should also familiarize themselves with the procedures for academic misconduct in UCF’s student handbook, The Golden Rule [http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf]. UCF faculty members have a responsibility for students’ education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a “Z Designation” on a student’s official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see [http://goldenrule.sdes.ucf.edu/zgrade].

Course Accessibility Statement:
The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact the professor as soon as possible. Students should also connect with Student Accessibility Services.
(SAS) <http://sas.sdes.ucf.edu/> (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

**Campus Safety Statement:**

- Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.
- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide’s physical location and review the online version at <http://emergency.ucf.edu/emergency_guide.html>.
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see <http://www.ehs.ucf.edu/workplacesafety.html> (click on link from menu on left).
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.
- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (<https://youtu.be/NIKYajEx4pk>).

**Campus Safety Statement for Student in Online-Only Courses:**

- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.

**Deployed Active Duty Military Students:**

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.
College of Engineering and Computer Science - Grad Course Addition -
EEL 5862 Real-Time Systems

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking in the top left corner.

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

Please note: If your proposal is for a new split level course, do not complete this form. Please complete the 2020-2021 Graduate Course Split-Level Class form.

Proposal Type: Grad Course Addition

College: College of Engineering and Computer Science

Unit / Department / College: Department of Electrical and Computer Engineering

Full Title: Grad Course Addition - EEL 5862 Real-Time Systems

Course Instructor: Zhishan Guo

Department Chair Phone Number: (407)823-3327

Dept Chair Email: qu@ucf.edu

Prefix: EEL

Number: 5862

Course Title: Real-Time Systems

Please Note: Originators of New Course Proposals are responsible for designating the new course number. Instructions can be found at https://graduatecouncil.ucf.edu/curriculum-committee/ The file is Course Number Guide in the Other Resources section of this webpage. New Course forms submitted with a 5/6/7 XXX designation will not be accepted.
30 Character Abbreviation:* Real-Time Systems

Course Type:* ☑ Graduate Course ☐ Medicine (MD) Course

Course Description (25 word limit)* Introduction to specification, analysis, design, and validation techniques for real-time (operating) systems with an emphasis on real-time scheduling theory.

Grading Scheme:* ABCDF

Prerequisite(s): COP 4600 or EEL 4768 or EEL 4742C.

Credit Hour Information

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

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Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hours = 3 hours of Total Course Engagement

2 Credit hours = 6 hours of Total Course Engagement

3 Credit hours = 9 hours of Total Course Engagement

4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC definition: [http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf](http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf)

Credit Hours:* 3

Instruction Time:* 3

Lab/Studio/Field 0
Out-of-Class Hours: 6

Total Engagement Hours: 9

Variable Credit (0-99):

NOTE: In determining if a course is repeatable for credit, the concept is that the content is the same, but the student experience with that content will be different each time it is taken.

For a repeatable course, indicate in the syllabus what will remain the same and what will change when the course is repeated.

Repeat for credit? Yes No

If yes, indicate the total times the course may be used toward completion of the degree.

Term of Offering

When will the course be offered? Odd Fall Even Fall Odd Spring Even Spring Odd Summer Even Summer Every Semester Occasional

Intended Utilization of Course

The course will be used primarily as: Required Course Elective Course

Materials and Supply Fee

New Materials and Supply Fees? Yes No

If yes, also complete the 2020-21 Graduate Materials and Supply Fee form.

Justification for Course Addition

What is the rationale for adding this course? Real-time systems is widely offered in many computer engineering/science programs. There is also an emerging need from both the industry (job market) as well as academic research along this line. The course is currently completely missing at UCF.

What grad programs/tracks require or recommend this course for graduation?

What will be the source of students? Undergraduate and Graduate CpE, CS, and EE students

What is the estimated annual enrollment? 40

Possible duplications and conflicts with other departments or colleges should be discussed with appropriate
parties. Please detail any discussions you have had or attach relevant documents like email threads in the Attachment List Section.

### Course Syllabus Policy

The University of Central of Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Core policy statements

  - Academic integrity statement including definition(s) of and consequences for academic misconduct
  - Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
  - Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with actions to take in various types of emergencies
  - Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: [https://policies.ucf.edu/documents/4-403.pdf](https://policies.ucf.edu/documents/4-403.pdf)

### Attachment List

Please attach any required files by navigating to the Proposal Toolbox and clicking 🗂️ in the top right corner.

- **Check** - I have completed all relevant parts of the form.
- **Attached** - I have attached a course syllabus and rationale.
- **Support from involved units that no duplication exists** - Duplicates support materials attached

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**Administration Use Only**

**Catalog Ownership:**

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<th>Course Type</th>
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Course Syllabus

EEL 5862 Real-Time Systems

Schedule: TBD
Course website: TBD
Instructor: Zhishan Guo
Office: HEC 443
Email: zhishan.guo@ucf.edu
Office Hours: TBD
Teaching Assistant: TBD

Target Audience: This is a “must” course for graduate students willing do conducting research in real-time systems at UCF. Any undergraduate or graduate student with certain background in algorithms, operating systems, or embedded systems is welcomed to take this course.

Prerequisites: A "C" or better grade in COP 4600 Operating Systems OR EEL 4768 Computer Architecture OR EEL4742C Embedded Systems. In addition, you are expected to be comfortable with logic and math proof, as the focus of this course is real-time scheduling theory.

We will also use some papers from the literature. These papers and some additional “classic” papers can be found on the course web page. The papers and the powerpoint slides will not be copied for you.

Description and Course Objectives:
To study issues related to the design and analysis of systems with real-time constraints. The problem of ensuring such constraints is ultimately a scheduling problem, so much attention is devoted to such problems. This is a “must” course for anyone wanting to do real-time systems research in this university.

Grading (5xxx/4xxx):
Homework (5) 20%/25%
(There will be HW questions for 5000-level only that are related to proofs and verification)
Class Participation 5%/5%
Mid-Term Exam 25%/35% (in class)
Final Exam 25%/35% (in class)
(There will be exam questions for 5000-level only that are related to proofs and verification)
Project 25%/0% (Bonus up to 5%), 5000-level only

This class will be far more enjoyable for everyone if all students come to class ready and willing to discuss the material to be covered. I plan to reward students who actively evolve in discussions (in class or on Webcourses) by increasing their final grades by up to 10%. I also reserve the right to give negative class participation grades to those who do not observe appropriate etiquette in class, which may result in 10% downgrade of your final scores.

In the course project, group work of 2 is allowed though contribution of each member must be clarified in the final report. You are responsible for defining/proposing the course project. It can be either a review of certain topic in real-time systems (no group work allowed), some research study to any open problem in the area, or system implementations of core scheduling algorithms. In-class presentations may be arranged for project takers in the latter half of the semester. Please note that failing to disclose any related project work from other course(s) will result in reduced grade, and may be considered plagiarism.

Special Needs: If you are entitled to extra accommodation for any reason (such as a disability), we make every reasonable attempt to accommodate you. However, it is your responsibility to discuss this with the instructor during the first week of the course. You will need to request that the Disability Support Services
staff send a letter to the instructor verifying your disability and specifying the accommodation you will need before the instructor can arrange your accommodation.

**Class Etiquette:** You are expected to maintain proper etiquette in class, which includes:
- Not making a habit of arriving late, or leaving in the midst of class;
- Not talking (include whispering), sleeping, reading newspapers, etc. in class;
- Do ONLY current-lecture-related actions (if) with your electronic devices.

**Homework Assignments:** HWs are due 23:59 on the due date given. An assignment is on time only if it is received before the class begins on the due date. No late homework is accepted. Some of the homework assignments may be time-consuming. You are encouraged to discuss the problem sets and study together in group (though you need to state clearly who you discussed with in your hand in work), but when it comes to formulating/writing solutions, you must work alone independently. Homework should be (hand) printed neatly. Poorly written homework sets may not be graded. When writing algorithms, be sure not only that your solution is correct, but also that it is easy for the grader to understand why your solution is correct. Your grade will be given not only based on correctness, but also on the clarity, simplicity, and elegance of your solution. The student should ensure that uploads to Webcourses are successful. After uploading a document, the student should download it back and open it to ensure that the server has received the file.

**Exams:** All exams will be held in-class. Exams are all close-book ones, but you are allowed to take \( m \) (Letter- or A4-size) pages to write whatever you want on both sides in the \( m \)th exam. You do not need to turn in those pages at the end of the exams. Make-up exams require a university accepted and documented reason.

**Exams:**

- **In-class Quizzes:** N/A.
- **Grades:** The student should discuss grades with the instructor or TA within three days from when the grades are posted so that the staff don’t get a load of requests in the end of the semester.
- **Student Honor Code & Academic Integrity:** Every student enrolled in this course is expected to be familiar with the Student Honor Code. Incidences of Academic Dishonesty will typically result in zero grades for the respective course components, notification of the student's advisor, the student's department chair, and the Office of Academic Support, and further academic sanctions may be imposed in accordance with the regulations. Note that those who allow others to copy their work are just as guilty of plagiarism and are treated in the same manner.
- **Title IX:** University of Central Florida is committed to the safety and well-being of all members of its community. US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. To learn more about Title IX resources and reporting options (confidential and non-confidential) available to UCF students, staff, and faculty, please visit [http://osrr.sdes.ucf.edu/titleix](http://osrr.sdes.ucf.edu/titleix).

**Topics Covered:** (* = optional = may or may not be covered)
- (Week 1) Introduction & Clock-Driven Scheduling
- (Week 2 - 3) Dynamic-Priority Scheduling
- (Week 4 - 6) Static-Priority Scheduling, Intractability*
- (Week 7 - 10) Mid-Term Exam, Multi-Processor Scheduling & PFair
- (Week 11 - 12) Resource Sharing Protocols
- (Week 13 - 14) Servers, Real-Time OS*,
- (Week 15) Project Presentation, Final Exam

**Disclaimer:** The instructor reserves the right to make changes to the syllabus, including due dates and topics to be covered. Important changes will be announced as early as possible.
**Read before you begin**

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Special topics course additions must be accompanied by a course syllabus and rationale. Departments must also submit an electronic syllabus to the college curriculum person.

**Proposal Type:** Grad Course Addition Special Topic

**College:** College of Engineering and Computer Science

**Unit / Department / College:** Department of Mechanical and Aerospace Engineering

For the Full Title box below, please type the course information in the following format: Prefix, Course Number, and Title. For example: IDS 6938 Creative Education

Please note: Special Topics codes can only be 5937 or 6938.

**Full Title:** BME 6938 ST: Continuum Biomechanics

**Prefix:** BME

**Code:** 6938

**Earliest semester course may be offered:**
- Fall
- Spring
- Summer

**Year:** 2020

**Course Title:** ST: Continuum Biomechanics

**Course Instructor** (Must be Approved Graduate)

Dr. Luigi Perotti
Graduate Faculty/Scholars:

Department Chair
Phone Number:* 407-823-5448

Dept Chair Email:* Yoav.Peles@ucf.edu

Course Description (25 word limit)*
Material laws for biological tissues, with / without microstructure and/or an incompressibility constraint. Models of damage, growth, remodeling, and electro-mechanical coupling. Introduction to multiscale modeling.

Grading Scheme:* ABCDF

Prerequisite(s): EGM 3601: Solid Mechanics and EML 5237: Intermediate Mechanics of Materials

Corequisite(s):

Credit Hour Information

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

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1 Credit hours = 3 hours of Total Course Engagement

2 Credit hours = 6 hours of Total Course Engagement

3 Credit hours = 9 hours of Total Course Engagement

4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

Credit Hours:* 3

Instruction Time:* 3

Lab/Studio/Field Work Hours:* 0

Out-of-Class Hours:* 6
Total Engagement

Hours: 9

Justification

**Why is this course being offered as a special topic?**

The goal of this course is to introduce the theoretical and computational tools necessary to characterize the deformation and the material response of biological tissues. In this context, several specialized topics in continuum mechanics will be presented including damage, growth, remodeling, materials with a microstructure, incompressibility, electro-mechanical coupling, and multi-scale modeling. A unified view of these tools is not presented in currently offered courses and is key to model the response of biological tissues and simulate organs’ function and disease.

There are 5 faculty members in the Mechanical and Aerospace Engineering department who are able to teach this course.

There are no special resources required to offer the course, but students will need access to a computer with finite element code and Matlab to carry out the course project.

**What is the source of students to enroll in this course?**

Mechanical and Aerospace Engineering

**What is the estimated annual enrollment?**

30

**Do you plan to request that this course become permanent?**

Yes

Possible duplications and conflicts with other departments or colleges should be discussed with appropriate parties. Please detail any discussions you have had or attach relevant documents like email threads in the Attachment List Section.

**Detail Discussion**

There was a discussion with the Institution of Simulation and Training (IST) about a name change. The MAE Department made the change as requested.

Course Syllabus Policy

The University of Central of Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

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- Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: [https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf](https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf)

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**PeopleSoft**

- Academic Group
- Career
- Print in Catalog
- Effective Date
- Lab Fee
- CRSE_ID
BME 6938ST: Continuum Biomechanics - Modeling Biological Tissues and Structures (3, 0)
Semester, YEAR

Prerequisites: EGM 3601, EML 5237 or Consent from Instructor

Co-requisites: NONE

Class Time and Location:
  Time: XX T, Th
  Location: XXX

Instructor and GTA Contact Information:
  Dr. Luigi E. Perotti, Mechanical and Aerospace Engineering
  Email: Luigi.Perotti@ucf.edu
  Office Location: ENG1-339
  Phone: 407-823-4445
  Office Hours: XXX

Catalog description:
Definition of motion and strain in the finite kinematics regime. Conservation laws. Material laws for biological tissues, with and without microstructure and/or an incompressibility constraint. Models of damage, growth and remodeling, and electro-mechanical coupling. Introduction to multiscale modeling.

Course content:
Modeling the mechanics of soft and hard biological tissues is necessary to simulate organs' function and dysfunction, understand disease mechanisms and progression, and test interventional and pharmacological therapies in silico. The goal of this course is to introduce the theoretical and computational tools necessary to characterize the deformation and the material response of biological tissues.

To achieve this goal, we will first define motion and strain in the finite kinematics regime, which is necessary to properly describe the large displacements and deformations generally observed in biological tissues. Subsequently, we will introduce the concept of stress tensor and conservation of energy principles.

In the second part of the class, we will use the introduced mathematical description to model the relation – or material law – between stresses and strains in biological materials. In particular we will focus on hyperelastic materials for which the stress-strain relation is defined through an energy density. We will discuss and derive isotropic and anisotropic (e.g., myocardium and arterial walls) materials, with or without an incompressibility constraint — the incompressibility constraint is often necessary to describe biological tissues. Moreover, we will consider growth and remodeling (e.g., due to changes in tissue loading conditions as in an infarcted heart), damage (e.g., due to trauma or disease), and electro-mechanical coupling (e.g., cardiac contraction and peristalsis in the digestive tract).

Finally, we will introduce how to use the derived material laws to compute the response of biological tissues in different geometries and under different loading conditions. In this context, the Finite Element Method is the most commonly used modeling tool and we will briefly discuss its formulation and implementation to solve non-linear, finite kinematics, hyperelastic examples.

Student Learning Outcomes:
Upon completion of this course, students will be able to
  • Define and apply several definitions of large strain to describe tissue deformation.
  • Define and apply conservation of energy principles to model the mechanical response of biological tissues.
  • Define and apply material energy laws to describe hyperelastic materials with and without a microstructure, an incompressibility constraint, and/or damage.
• Describe the electro mechanical coupling in skeleton and cardiac muscles.
• Describe how to apply energy laws derived at the material point to full organ models.
• Present and apply classic models reported in research papers (final project).


**Sequence of Course Activity (*Subject to Change):**
HW Assignments are due on Fridays.

- **Week 1:**
  - Course Introduction.
  - Review of Vectors and Tensors, including indicial notation and matrix representation.
    Holzapfel Ch 1

- **Week 2:**
  - Kinematics description: displacement and deformation mapping.
  - Material and spatial derivatives.
  - HW #1 Due
    Holzapfel Ch 2.1 to 2.3

- **Week 3:**
  - Deformation gradient.
  - Strain tensors.
  - Rotation and stretch tensors.
  - HW #2 Due
    Holzapfel Ch 2.4 to 2.8

- **Week 4:**
  - The concept of stress, traction vectors, and stress tensors.
  - Several representations of the stress tensor.
  - HW #3 Due
  - Quiz #1
    Holzapfel Ch 3

- **Week 5:**
  - Conservation of Mass.
  - Conservation of linear and angular momentum.
  - Energy balance.
  - HW #4 Due
    Holzapfel Ch 4.1 to 4.5

- **Week 6:**
  - Entropy inequality.
  - Objectivity: rigid body motion and frame indifference.
  - HW #5 Due
    Holzapfel Ch 4.6 to 5.4

- **Week 7:**
  - Hyperelastic materials constitutive equations.
  - Incompressibility.
  - Examples of strain energy functions.
  - Isotropic and anisotropic materials.
  - HW #6 Due
  - Quiz #2
    Holzapfel Ch 6.1 to 6.7

- **Week 8:**
  - Biological materials with a microstructure.
  - Growth and remodeling.
  - HW #7 Due
• Quiz #2
  Holzapfel Ch 6.8 to 6.10
• Week 9:
  o Materials with internal damage.
  o Viscoelastic materials in large strains (if time allows.)
  o HW #8 Due
    Holzapfel Ch 6.10 to 6.11
• Week 10:
  o Electro-Mechanical coupling.
  o Active strain.
  o Active stress.
  o HW #9 Due
  o Quiz #3
• Week 11:
  o Uniaxial and biaxial tissue stretch experiments.
  o The Newton-Raphson method in 1D.
  o Application of the Newton-Raphson method to simulate material tests.
  o Term project discussion (during office hours).
  o HW #10 Due
• Week 12:
  o From a material point to tissue samples and organs.
  o An overview of the finite element method.
  o Term project discussion (during office hours).
  o Quiz #4
• Week 13:
  o Application1: understanding cardiac kinematics.
  o Application2: modeling muscle contraction.
  o Term project discussion (during office hours).
• Week 14:
  o Term project presentation.
• Week 15:
  o Term project presentation.
  o Review.

Final Exam:
Exam Format and Time - (Comprehensive, open books, open notes) at XX on XX

Assessment and Grading Procedures:
- Grading Scale:  A-F (+/-)
- Homework* 20%
  Each homework consists in several exercises. Only one problem per each homework will be graded and will determine the grade for that homework. The problem to be graded will be known ahead of time. Students may not collaborate on or discuss the graded problem but are strongly encouraged to collaborate on every other problem in the assignment. Solution for all problems will be posted after the homework is due.
- Quizzes 20%
  Each quiz will consist in one problem chosen from past homework assignments. Any problem (graded or ungraded can be chosen). Quizzes are closed books and will be held at the beginning of class, time limit 15 minutes.
- Midterm 20%
  Open books, open notes. Time limit 1 hour and 15 minutes.
- Term project paper and presentation 20% (more details will be given in class)
Term project will be a group project. Each group will choose among several papers proposed by the instructor and, based on the material learned in class, prepare a 15-20 minutes presentation (time duration will also depend on number of students in the class). This presentation will contain two parts:
1) A summary of the paper main contribution.
2) An application of the model presented in the paper. This second part of the project will require finite element simulations in a commercial finite element software (e.g., Abaqus) and/or programming simple subroutines in Matlab (or Python).

- Final 20%
  Open books, open notes.

Course Materials and Resources:
Required:
2. Introduction to Continuum Biomechanics, Kyriacos A. Athanasiou and Roman M. Natoli, Morgan & Claypool (available free as PDF).
3. Journal articles for term project – all available freely online (more details will be given in class)

Optional:
1. The Elements of Continuum Biomechanics, M. Epstein, John Wiley and Sons.
3. The finite element method: linear static and dynamic finite element analysis. Hughes, J.R. Thomas
Make-up Exam and Assignment Policy:
Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at: <http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf>

Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see the UCF policy at: <http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf>.

No partial credits for late submission

Course Policy Statement:

Academic Integrity:
Students should familiarize themselves with UCF’s Rules of Conduct. According to Section 1, “Academic Misconduct,” students are prohibited from engaging in

1. Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.

2. Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else’s efforts and used as part of an examination, course assignment, or project.

3. Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor’s PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.

4. Falsifying or misrepresenting the student’s own academic work.

5. Plagiarism: Using or appropriating another’s work without any indication of the source, thereby attempting to convey the impression that such work is the student’s own.

6. Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.

7. Helping another violate academic behavior standards.

For more information about Academic Integrity, students may consult The Center for Academic Integrity http://www.academicintegrity.org/icai/assets/FVProject.pdf.
For more information about plagiarism and misuse of sources, see “Defining and Avoiding Plagiarism: The WPA Statement on Best Practices."

Students should also familiarize themselves with the procedures for academic misconduct in UCF’s student handbook, The Golden Rule http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf. UCF faculty members have a responsibility for students’ education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a “Z Designation” on a student’s official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see http://goldenrule.sdes.ucf.edu/zgrade.

Course Accessibility Statement:
The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact the professor as soon as possible. Students should also connect with Student Accessibility Services
Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

Campus Safety Statement:

- Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.
- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide’s physical location and review the online version at <http://emergency.ucf.edu/emergency_guide.html>.
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see <http://www.ehs.ucf.edu/workplacesafety.html> (click on link from menu on left).
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.
- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (<https://youtu.be/NIKYajEx4pk>).

Campus Safety Statement for Student in Online-Only Courses:

- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.

Deployed Active Duty Military Students:

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.
**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

2. FILL IN all fields required marked with an * . You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ▶️ in the top left corner.

Special topics course additions must be accompanied by a course syllabus and rationale. Departments must also submit an electronic syllabus to the college curriculum person.

**General Catalog Information**

Proposal Type: Grad Course Addition Special Topic

College: College of Engineering and Computer Science

Unit / Department / College: Department of Computer Science

Full Title: CAP 5937 ST: Mixed Reality- Virtual Reality

Prefix: CAP  Code: 5937

Earliest semester course may be offered: Fall  Spring  Summer

Year: 2020

Course Title: ST: Mixed Reality - Virtual Reality

30 Char. Abbreviation - must begin with ST: ST:MRVR

Course Instructor (Must be Approved Graduate) Ryan McMahan
Course Description
Virtual reality, scene graphs, immersion, presence, VR sickness, interaction techniques, audio, haptics, system control, perception, interaction principles, physics, scenario fidelity, animations, virtual agents, 360° videos.

Grading Scheme: ABCDF

Prerequisite(s): None

Corequisite(s): None

Credit Hour Information

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

| Credit Hour | 1 | 1 | 1 |
| Formal Instruction Time - Class Hours or Online Module, etc. | 1 | 1 | 1 |
| Lab/Studio/Field work | 0 | 1 | 2 |
| Out-of-Class (homework, course readings, group work, online posts, etc) | 2 | 1 | 0 |
| Total Course Engagement | 3 | 3 | 3 |

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hours = 3 hours of Total Course Engagement
2 Credit hours = 6 hours of Total Course Engagement
3 Credit hours = 9 hours of Total Course Engagement
4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

Credit Hours: 3
Instruction Time: 2
Lab/Studio/Field Work Hours: 1
Out-of-Class Hours: 6
Total Engagement Hours: 9

Justification

Why is this course being offered as a special topic?*

This special topics course is an important addition to the UCF curriculum for three reasons. First, it will be used to beta test the Mixed Reality I course which is part of the Mixed Reality Graduate Certificate and Mixed Reality Master's track. Second, it is a necessary course given the proliferation of virtual reality in the world today. This course will be useful for helping students get jobs with virtual and mixed reality companies and those companies who make use of virtual and mixed reality. Third, this course will also help fine tune the regular Mixed Reality I course which will be one of the foundational courses under the Mixed Reality Education and Innovation Center the UCF is working to establish.

What is the source of students to enroll in this course?*

Computer Science and Engineering, Modeling and Simulation, Digital Media

What is the estimated annual enrollment?*

30

Do you plan to request that this course become permanent?*

Yes  No

Possible duplications and conflicts with other departments or colleges should be discussed with appropriate parties. Please detail any discussions you have had or attach relevant documents like email threads in the Attachment List Section.

Detail Discussion

We see no duplications or conflicts with other colleges or departments.

Course Syllabus Policy

The University of Central Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Core policy statements
  - Academic integrity statement including definition(s) of and consequences for academic misconduct
  - Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
  - Statement regarding emergency procedures and campus safety, encouraging students
to be aware of their surroundings and familiar with actions to take in various types of emergencies

Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: [https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf](https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf)

<table>
<thead>
<tr>
<th>Course Syllabus Policy*</th>
<th>☑️ I have aligned this syllabus per the UCF syllabus policy.</th>
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</thead>
<tbody>
<tr>
<td>Check Attached*</td>
<td>☑️ I have attached a course syllabus.</td>
</tr>
<tr>
<td>Support from involved units that no duplication exists</td>
<td>☐️ Duplication support materials attached</td>
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**PeopleSoft**

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<tr>
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<tr>
<td>Print in Catalog</td>
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<tr>
<td>Effective Date</td>
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CAP 5937: Special Topics in Mixed Reality – Virtual Reality  
3 Credit Hours

Course Syllabus

Course Information

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>CAP 5937</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Section:</td>
<td>Section number</td>
</tr>
<tr>
<td>Course Name:</td>
<td>Special Topics in Mixed Reality – Virtual Reality</td>
</tr>
<tr>
<td>Prerequisite(s):</td>
<td>None</td>
</tr>
</tbody>
</table>

| Term: | Semester and year |
| Class Meeting Times: | Days and time |
| Class Location: | Class location |

Contact Information

| Instructor: | Instructor name |
| GTA: | GTA name |
| Office Location: | Office location |
| Office Hours: | Days and time |
| Email: | Instructor’s UCF email |
| Phone: | Office phone number |

| GTA Location: | GTA name |
| Office Location: | Office location |
| Office Hours: | Days and time |
| Email: | Instructor’s UCF email |
| Phone: | Office phone number |

Course Description

Virtual reality, scene graphs, immersion, presence, VR sickness, interaction techniques, audio, haptics, system control, perception, interaction principles, physics, scenario fidelity, animations, virtual agents, 360° videos.

Student Learning Outcomes

Students are expected to achieve the following by using current tools and applying best practices:

- Design and implement high-fidelity virtual environments.
- Implement usable travel techniques.
- Implement usable manipulation techniques.
- Design and implement functional menus and user interfaces.
- Design and implement animation-based interactions.
- Design and implement physics-based interactions.
- Implement suitable 360° video-based virtual environments.
Course Activities

Calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Readings</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mixed and virtual reality</td>
<td>Jerald p9-30</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Scene graphs and computer graphics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Immersion and presence</td>
<td>Jerald p45-52</td>
<td>Homework 1 due</td>
</tr>
<tr>
<td>4</td>
<td>Travel techniques and wayfinding</td>
<td>Jerald p335-343</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>VR sickness</td>
<td>Jerald p159-176</td>
<td>Homework 2 due</td>
</tr>
<tr>
<td>6</td>
<td>Selection and manipulation techniques</td>
<td>Jerald p325-334</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Spatial audio and haptics</td>
<td>Jerald p85-110</td>
<td>Homework 3 due</td>
</tr>
<tr>
<td>8</td>
<td>System control and user interfaces</td>
<td>Jerald p344-354</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Perception and interaction principles</td>
<td>Jerald p355-368</td>
<td>Homework 4 due</td>
</tr>
<tr>
<td>10</td>
<td>Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Scenario fidelity and constraints</td>
<td>Jerald p223-236</td>
<td>Homework 5 due</td>
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<tr>
<td>12</td>
<td>Animations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Virtual agents</td>
<td></td>
<td>Homework 6 due</td>
</tr>
<tr>
<td>14</td>
<td>360° videos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Evaluations of MR</td>
<td></td>
<td>Homework 7 due</td>
</tr>
</tbody>
</table>

Important Dates
- List of university holidays, closures, drop/withdrawal deadlines, and final exam date.

Assignments
Students are expected to complete and submit the following assignments through Webcourses@UCF. Specifications and details for each assignment can be found on Webcourses@UCF.
- Homework 1: Design and implement a high-fidelity virtual environment.
- Homework 2: Implement a usable travel technique.
- Homework 3: Implement a usable manipulation technique.
- Homework 4: Design and implement a functional menu interface.
- Homework 5: Design and implement a physics-based interaction.
- Homework 6: Design and implement an animation-based interaction.
- Homework 7: Implement a suitable 360° video-based virtual environment.

Final Exam
Students are expected to take a final examination on all course content during the designated final exam period. Details of the final exam, including format, date, and time.

Assessment and Grading Procedures

Grading Methods
A point-based grading system will be used with 100 total points distributed among the assignments and final exam as follows:
- Homework 1 10 points
• Homework 2 10 points
• Homework 3 10 points
• Homework 4 10 points
• Homework 5 10 points
• Homework 6 10 points
• Homework 7 10 points
• Final Exam 30 points

The following grading scale will be employed on the final point totals:
• A 93 or above
• A- 90-93
• B+ 87-90
• B 83-87
• B- 80-83
• C+ 77-80
• C 70-77
• F 70 or below

Make-up Assignments and Exams
Per university policy, students must be allowed to turn in make-up work (or an equivalent, alternate assignment) for university-sponsored events, religious observances, or legal obligations (such as jury duty). In these instances, students must also be excused from class without penalty. Otherwise, make-up assignments and exams will not be accepted.

Attendance/Participation
Attendance and participation in class meetings are required. Every unexcused absence will result in a 3-point deduction from the student’s final point total. Reasons for acceptable absences may include illness, serious family emergencies, special curricular requirements (e.g., judging trips, field trips, professional conferences), military obligations, severe weather conditions, and religious holidays. Students must email the professor in advance or within one week of the absence to request that an acceptable absence be excused.

Extra Credit
No extra credit will be offered unless otherwise noted in an assignment.

Grade Dissemination
All grades will be disseminated through Webcourses@UCF.

Course Materials and Resources

Required texts

Required materials
• Unity version number
Policy Statements

Academic Integrity
The Center for Academic Integrity (CAI) defines academic integrity as a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow principles of behavior that enable academic communities to translate ideals into action. [http://academicintegrity.org/](http://academicintegrity.org/)

UCF Creed: Integrity, scholarship, community, creativity, and excellence are the core values that guide our conduct, performance, and decisions.

1. Integrity: I will practice and defend academic and personal honesty.
2. Scholarship: I will cherish and honor learning as a fundamental purpose of my membership in the UCF community.
3. Community: I will promote an open and supportive campus environment by respecting the rights and contributions of every individual.
4. Creativity: I will use my talents to enrich the human experience.
5. Excellence: I will strive toward the highest standards of performance in any endeavor I undertake.

The following definitions of plagiarism and misuse of sources come from the Council of Writing Program Administrators [<http://wpacouncil.org/node/9>](http://wpacouncil.org/node/9) and have been adopted by UCF’s Department of Writing & Rhetoric.

Plagiarism
In an instructional setting, plagiarism occurs when a writer deliberately uses someone else’s language, ideas, or other original (not common-knowledge) material without acknowledging its source. This definition applies to texts published in print or on-line, to manuscripts, and to the work of other student writers.

Misure of Sources
A student who attempts (even if clumsily) to identify and credit his or her source, but who misuses a specific citation format or incorrectly uses quotation marks or other forms of identifying material taken from other sources, has not plagiarized. Instead, such a student should be considered to have failed to cite and document sources appropriately.

Responses to Academic Dishonesty, Plagiarism, or Cheating
UCF faculty members have a responsibility for your education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to infringements of academic integrity. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see [http://goldenrule.sdes.ucf.edu/zgrade](http://goldenrule.sdes.ucf.edu/zgrade).

Unauthorized Use of Class Materials
There are many fraudulent websites claiming to offer study aids to students but are actually cheat sites. They encourage students to upload course materials, such as test questions, individual assignments, and examples of graded material. Such materials are the intellectual property of instructors, the university, or publishers and may not be distributed without prior authorization. Students who engage in such activity are in violation of academic conduct standards and may face penalties.
Unauthorized Use of Class Notes
Faculty have reported errors in class notes being sold by third parties, and the errors may be contributing to higher failure rates in some classes. The following is a statement appropriate for distribution to your classes or for inclusion on your syllabus:
Third parties may be selling class notes from this class without my authorization. Please be aware that such class materials may contain errors, which could affect your performance or grade. Use these materials at your own risk.

In-Class Recording Policy
Outside of the notetaking and recording services offered by Student Accessibility Services, the creation of an audio or video recording of all or part of a class for personal use is allowed only with the advance and explicit written consent of the instructor. Such recordings are only acceptable in the context of personal, private studying and notetaking and are not authorized to be shared with anyone without the separate written approval of the instructor.

Course Accessibility Statement
The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need specific access in this course, such as accommodations, should contact the professor as soon as possible to discuss various access options. Students should also connect with Student Accessibility Services (Ferrell Commons, 7F, Room 185, sas@ucf.edu, phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable.

Campus Safety Statement
Emergencies on campus are rare, but if one should arise in our class, we will all need to work together. Everyone should be aware of the surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Please make a note of the guide’s physical location and consider reviewing the online version at http://emergency.ucf.edu/emergency_guide.html.
- Familiarize yourself with evacuation routes from each of your classrooms and have a plan for finding safety in case of an emergency. (Insert class-specific details if appropriate)
- If there is a medical emergency during class, we may need to access a first aid kit or AED (Automated External Defibrillator). To learn where those items are located in this building, see http://www.ehs.ucf.edu/AEDlocations-UCF (click on link from menu on left). (insert class specific information if appropriate)
- To stay informed about emergency situations, sign up to receive UCF text alerts by going to my.ucf.edu and logging in. Click on “Student Self Service” located on the left side of the screen in the tool bar, scroll down to the blue “Personal Information” heading on your Student Center screen, click on “UCF Alert”, fill out the information, including your e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- If you have a special need related to emergency situations, please speak with me during office hours.
- Consider viewing this video (https://youtu.be/NIKYajEx4pk) about how to manage an active shooter situation on campus or elsewhere.

Deployed Active Duty Military Students
If you are a deployed active duty military student and feel that you may need a special accommodation due to that unique status, please contact your instructor to discuss your circumstances.
College of Engineering and Computer Science - Grad Course Addition Special Topic - CAP 6938 ST: Mixed Reality - Augmented Reality

2020-2021 Graduate Course Special Topics Request

General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ➩ in the top left corner.

Special topics course additions must be accompanied by a course syllabus and rationale. Departments must also submit an electronic syllabus to the college curriculum person.

Proposal Type:*
Grad Course Addition Special Topic

College:* College of Engineering and Computer Science

Unit / Department / College:* Department of Computer Science

For the Full Title box below, please type the course information in the following format: Prefix, Course Number, and Title. For example: IDS 6938 Creative Education

Please note: Special Topics codes can only be 5937 or 6938.

Full Title:* CAP 6938 ST: Mixed Reality - Augmented Reality

Prefix:* CAP

Code:* 6938

Year:* 2020

Earliest semester course may be offered:* Fall
Spring
Summer

Course Title:* ST: Mixed Reality - Augmented reality

Course Instructor (Must be Approved Graduate)
Ryan McMahan
Faculty/Scholars:

Department Chair
Phone Number: * 4078234758

Dept Chair Email: * leavens@cs.ucf.edu

Course Description (25 word limit)* Augmented reality, tracking, situated visualization, simultaneous localization and mapping, AR interactions, calibration, registration, occlusion, photometric registration, common illumination, diminished reality, viewpoint guidance, multiple perspectives, collaboration.

Grading Scheme: * ABCDF

Prerequisite(s): None

Corequisite(s): None

Credit Hour Information

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

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</tr>
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<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Out-of-Class (homework, course readings, group work, online posts, etc)</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total Course Engagement</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hour = 3 hours of Total Course Engagement

2 Credit hours = 6 hours of Total Course Engagement

3 Credit hours = 9 hours of Total Course Engagement

4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

Credit Hours: * 3

Instruction Time: * 2

Lab/Studio/Field Work Hours: * 1

Out-of-Class Hours: * 6
**Justification**

**Why is this course being offered as a special topic?**

This special topics course is an important addition to the UCF curriculum for three reasons. First, it will be used to beta test the Mixed Reality II course which is part of the Mixed Reality Graduate Certificate and Mixed Reality Master's track. Second, it is a necessary course given the proliferation of augmented reality in the world today. This course will be useful for helping students get jobs with augmented and mixed reality companies and those companies who make use of augmented and mixed reality. Third, this course will also help fine tune the regular Mixed Reality II course which will be one of the foundational courses under the Mixed Reality Education and Innovation Center that UCF is working to establish.

**What is the source of students to enroll in this course?**

Computer science and engineering, Modeling and Simulation, Digital Media

**What is the estimated annual enrollment?**

30

**Do you plan to request that this course become permanent?**

Yes

Possible duplications and conflicts with other departments or colleges should be discussed with appropriate parties. Please detail any discussions you have had or attach relevant documents like email threads in the Attachment List Section.

**Detail Discussion**

We see no duplications or conflicts with other colleges or departments.

**Course Syllabus Policy**

The University of Central Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Core policy statements

  - Academic integrity statement including definition(s) of and consequences for academic misconduct
  - Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
  - Statement regarding emergency procedures and campus safety, encouraging students
to be aware of their surroundings and familiar with actions to take in various types of emergencies

Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: [https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf](https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf)

<table>
<thead>
<tr>
<th>Course Syllabus Policy*</th>
<th>I have aligned this syllabus per the UCF syllabus policy.</th>
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<tr>
<td>Check Attached*</td>
<td>I have attached a course syllabus.</td>
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<tr>
<td>Support from involved units that no duplication exists</td>
<td>Diversification support materials attached</td>
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**PeopleSoft**

- **Academic Group**
- **Career**
- **Print in Catalog**
- **Effective Date**
- **Lab Fee**
- **CRSE_ID**
CAP 6938: Special Topics in Mixed Reality – Augmented Reality
3 Credit Hours

Course Syllabus

Course Information

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>CAP 6938</th>
<th>Term:</th>
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<tr>
<td>Course Section:</td>
<td>Section number</td>
<td>Class Meeting Times:</td>
<td>Days and time</td>
</tr>
<tr>
<td>Course Name:</td>
<td>Special Topics in Mixed Reality – Augmented Reality</td>
<td>Class Location:</td>
<td>Class location</td>
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<tr>
<td>Prerequisite(s):</td>
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Contact Information

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<tr>
<th>Instructor:</th>
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<td>Days and time</td>
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<td>Days and time</td>
</tr>
<tr>
<td>Email:</td>
<td>Instructor’s UCF email</td>
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</tr>
<tr>
<td>Phone:</td>
<td>Office phone number</td>
<td>Phone:</td>
<td>Office phone number</td>
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</table>

Course Description

Augmented reality, tracking, situated visualization, simultaneous localization and mapping, AR interactions, calibration, registration, occlusion, photometric registration, common illumination, diminished reality, viewpoint guidance, multiple perspectives, collaboration.

Student Learning Outcomes

Students are expected to achieve the following by using current tools and applying best practices:

- Implement marker tracking techniques.
- Implement object recognition techniques.
- Implement markerless tracking techniques.
- Implement model tracking techniques.
- Design and implement visually coherent virtual content.
- Design and implement viewpoint guidance techniques.
- Design and implement remote collaboration applications.
Course Activities

Calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Readings</th>
<th>Assignments</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Mixed and augmented reality</td>
<td>p1-32</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tracking</td>
<td>p85-120</td>
<td></td>
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<tr>
<td>3</td>
<td>Marker tracking</td>
<td>p121-131</td>
<td>Homework 1 due</td>
</tr>
<tr>
<td>4</td>
<td>Natural feature tracking</td>
<td>p138-155</td>
<td></td>
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<tr>
<td>5</td>
<td>Situated visualization</td>
<td>p239-270</td>
<td>Homework 2 due</td>
</tr>
<tr>
<td>6</td>
<td>Simultaneous localization and mapping</td>
<td>p156-178</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>AR interactions</td>
<td>p271-310</td>
<td>Homework 3 due</td>
</tr>
<tr>
<td>8</td>
<td>Calibration and registration</td>
<td>p179-194</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Occlusion</td>
<td>p195-204</td>
<td>Homework 4 due</td>
</tr>
<tr>
<td>10</td>
<td>Photometric registration and illumination</td>
<td>p205-226</td>
<td></td>
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<td>11</td>
<td>Diminished reality</td>
<td>p227-238</td>
<td>Homework 5 due</td>
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<tr>
<td>12</td>
<td>Viewpoint guidance</td>
<td>p345-354</td>
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<td>13</td>
<td>Multiple perspectives</td>
<td>p354-360</td>
<td>Homework 6 due</td>
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<td>14</td>
<td>Collaboration</td>
<td>p361-378</td>
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<tr>
<td>15</td>
<td>Future of MR</td>
<td></td>
<td>Homework 7 due</td>
</tr>
</tbody>
</table>

Important Dates
- List of university holidays, closures, drop/withdrawal deadlines, and final exam date.

Assignments
Students are expected to complete and submit the following assignments through Webcourses@UCF. Specifications and details for each assignment can be found on Webcourses@UCF.
- Homework 1: Implement a marker tracking technique.
- Homework 2: Implement an object recognition technique.
- Homework 3: Implement a markerless tracking technique.
- Homework 4: Implement a model tracking technique.
- Homework 5: Design and implement visually coherent virtual content.
- Homework 6: Design and implement a viewpoint guidance technique.
- Homework 7: Design and implement a remote collaboration application.

Final Exam
Students are expected to take a final examination on all course content during the designated final exam period. Details of the final exam, including format, date, and time.

Assessment and Grading Procedures

Grading Methods
A point-based grading system will be used with 100 total points distributed among the assignments and final exam as follows:
- Homework 1 10 points
Homework 2 10 points
Homework 3 10 points
Homework 4 10 points
Homework 5 10 points
Homework 6 10 points
Homework 7 10 points
Final Exam 30 points

The following grading scale will be employed on the final point totals:
- A 93 or above
- A- 90-93
- B+ 87-90
- B 83-87
- B- 80-83
- C+ 77-80
- C 70-77
- F 70 or below

Make-up Assignments and Exams
Per university policy, students must be allowed to turn in make-up work (or an equivalent, alternate assignment) for university-sponsored events, religious observances, or legal obligations (such as jury duty). In these instances, students must also be excused from class without penalty. Otherwise, make-up assignments and exams will not be accepted.

Attendance/Participation
Attendance and participation in class meetings are required. Every unexcused absence will result in a 3-point deduction from the student’s final point total. Reasons for acceptable absences may include illness, serious family emergencies, special curricular requirements (e.g., judging trips, field trips, professional conferences), military obligations, severe weather conditions, and religious holidays. Students must email the professor in advance or within one week of the absence to request that an acceptable absence be excused.

Extra Credit
No extra credit will be offered unless otherwise noted in an assignment.

Grade Dissemination
All grades will be disseminated through Webcourses@UCF.

Course Materials and Resources

Required texts

Required materials
- Unity version number
- Vuforia version number
- A Vuforia-supported device: https://library.vuforia.com/articles/Solution/vuforia-fusion-supported-devices.html
Policy Statements

Academic Integrity
The Center for Academic Integrity (CAI) defines academic integrity as a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow principles of behavior that enable academic communities to translate ideals into action. http://academicintegrity.org/

UCF Creed: Integrity, scholarship, community, creativity, and excellence are the core values that guide our conduct, performance, and decisions.

1. Integrity: I will practice and defend academic and personal honesty.
2. Scholarship: I will cherish and honor learning as a fundamental purpose of my membership in the UCF community.
3. Community: I will promote an open and supportive campus environment by respecting the rights and contributions of every individual.
4. Creativity: I will use my talents to enrich the human experience.
5. Excellence: I will strive toward the highest standards of performance in any endeavor I undertake.

The following definitions of plagiarism and misuse of sources come from the Council of Writing Program Administrators <http://wpacouncil.org/node/9> and have been adopted by UCF’s Department of Writing & Rhetoric.

Plagiarism
In an instructional setting, plagiarism occurs when a writer deliberately uses someone else’s language, ideas, or other original (not common-knowledge) material without acknowledging its source. This definition applies to texts published in print or on-line, to manuscripts, and to the work of other student writers.

Misuse of Sources
A student who attempts (even if clumsily) to identify and credit his or her source, but who misuses a specific citation format or incorrectly uses quotation marks or other forms of identifying material taken from other sources, has not plagiarized. Instead, such a student should be considered to have failed to cite and document sources appropriately.

Responses to Academic Dishonesty, Plagiarism, or Cheating
UCF faculty members have a responsibility for your education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to infringements of academic integrity. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see http://goldenrule.sdes.ucf.edu/zgrade.
For more information about UCF's Rules of Conduct, see http://www.osc.sdes.ucf.edu/.

Unauthorized Use of Class Materials
There are many fraudulent websites claiming to offer study aids to students but are actually cheat sites. They encourage students to upload course materials, such as test questions, individual assignments, and examples of graded material. Such materials are the intellectual property of instructors, the university, or publishers and may not be distributed without prior authorization. Students who engage in such activity are in violation of academic conduct standards and may face penalties.
Unauthorized Use of Class Notes
Faculty have reported errors in class notes being sold by third parties, and the errors may be contributing
to higher failure rates in some classes. The following is a statement appropriate for distribution to your
classes or for inclusion on your syllabus:
Third parties may be selling class notes from this class without my authorization. Please be aware that
such class materials may contain errors, which could affect your performance or grade. Use these
materials at your own risk.

In-Class Recording Policy
Outside of the notetaking and recording services offered by Student Accessibility Services, the creation of
an audio or video recording of all or part of a class for personal use is allowed only with the advance and
explicit written consent of the instructor. Such recordings are only acceptable in the context of personal,
private studying and notetaking and are not authorized to be shared with anyone without the separate
written approval of the instructor.

Course Accessibility Statement
The University of Central Florida is committed to providing access and inclusion for all persons with
disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who
need specific access in this course, such as accommodations, should contact the professor as soon as
possible to discuss various access options. Students should also connect with Student Accessibility
Services (Ferrell Commons, 7F, Room 185, sas@ucf.edu, phone (407) 823-2371). Through Student
Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs
faculty of potential access and accommodations that might be reasonable.

Campus Safety Statement
Emergencies on campus are rare, but if one should arise in our class, we will all need to work together.
Everyone should be aware of the surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door.
  Please make a note of the guide’s physical location and consider reviewing the online version at
- Familiarize yourself with evacuation routes from each of your classrooms and have a plan for
  finding safety in case of an emergency. (Insert class-specific details if appropriate)
- If there is a medical emergency during class, we may need to access a first aid kit or AED
  (Automated External Defibrillator). To learn where those items are located in this building, see
  http://www.ehs.ucf.edu/AEDlocations-UCF (click on link from menu on left). (insert class
  specific information if appropriate)
- To stay informed about emergency situations, sign up to receive UCF text alerts by going to
  my.ucf.edu and logging in. Click on “Student Self Service” located on the left side of the screen
  in the tool bar, scroll down to the blue “Personal Information” heading on your Student Center
  screen, click on “UCF Alert”, fill out the information, including your e-mail address, cell phone
  number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- If you have a special need related to emergency situations, please speak with me during office
  hours.
- Consider viewing this video (https://youtu.be/NIKYajEx4pk) about how to manage an active
  shooter situation on campus or elsewhere.

Deployed Active Duty Military Students
If you are a deployed active duty military student and feel that you may need a special accommodation
due to that unique status, please contact your instructor to discuss your circumstances.
College of Engineering and Computer Science - Grad Course Addition-
BME 5740C: Modeling Techniques and Methodologies in Bioengineering

2020-2021 Graduate Course New

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking ☰ in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ↘ in the top left corner.

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

Please note: If your proposal is for a new split level course, do not complete this form. Please complete the 2020-2021 Graduate Course Split-Level Class form.

Proposal Type: Grad Course Addition

College: College of Engineering and Computer Science

Unit / Department / College: Department of Mechanical and Aerospace Engineering

For the Full Title box below, please type the course information in the following format: Prefix, Course Number, and Title. For example: IDS 6000 Creative Education

Full Title: Grad Course Addition- BME 5740C: Modeling Techniques and Methodologies in Bioengineering

Course Instructor (Must be Approved Graduate Faculty/Scholars): Qiushi Fu

Department Chair Phone Number: (407) 823-5448

Dept Chair Email: yoav.peles@ucf.edu

Please Note: Originators of New Course Proposals are responsible for designating the new course number. Instructions can be found at https://graduatecouncil.ucf.edu/curriculum-committee/ The file is Course Number Guide in the Other Resources section of this webpage. New Course forms submitted with a 5/6/7 XXX designation will not be accepted.

Prefix: BME

Number: 5740
Course Title: Modeling Techniques and Methodologies in Bioengineering

Abbreviation: Biomedical Modeling

Course Type: Graduate Course

Course Description (25 word limit): Model identification and simulation implementation for physiological systems (e.g., cardiovascular, respiratory, neural, and muscular systems)

Grading Scheme: ABCDF

Prerequisite(s): EGN 3034, PHY 2048C, or C.I.

Credit Hour Information

As part of UCF's accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

<table>
<thead>
<tr>
<th>Credit Hour Design</th>
<th>1</th>
<th>1</th>
<th>1</th>
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<tbody>
<tr>
<td>(Formal) Instruction Time - Class Hours or Online Module, etc.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lab/Studio/Field work</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Out-of-Class (homework, course readings, group work, online posts, etc)</td>
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<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total Course Engagement</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hours = 3 hours of Total Course Engagement
2 Credit hours = 6 hours of Total Course Engagement
3 Credit hours = 9 hours of Total Course Engagement
4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC definition: [http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf](http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf)
Work Hours: 1

Out-of-Class Hours: 6

Total Engagement Hours: 9

Variable Credit (0-99):

**NOTE:** In determining if a course is repeatable for credit, the concept is that the content is the same, but the student experience with that content will be different each time it is taken.

For a repeatable course, indicate in the syllabus what will remain the same and what will change when the course is repeated.

Repeat for credit? Yes No

If yes, indicate the total times the course may be used toward completion of the degree.

Term of Offering

When will the course be offered? Odd Fall Even Fall Odd Spring Even Spring Odd Summer Even Summer Every Semester Occasional

Intended Utilization of Course

The course will be used primarily as: Required Course Elective Course

Materials and Supply Fee

New Materials and Supply Fees? Yes No

If yes, also complete the 2020-21 Graduate Materials and Supply Fee form.

Justification for Course Addition

What is the rationale for adding this course? This course is designed to be one of the core courses for the Biomedical Engineering graduate programs. It will introduce fundamental theory and programming techniques needed for the modeling and simulation of a broad range of physiological systems. This course, together with BME6500, BME5216, will serve as the basis of all advanced biomedical engineering graduate courses.

What grad programs/tracks require or recommend this course for graduation? Biomedical Engineering

What will be the source of students? Biomedical Engineering Master and PhD programs

What is the estimated annual enrollment? 15
Possible duplications and conflicts with other departments or colleges should be discussed with appropriate parties. Please detail any discussions you have had or attach relevant documents like email threads in the Attachment List Section.

**Detail Discussion**
There is no known duplications and conflicts.

**Course Syllabus Policy**

The University of Central Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

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  - Statement regarding accommodations for active duty military students

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**Course Syllabus Policy**
- I have aligned this syllabus per the UCF syllabus policy.

**Attachment List**

Please attach any required files by navigating to the Proposal Toolbox and clicking in the top right corner.

**Check**
- I have completed all relevant parts of the form.

**Attached**
- I have attached a course syllabus and rationale.

**Support from involved units that no duplication exists**
- Duplication support materials attached
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<td><strong>CRSE_ID</strong></td>
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BME 5740C Modeling Techniques and Methodologies in Bioengineering (3, 1)
Fall, 2020

Course Prerequisites: PHY 2048C Physics for Engineers and Scientists I, EGN 3034 Modeling methods in mechanical engineering, or consent of instructor.

Class Time and Location:
- Time: TBD
- Location: TBD

Instructor Contact Information:
- Dr. Qiushi Fu, Mechanical and Aerospace Engineering
- Email: Qiushi.Fu@ucf.edu
- Office Location: ENG1-342
- Office Hours: TBD

Course Description:
This course introduces the fundamental theory and programming techniques needed for the modeling and simulation of physiological systems. The relevant computational models and simulation techniques will be discussed in the lecture and practiced in several homework programming assignments and a semester project. The topics covered in the course include cardiovascular system, respiratory system, motor system, and neural system. Emphasis is also placed on literature review, report writing and team work.

Student Learning Outcomes:
The learning objectives of this course are to master the following
- Derivation of a mathematical model of a dynamic bio-system based on physical principles drawn from various engineering disciplines.
- Construction of a system's dynamic model based on empirically obtained data and parameter estimation.
- Recognition and simulation of system nonlinearities, understanding of the process of linearization and its range of validity.
- Understanding of the process of sensitivity analysis.
- Implementation of computational models and numerical analysis in MATLAB and/or Simulink.
- Practice team work, and be competent in technical report writing and giving presentations.

Course Materials and Resources:
Required Textbook:
F. C. Hoppensteadt, C. Peskin: Modeling and Simulation in Medicine and the Life Sciences
Optional Textbook:
A. Constantinides, P. V. Moghe, and S. Dunn: Numerical Methods in Biomedical Engineering
Software:
Students should have access to MATLAB and Simulink

Calendar (subject to change):
<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture</th>
<th>Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction; Math review</td>
<td>Lab 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MATLAB practice</td>
</tr>
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<td>---</td>
</tr>
<tr>
<td></td>
<td>Math review, MATLAB basics</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Heart and circulation</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Heart and circulation</td>
<td>Lab 2</td>
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<tr>
<td>5</td>
<td>Heart and circulation</td>
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</tr>
<tr>
<td>6</td>
<td>Gas exchange</td>
<td>Lab 3</td>
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<tr>
<td>7</td>
<td>Gas exchange</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Muscle mechanics</td>
<td>Lab 4</td>
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<tr>
<td>9</td>
<td>Muscle mechanics</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Model fitting and sensitivity analysis</td>
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<tr>
<td>11</td>
<td>Term project progress presentation</td>
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<tr>
<td>12</td>
<td>Cell membrane potential</td>
<td>Lab 5</td>
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<tr>
<td>13</td>
<td>Cell membrane potential</td>
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<tr>
<td>14</td>
<td>Volume Conduction</td>
<td>Lab 6</td>
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<tr>
<td>15</td>
<td>Volume Conduction</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Final presentation</td>
<td></td>
</tr>
</tbody>
</table>

**Assessment and Grading Procedures:**
- Grading Scale: A-F (+/-)
- Lab reports 50% (10% for each Lab 2-6)
- Term project progress presentation 10%
- Term project group report 25%
- Final presentation 15%

**Make-up Assignment Policy:**
Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at: <http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf>
Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see the UCF policy at:

**Course Policy Statement:**

**Academic Integrity:**

Students should familiarize themselves with UCF’s Rules of Conduct. According to Section 1, “Academic Misconduct,” students are prohibited from engaging in

1. Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor. The unauthorized possession of examination or course-related material also constitutes cheating.
2. Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else’s efforts and used as part of an examination, course assignment, or project.
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4. Falsifying or misrepresenting the student’s own academic work.
5. Plagiarism: Using or appropriating another’s work without any indication of the source, thereby attempting to convey the impression that such work is the student’s own.
6. Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
7. Helping another violate academic behavior standards.

For more information about Academic Integrity, students may consult The Center for Academic Integrity [http://www.academicintegrity.org/ica/ICT/assets/FVProject.pdf]. For more information about plagiarism and misuse of sources, see “Defining and Avoiding Plagiarism: The WPA Statement on Best Practices.”

Students should also familiarize themselves with the procedures for academic misconduct in UCF’s student handbook, *The Golden Rule* [http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf]. UCF faculty members have a responsibility for students’ education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a “Z Designation” on a student’s official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see [http://goldenrule.sdes.ucf.edu/zgrade](http://goldenrule.sdes.ucf.edu/zgrade).

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Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

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- Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.
- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide’s physical location and review the online version at [http://emergency.ucf.edu/emergency_guide.html](http://emergency.ucf.edu/emergency_guide.html).
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see [http://www.ehs.ucf.edu/workplacesafety.html](http://www.ehs.ucf.edu/workplacesafety.html) (click on link from menu on left).
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to [ucf.edu](http://ucf.edu) and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.
- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video (<https://youtu.be/NIKYajEx4pk>).

**Campus Safety Statement for Student in Online-Only Courses:**

- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to [ucf.edu](http://ucf.edu) and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.

**Deployed Active Duty Military Students:**

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.
College of Engineering and Computer Science - Grad Course Revision- EML 5228 Modal Analysis

2020-2021 Graduate Course Revision

General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking  in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking  in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after the proposal is launched.

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

College: College of Engineering and Computer Science

Unit / Department / College: Department of Mechanical and Aerospace Engineering

IMPORT COURSE NOW! Please use the Import feature to import the course information from the Catalog by clicking  in the top left corner of the form. Do not type the course prefix and code.

Prefix: EML

Code: 5228

Course Title: Modal Analysis

Abbreviation: Modal Analysis

Full Title: Grad Course Revision- EML 5228 Modal Analysis

Course Instructor (Must be Approved Graduate Faculty/Scholars):

Dr. Jeffrey Kauffman
Complete the remaining required fields and LAUNCH this proposal by clicking in the top left corner! Do not begin revisions until after launch. Course revisions before launch will not be tracked.

**Course Description:** Measurement techniques, excitation, transducers, data acquisition. Detailed data analysis, modal parameter extraction, curve-fitting procedures. Modeling.

**Prerequisite(s):** EML 3303C, EML 4225, and EML 5060.

**Corequisite(s):** None

**Does this proposal include revisions to prerequisites?** Yes

**Grading Scheme:** ABCDF

### Credit Hour Information

As part of UCF's accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

**Credit Hour Design Options**

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</thead>
<tbody>
<tr>
<td>(Formal) Instruction Time - Class Hours or Online Module, etc.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lab/Studio/Field work</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Out-of-Class (homework, course readings, group work, online posts, etc)</td>
<td>2</td>
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<td>0</td>
</tr>
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<td>Total Course Engagement</td>
<td>3</td>
<td>3</td>
<td>3</td>
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Any combination of these elements that extend beyond the 3 hours of Total Course Engagement, could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hour = 3 hours of Total Course Engagement

2 Credit hours = 6 hours of Total Course Engagement

3 Credit hours = 9 hours of Total Course Engagement
4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC definition: [http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf](http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf)

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<td>0</td>
</tr>
<tr>
<td>Out-of-Class Hours:*</td>
<td>2-3</td>
</tr>
<tr>
<td>Total Engagement Hours:*</td>
<td>6</td>
</tr>
</tbody>
</table>

**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.

Repeat for credit?  
- [ ] Yes
- [ ] No

If yes, indicate the degree program name and the total times the course may repeated.

If the course you are revising is a split-level class, please note this revision form will only impact the graduate side of the course. The undergraduate component of the course should be revised through the Undergraduate Curriculum Committee. As a reminder, the graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor.

Split-Level Class:*  
- [ ] Yes
- [ ] No

List undergraduate split-level course:

**Term of Offering**

When will the course be offered?  
- [ ] Odd Fall
- [ ] Even Fall
- [ ] Odd Spring
- [ ] Even Spring
- [ ] Odd Summer
- [ ] Even Summer
- [ ] Every Semester
- [ ] Occasional

**Intended Utilization of Course**

The course will be used primarily as:  
- [ ] Required Course
- [ ] Elective Course

**Justification for Course Revision**
What is the rationale for revising this course?*

We are revising out of date course information. This course is a lecture based course but has a "C" / Laboratory designation. We are also updating pre-requisites to remove a course that was phased out of the MAE program (EML 4220).

What grad programs/tracks require or recommend this course for graduation?

Mechanical or Aerospace Engineering

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

What is the estimated annual enrollment?

30 Students

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

Detail Discussion N/A

Course Syllabus Policy

The University of Central Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Core policy statements
  - Academic integrity statement including definition(s) of and consequences for academic misconduct
  - Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
  - Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with
actions to take in various types of emergencies
Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: https://policies.ucf.edu/documents/4-403.pdf

Course Syllabus Policy*  I have aligned this syllabus per the UCF syllabus policy.

Attachment List

Please attach any required files by navigating to the Proposal Toolbox and clicking 📜 in the top right corner.

Check  I have completed all relevant parts of the form.

Attached  I have attached a course syllabus and rationale.

Proposal Type: Grad Course Revision

Administration Use Only

Catalog Ownership:

Course OID

Course Type

Status  Active-Visible  Inactive-Hidden

PeopleSoft

Academic Organization

Academic Group

Career

Print in Catalog

Effective Date

Lab Fee

CRSE_ID
Instructor

Prof. Jeffrey L. Kauffman  
ENG1 313 | JL.Kauffman@ucf.edu | 407.823.0370 | OH: M 2:30-4:30  
W 9:30-11:30  
F 12:30-2:30

Lecture
Kauffman    MWF 11:30 – 12:20    ENG1 384    #19205
Additional Sections 0002 (#19204), 0V83 (#19206), 0V91 (#19208)

Course Description
Theoretical basis. Measurement techniques, excitation, transducers, data acquisition. Detailed data analysis, modal parameter extraction, curve-fitting procedures. Modeling. Occasional. 3(3,0)

Course Objectives
Upon successful completion of this course, students will understand the theoretical framework of modal analysis needed for advanced work in structural dynamics. Students will be able to design experiments to collect desired data for a vibratory system using appropriate transducers. Students will also be able to analyze the corresponding data to extract key modal parameters, to provide model validation and correlation, and to develop empirical models. Finally, students will be well prepared for industry applications, advanced courses, and research in a variety of areas including experimental dynamics, modal testing, and structural dynamics.

Prerequisites
EML 3303C (Mechanical Engineering Measurements) EML 4220 (Vibration Analysis), and  
EML 5060 (Mathematical Methods in Mechanical and Aerospace Engineering).

Required Text

Suggested Texts

Computer Use
Students should check webcourses regularly and use it for messaging in lieu of Knights email. Homework, a project, and exams will require use of a computer; Matlab or equivalent is ideal, tasks may be possible with advanced Excel proficiency, and MathCAD is not recommended. Some Matlab instruction and sample code will be provided.
Grading
Grades will be updated regularly and available online. Weighting: 30% homework, 25% midterm exam, 25% final exam, 15% project, and 5% article review. The grading scale is as follows (numbers are exact, not rounded):

<table>
<thead>
<tr>
<th>92</th>
<th>90</th>
<th>88</th>
<th>82</th>
<th>80</th>
<th>78</th>
<th>72</th>
<th>70</th>
<th>68</th>
<th>62</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A-</td>
<td>B+</td>
<td>B</td>
<td>B-</td>
<td>C+</td>
<td>C</td>
<td>C-</td>
<td>D+</td>
<td>D</td>
<td>D-</td>
</tr>
</tbody>
</table>

Homework Policy
Homework assignments will be posted on webcourses and announced in class. Late submissions may be penalized 10% per day and will not be accepted after the solution has been posted to webcourses. Students are encouraged to discuss homework problems and solution approaches with fellow students in the class, but each submission must be an individual effort and reflect the student’s understanding of the assignment.

Since Fall 2014, all faculty members are required to document students’ academic activity at the beginning of each course. Completion of HW0 will indicate initiation of this course; failure to complete the assignment on time may result in a delay in the disbursement of financial aid, if applicable.

Exam Policy
There will be a midterm exam, announced at least 2 weeks in advance. The scheduled final exam period is Wednesday, April 24, from 10:00 AM – 12:50 PM. Any take-home portion of an exam shall be strictly an individual effort. The only communication of any form (intentional or otherwise) regarding the exam shall take place between the student and the instructor. Any observed violation of this policy shall be reported to the instructor immediately. If clarification is needed at any point, contact the professor.

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Academic Integrity
The University of Central Florida is committed to promoting a culture of academic integrity. Any misrepresentation of student learning invalidates all student grades and tarnishes the credibility of the university. Any act of academic misconduct will be reported to the Office of Student Conduct (http://osc.sdes.ucf.edu) in accordance with university regulations. Please review the Golden Rule (http://goldenrule.sdes.ucf.edu) for guidelines governing university expectations of student conduct. Please also review UCF’s Rules of Conduct (http://osc.sdes.ucf.edu/process/roc). According to Section 1, “Academic Misconduct,” students are prohibited from engaging in:

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• If there is a medical emergency during class, students may need to access a first-aid kit or Automated External Defibrillator; nearby AEDs can be located near the ENG1 lobby elevator and in BA1 on the 2nd and 4th floors by the elevators. For a more complete location list, see http://www.ehs.ucf.edu/AEDlocations-UCF (click on link from menu on left).
• To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to https://my.ucf.edu and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
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### Tentative Schedule

<table>
<thead>
<tr>
<th>Week of</th>
<th>Reading (Ewins)</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 7*</td>
<td>A.1-A.3, A.5, 1, 2.2-2.3</td>
<td>Introduction and Math Review; SDOF Systems</td>
</tr>
<tr>
<td>Jan 14</td>
<td>2.3-2.4</td>
<td>SDOF &amp; MDOF Systems, FRFs</td>
</tr>
<tr>
<td>Jan 21**</td>
<td>2.5-2.9</td>
<td>Damping</td>
</tr>
<tr>
<td>Jan 28</td>
<td>2.10-2.11</td>
<td>FRF Methods and Visualization</td>
</tr>
<tr>
<td>Feb 4</td>
<td>3.1-3.5, 3.8, 3.12</td>
<td>Experimental Testing</td>
</tr>
<tr>
<td>Feb 11</td>
<td>3.7-3.8</td>
<td>Digital Signal Processing</td>
</tr>
<tr>
<td>Feb 18</td>
<td>4.1-4.3.2</td>
<td>FRF Methods: Peak Picking</td>
</tr>
<tr>
<td>Feb 25</td>
<td>4.3.3, supplement</td>
<td>FRF Methods: Circle Fit; Least Squares Estimation</td>
</tr>
<tr>
<td>Mar 4</td>
<td>4.3.4-4.3.5</td>
<td>FRF Methods: Inverse Fit</td>
</tr>
<tr>
<td>Mar 11</td>
<td>No Classes – Spring Break</td>
<td></td>
</tr>
<tr>
<td>Mar 18</td>
<td>4.4-4.5</td>
<td>FRF Methods: MDOF</td>
</tr>
<tr>
<td>Mar 25</td>
<td>4.6.1-4.6.2</td>
<td>TD Methods: Exponential Fit</td>
</tr>
<tr>
<td>Apr 1</td>
<td>4.6.3</td>
<td>TD Methods: Ibrahim</td>
</tr>
<tr>
<td>Apr 8</td>
<td>2.12, 5.1-5.3</td>
<td>Model Construction and Refinement</td>
</tr>
<tr>
<td>Apr 15</td>
<td>6.1-6.3</td>
<td>Model-Data Comparison, Model Updating</td>
</tr>
<tr>
<td>Apr 22</td>
<td>6.3</td>
<td>Model Updating</td>
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* Class will not meet during the week of January 7. Two lectures and an exercise will be posted.
** No class on Monday, January 21 (Martin Luther King Jr. Day).

This syllabus is subject to change; all modifications will be announced in class and reflected on the syllabus posted on the course website.
College of Engineering and Computer Science - Grad Course Revision - EML 5271 Intermediate Dynamics

2020-2021 Graduate Course Revision

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Unit / Department / College: * Department of Mechanical and Aerospace Engineering

IMPORT COURSE NOW! Please use the Import feature to import the course information from the Catalog by clicking in the top left corner of the form. Do not type the course prefix and code.

Prefix: * EML

Code: * 5271

Course Title: * Intermediate Dynamics

30 Character Abbreviation: * Intermediate Dynamics

Full Title: * Grad Course Revision-EML 5271 Intermediate Dynamics

Course Instructor (Must be Approved Graduate Faculty/Scholars): Dr. Tuhin Das
Complete the remaining required fields and LAUNCH this proposal by clicking ➤ in the top left corner! Do not begin revisions until after launch. Course revisions before launch will not be tracked.

**Course Description:** Dynamics of particles, rigid bodies, and distributed mass systems. Topics include: Hamilton’s principle, Lagrange’s equations, Numerical methods, and Mechanisms.

**Prerequisite(s):** EGN 3321.

**Corequisite(s):**

**Does this proposal include revisions to prerequisites?** Yes ☐ No ☐

**Grading Scheme:** ABCDF

---

**Credit Hour Information**

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

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<tr>
<th>Lab/Studio/Field Work Hours:*</th>
<th>0</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Out-of-Class Hours:*</th>
<th>2-3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Total Engagement Hours:*</th>
<th>6</th>
</tr>
</thead>
</table>

**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.

Repeat for credit?  
- [ ] Yes  
- [ ] No

If yes, indicate the degree program name and the total times the course may repeated.

If the course you are revising is a split-level class, please note this revision form will only impact the graduate side of the course. The undergraduate component of the course should be revised through the Undergraduate Curriculum Committee. As a reminder, the graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor.

Split-Level Class:*  
- [ ] Yes  
- [ ] No

List undergraduate split-level course:

**Term of Offering**

When will the course be offered?  
- [ ] Odd Fall  
- [ ] Even Fall  
- [ ] Odd Spring  
- [ ] Even Spring  
- [ ] Odd Summer  
- [ ] Even Summer  
- [ ] Every Semester  
- [ ] Occasional

**Intended Utilization of Course**

The course will be used primarily as:  
- [ ] Required Course  
- [ ] Elective Course

**Justification for Course Revision**
<table>
<thead>
<tr>
<th><strong>What is the rationale for revising this course?</strong></th>
<th>Revision to Undergraduate Course that serves as a Pre-Requisite</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What grad programs/tracks require or recommend this course for graduation?</strong></td>
<td>Mechanical and Aerospace Engineering</td>
</tr>
<tr>
<td><strong>If not a major requirement, what will be the source of students?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>What is the estimated annual enrollment?</strong></td>
<td>60 Students</td>
</tr>
</tbody>
</table>

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

**Detail Discussion**

N / A

### Course Syllabus Policy

The University of Central Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
- Student learning outcomes
- Sequence of course activity
- Assessment and grading procedures
- Course Materials and Resources
- Core policy statements
  - Academic integrity statement including definition(s) of and consequences for academic misconduct
  - Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
  - Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with...
actions to take in various types of emergencies
Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: https://policies.ucf.edu/documents/4-403.pdf

---

**Course Syllabus Policy**

I have aligned this syllabus per the UCF syllabus policy.

---

**Attachment List**

Please attach any required files by navigating to the Proposal Toolbox and clicking 📦 in the top right corner.

- **Check**
  - I have completed all relevant parts of the form.

- **Attached**
  - I have attached a course syllabus and rationale.

**Proposal Type:** Grad Course Revision

---

**Administration Use Only**

**Catalog Ownership:**

- Course OID
- Course Type

**Status**

- Active-Visible
- Inactive-Hidden

---

**PeopleSoft**

- **Academic Organization**
- **Academic Group**
- **Career**
- **Print in Catalog**
- **Effective Date**
- **Lab Fee**
- **CRSE_ID**
EML 5271 Intermediate Dynamics (3, 0)  
Spring Semester, 2019

Prerequisites: “C” (2.0), or better in the following courses: EGN 3321
Co-requisites: NONE
Class Time and Location:
  Time: Tu, Th: 6:00-7:15pm  
  Location: ENG1 386A

Instructor Contact Information:
  Instructor: Dr. Tuhin Das, Mechanical and Aerospace Engineering  
  Email: Please use web-courses e-mail  
  Office Location: ENG1-218  
  Phone: 407-823-5792  
  Office Hours: Tu: 12noon-3pm, Th: 12noon-3pm

Course Materials and Resources:
  References:  

Description:
  Dynamics of particles, rigid bodies and distributed mass systems, Hamilton’s principle,  
  Lagrange’s equations, Numerical methods, and Mechanisms.

Student Learning Outcomes: By the end of this class, students taking this course will,
  • Learn to formulate the phenomena of particle and rigid body dynamics and implement  
    them in applications (at the intermediate level).  
  • Develop a clear grasp of the principles of dynamics in the context of modern, analytical,  
    and computational methods.  
  • Develop an intuition in dynamics that will help with complex problem solving.  
  • Considerable exposure to integrated analysis, modeling, derivation, and solution of  
    differential algebraic equations in the context of mechanical dynamics.

Accreditation Standards: http://mae.ucf.edu/accreditation/

Student Participation (IMPORTANT): All faculty members are required to document students'  
  academic activity at the beginning of each course. In order to document that you began this  
  course, please complete the required academic activity (will be detailed by instructor) by the end  
  of the first week of classes, or as soon as possible after adding the course, but no later than  
  January 11. Failure to do so will result in a delay in the disbursement of your financial aid.

Homework
  1. Please check web-courses and your e-mail throughout the duration of this course. It is  
     your responsibility to remain informed about course announcements and postings in a  
     timely manner.
2. Homework sets will be posted on web-courses and will be due in approximately 1.5 to 2 weeks’ time. Homework submissions will be through web-courses in pdf form. It is the students' responsibility to ensure that the submitted pdf is legible.

3. Homework solutions will be posted on web-courses on regular basis, after respectively homework submission deadlines.

4. You must solve all problems listed in each homework-set. Homework problems will serve as relevant practice problems. Quality of overall attempt of each problem will also be considered during grading.

**Lectures**

- Please cooperate to maintain a professional atmosphere in the classroom that is conducive for learning. The same applies in your interaction with the instructor.
- Cell phones should be switched off or muted in class during lectures.
- During lectures, please refrain from personal communications and conversations among yourselves, as it adversely affects both teaching as well as learning.

**Exams:** Please see course schedule below.

**Course Schedule (*Subject to Change):**

<table>
<thead>
<tr>
<th>Wk</th>
<th>Dates</th>
<th>Topics</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 7</td>
<td>Chap.1: Introductory concepts, Chap. 2: Deriv. of unit vector, vel. and accln. in different coordinate systems.</td>
<td>HW1 posted</td>
</tr>
<tr>
<td>2</td>
<td>Jan 14</td>
<td>Chap. 2: Derivatives in rotating systems, motion of particles in rotating/moving coordinate frame</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Jan 21</td>
<td>Chap. 3: Particle dynamics, work-energy, impulse-momentum</td>
<td>HW1 due, HW2 posted</td>
</tr>
<tr>
<td>4</td>
<td>Jan 28</td>
<td>Chap. 3: Particle dynamics, linear impulse-momentum, angular momentum</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Feb 4</td>
<td>Chap. 4: System of particles, work-energy, linear impulse-momentum, Exam 1 on Th, Feb 7</td>
<td>HW2 due</td>
</tr>
<tr>
<td>6</td>
<td>Feb 11</td>
<td>Chap. 4: System of particles, angular momentum, collision problem</td>
<td>HW3 posted</td>
</tr>
<tr>
<td>7</td>
<td>Feb 18</td>
<td>Chap. 4: Collision problem, rocket problem, Chap. 6: Generalized coordinates, constraints</td>
<td>HW3 due, HW4 posted</td>
</tr>
<tr>
<td>8</td>
<td>Feb 25</td>
<td>Chap. 6: Lagrange’s equation, virtual work, generalized forces</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Mar 4</td>
<td>Chap. 6: Lagrange’s equation, Exam 2 on Th, Mar 7</td>
<td>HW4 due</td>
</tr>
<tr>
<td>10</td>
<td>Mar 11</td>
<td>Spring break</td>
<td>no classes</td>
</tr>
<tr>
<td>11</td>
<td>Mar 18</td>
<td>Chap. 7: Kinematics of rigid bodies, moments of inertia</td>
<td>HW5 posted</td>
</tr>
<tr>
<td>12</td>
<td>Mar 25</td>
<td>Chap. 7: Kinetic energy, angular momentum, translation and rotation of axes</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Apr 1</td>
<td>Chap. 7: Force reduction, Euler angles</td>
<td>HW5 due</td>
</tr>
<tr>
<td>14</td>
<td>Apr 8</td>
<td>Chap. 8: Dynamics of rigid body, equations of motion, free motion of rigid body</td>
<td>HW6 due</td>
</tr>
<tr>
<td>15</td>
<td>Apr 15</td>
<td>Chap. 8: Dynamics of rigid body, motion of a top, axially symmetric bodies.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Apr 22</td>
<td>Exam 3 on Tues, Apr 30, 4pm to 6:50pm</td>
<td></td>
</tr>
</tbody>
</table>

**Assessment and Grading Procedures:** Grading Scale: A-F (Relative grading will be adopted and the letter grade will be finalized based on class performance. Intermediate, i.e. +/-, scale may be incorporated)
Grade distribution:
Participatory quiz: 0%, Homework: 15%, Mid Term Exam1: 25%, Mid Term Exam2: 25%, Final examination: 35%

Make-up Exam and Assignment Policy:
Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at: http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf

Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see the UCF policy at: http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf.

Students that have any other form of conflict or foresee a conflict with exam(s) should make attempts to resolve it themselves and minimize requests for make-up exams. If the conflict is unavoidable, they should notify their instructor promptly. In addition, students should make every attempt to submit assignments on time. Late submissions will incur point deduction.

Course Policy Statement:
Academic Integrity:
Students should familiarize themselves with UCF’s Rules of Conduct. According to Section 1, “Academic Misconduct,” students are prohibited from engaging in
1. Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
2. Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else’s efforts and used as part of an examination, course assignment, or project.
3. Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor’s PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
4. Falsifying or misrepresenting the student’s own academic work.
5. Plagiarism: Using or appropriating another’s work without any indication of the source, thereby attempting to convey the impression that such work is the student’s own.
6. Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
7. Helping another violate academic behavior standards.

For more information about Academic Integrity, students may consult The Center for Academic Integrity http://www.academicintegrity.org/icai/assets/FVProject.pdf.
For more information about plagiarism and misuse of sources, see “Defining and Avoiding Plagiarism: The WPA Statement on Best Practices.”

Students should also familiarize themselves with the procedures for academic misconduct in UCF’s student handbook, The Golden Rule.
UCF faculty members have a responsibility for students’ education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a “Z Designation” on a student’s official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see [http://goldenrule.sdes.ucf.edu/zgrade](http://goldenrule.sdes.ucf.edu/zgrade).

**Course Accessibility Statement:**
The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact the professor as soon as possible. Students should also connect with Student Accessibility Services (SAS) [http://sas.sdes.ucf.edu/](http://sas.sdes.ucf.edu/) (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

**Campus Safety Statement:**
- Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.
- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide’s physical location and review the online version at [http://emergency.ucf.edu/emergency_guide.html](http://emergency.ucf.edu/emergency_guide.html).
- Students should know the evacuation routes from each of their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see [http://www.ehs.ucf.edu/workplacesafety.html](http://www.ehs.ucf.edu/workplacesafety.html) (click on link from menu on left).
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.
- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video ([https://youtu.be/NIKYajEx4pk](https://youtu.be/NIKYajEx4pk)).

**Campus Safety Statement for Student in Online-Only Courses:**
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <ucf.edu> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
• Students with special needs related to emergency situations should speak with their instructors outside of class.

Deployed Active Duty Military Students:
Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.
GCCC Agenda 11-6-19

Committee  Graduate Curriculum Committee

Notes

Total Proposals  37

College of Business Administration - Grad Course Deletion - ACG 6065 Accounting Foundations

2020-2021 Graduate Course Deletion

General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking in the top left corner.

Proposal Type:* Grad Course Deletion

College:* College of Business Administration

Unit / Department / College:* Kenneth G. Dixon School of Accounting

IMPORT COURSE NOW! Please use the Import feature to import the course information from the Catalog by clicking in the top left corner of the form. Do not type the course prefix and code.

Prefix:* ACG

Code:* 6065

Course Title:* Accounting Foundations

Full Title:* ACG 6065 Accounting Foundations
Course Description: To provide students with a basic understanding of accounting information used for investor and managerial decision making.

| Credit Hours: | 3 |
| Class Hours:  | 3 |
| Lab and Field Work Hours: | 0 |
| Contact Hours: | 3 |
| Prerequisite(s): | Graduate standing. |
| Corequisite(s): | |
| Graded S/U? | Yes ☐ No ☑ |
| Split-Level Class: | Yes ☐ No ☑ |
| List undergraduate split-level course: | |

Term of Offering

| When was the course offered? | Odd Fall ☐ Even Fall ☐ Odd Spring ☑ Even Spring ☑ Odd Summer ☑ Even Summer ☑ Every Semester ☐ Occasional ☐ |

Utilization of Course

| The course was a: | Required Course ☐ Elective Course ☑ |

Justification for Course Deletion

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking 📊 in the top left corner of the form and answer below according to the results.

| Is this course a required course for graduation or prerequisite for another course? | Yes ☐ No ☑ |
| If yes, have all relevant units been informed of the deletion? | Yes ☐ No ☑ |
| If not, explain: | |

Notes: Course has not been offered in more than 5 years and is not required in any program.

Attachment

Supporting | Yes ☑ No ☐
10/25/2019 Curriculog

documents from impacted units of the deletion*

---

**Administration Use Only**

**Catalog Ownership:** Kenneth G. Dixon School of Accounting

**Course OID**

**Course Type** Accounting: General

**Status** [Active-Visible] [Inactive-Hidden]

---

**PeopleSoft**

**Academic Group**

**Career**

**Print in Catalog**

**Effective Date**

**Lab Fee**

**CRSE_ID** 043734
Impact Report for ACG 6065

Source: 2020-2021 Graduate Catalog (WORKING COPY)

Full Course Title: ACG 6065 - Accounting Foundations
College of Business Administration - Grad Course Deletion - MAN 6244 Organizational Behavior
2020-2021 Graduate Course Deletion

General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking in the top left corner.

Proposal Type:* Grad Course Deletion
College:* College of Business Administration
Unit / Department / College:* Department of Management

IMPORT COURSE NOW! Please use the Import feature to import the course information from the Catalog by clicking in the top left corner of the form. Do not type the course prefix and code.

Prefix:* MAN
Code:* 6244

Course Title:* Organizational Behavior
Full Title:* MAN 6244 Organizational Behavior
Course Description:* Study of behavior of individuals, groups, and the interactions between them. Students will be exposed to the theories behind the “people” skills for effective management.

Credit Hours: 1.5
Class Hours: 1.5
Lab and Field Work Hours: 0
Contact Hours: 2
Prerequisite(s): Graduate standing.
Corequisite(s):

Graded S/U?  Yes  No

Split-Level Class:  Yes  No

List undergraduate split-level course:

**Term of Offering**

When was the course offered?  Odd Fall  Even Fall  Odd Spring  Even Spring  Odd Summer  Even Summer  Every Semester  Occasional

**Utilization of Course**

The course was a:  Required Course  Elective Course

**Justification for Course Deletion**

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking ☐ in the top left corner of the form and answer below according to the results.

Is this course a required course for graduation or prerequisite for another course?  Yes  No

If yes, have all relevant units been informed of the deletion?  Yes  No

If not, explain:

**Notes:**

The course (MAN 6244 Organizational Behavior) has not been offered in the last five years. The course is not needed as MAN 6245 Organizational Behavior and Development is a required course in the department's graduate programs.

**Attachment**

Supporting documents from impacted units of the deletion*  Yes  No

**Administration Use Only**

Catalog Ownership:  Department of Management

Course OID
<table>
<thead>
<tr>
<th>Course Type</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Active-Visible</td>
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</tbody>
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### PeopleSoft

<table>
<thead>
<tr>
<th>Academic Group</th>
<th>Career</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print in Catalog</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Lab Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRSE_ID</td>
<td>043861</td>
</tr>
</tbody>
</table>
Impact Report for MAN 6244

Source: 2020-2021 Graduate Catalog (WORKING COPY)

Full Course Title: MAN 6244 - Organizational Behavior
College of Business Administration - Grad Course Deletion - MAN 6446
Applied Negotiations in Management

2020-2021 Graduate Course Deletion

General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking ⌁ in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ⬤ in the top left corner.

Proposal Type: * Grad Course Deletion

College: * College of Business Administration

Unit / Department / College: * Department of Management

IMPORT COURSE NOW! Please use the Import feature to import the course information from the Catalog by clicking ⤦ in the top left corner of the form. Do not type the course prefix and code.

Prefix: * MAN

Code: * 6446

Course Title: * Applied Negotiations in Management

Full Title: * MAN 6446 Applied Negotiations in Management

Course Description: * The study and application of negotiation theories and processes to human resource management practices and other management activities in work organizations.

Credit Hours: 1.5

Class Hours: 1.5

Lab and Field Work Hours: 0

Contact Hours: 2

Prerequisite(s): Graduate standing.
Corequisite(s):

Graded S/U?  Yes  No

Split-Level Class:  Yes  No

List undergraduate split-level course:

Term of Offering

When was the course offered?  
- Odd Fall  
- Even Fall  
- Odd Spring  
- Even Spring  
- Odd Summer  
- Even Summer  
- Every Semester  
- Occasional

Utilization of Course

The course was a:  Required Course  Elective Course

Justification for Course Deletion

If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.

Run an Impact Report by clicking  in the top left corner of the form and answer below according to the results.

Is this course a required course for graduation or prerequisite for another course?  Yes  No

If yes, have all relevant units been informed of the deletion?  Yes  No

If not, explain:

Notes:  Course has not been offered in the last five years.

Attachment

Supporting documents from impacted units of the deletion*  Yes  No

Administration Use Only

Catalog Ownership:  Department of Management

Course OID

Course Type:  Management
<table>
<thead>
<tr>
<th>PeopleSoft</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Group</strong></td>
</tr>
<tr>
<td><strong>Career</strong></td>
</tr>
<tr>
<td><strong>Print in Catalog</strong></td>
</tr>
<tr>
<td><strong>Effective Date</strong></td>
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<tr>
<td><strong>Lab Fee</strong></td>
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<td><strong>CRSE_ID</strong></td>
</tr>
</tbody>
</table>

**Status**
- Active-Visible
- Inactive-Hidden

10/25/2019 Curriculog

https://ucf.curriculog.com/agenda:249/print
# Impact Report for MAN 6446

**Source:** 2020-2021 Graduate Catalog (WORKING COPY)

<table>
<thead>
<tr>
<th><strong>Full Course Title</strong></th>
<th><strong>MAN 6446 - Applied Negotiations in Management</strong></th>
</tr>
</thead>
</table>
# College of Business Administration - Grad Course Deletion - TAX 6875

**Contemporary Tax Topics**

**2020-2021 Graduate Course Deletion**

## General Catalog Information

**Read before you begin**

1. **TURN ON** help text before starting this proposal by clicking 🔄 in the top right corner of the heading.
2. **FILL IN** all fields required marked with an * (*). You will not be able to launch the proposal without completing required fields.
3. **LAUNCH** proposal by clicking ⬇️ in the top left corner.

<table>
<thead>
<tr>
<th>Proposal Type:</th>
<th>Grad Course Deletion</th>
</tr>
</thead>
<tbody>
<tr>
<td>College:</td>
<td>College of Business Administration</td>
</tr>
<tr>
<td>Unit / Department / College:</td>
<td>Kenneth G. Dixon School of Accounting</td>
</tr>
</tbody>
</table>

**IMPORT COURSE NOW!** Please use the Import feature to import the course information from the Catalog by clicking ↩️ in the top left corner of the form. Do not type the course prefix and code.

<table>
<thead>
<tr>
<th>Prefix:</th>
<th>TAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code:</td>
<td>6875</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Contemporary Tax Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Title:</td>
<td>TAX 6875 Contemporary Tax Topics</td>
</tr>
</tbody>
</table>

| Course Description: | Advanced study of current tax issues affecting both business and individual taxpayers, including tax policy, pending tax legislation and tax reform. |

| Credit Hours: | 3 |
| Class Hours:  | 3 |
| Lab and Field Work Hours: | 0 |
| Contact Hours: | 3 |

**Prerequisite(s):** Graduate standing and TAX 5015.
Corequisite(s):  

Graded S/U?  
☐ Yes ☐ No  

Split-Level Class:  
☐ Yes ☐ No  

List undergraduate split-level course:  

**Term of Offering**  
When was the course offered?  
☐ Odd Fall ☐ Even Fall ☐ Odd Spring ☐ Even Spring ☐ Odd Summer ☐ Even Summer  
☐ Every Semester ☑ Occasional  

**Utilization of Course**  
The course was a:  
☐ Required Course ☐ Elective Course  

**Justification for Course Deletion**  
If this course is required in any UCF program or is a prerequisite for any UCF course, attach evidence of discussions you have had with impacted programs/departments/schools.  

Run an Impact Report by clicking ☑ in the top left corner of the form and answer below according to the results.  

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

If yes, have all relevant units been informed of the deletion?  
☐ Yes ☑ No  

If not, explain:  

Notes:  
Course was an elective in the Taxation MST program, which has not accepted applications since Fall 2014 and the course has not been offered in over 5 years.  

**Attachment**  
Supporting documents from impacted units of the deletion  
☐ Yes ☑ No  

**Administration Use Only**  
Catalog Ownership:  
Kenneth G. Dixon School of Accounting  

Course OID  

Course Type  Taxation
<table>
<thead>
<tr>
<th>PeopleSoft</th>
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<tbody>
<tr>
<td><strong>Academic Group</strong></td>
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<td><strong>Career</strong></td>
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## Impact Report for TAX 6875

**Source:** 2020-2021 Graduate Catalog (WORKING COPY)

<table>
<thead>
<tr>
<th>Full Course Title</th>
<th>TAX 6875 - Contemporary Tax Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programs</td>
<td>Taxation MST</td>
</tr>
</tbody>
</table>
General Catalog Information

**Read before you begin**

1. TURN ON help text before starting this proposal by clicking 🔄 in the top right corner of the heading.

2. FILL IN all fields required marked with an *. You will not be able to launch the proposal without completing required fields.

3. LAUNCH proposal by clicking ✅ in the top left corner. DO NOT make proposed changes before launching proposal. Changes will only be tracked after the proposal is launched.

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

Proposal Type: *Grad Course Revision*

College: *College of Business Administration*

Unit / Department / College:* Department of Finance*

IMPORT COURSE NOW! Please use the import feature to import the course information from the Catalog by clicking ⬇️ in the top left corner of the form. Do not type the course prefix and code.

Prefix: *

Activity Log
Susan Wiesen

Code: *6465*

Course Title:* Financial Analysis Seminar of Real Estate Firms*
30 Character Abbreviation:* Financial Analysis Seminar of Real Estate Firms

Full Title:* REE 6465 Financial Analysis of Real Estate Firms

Course Instructor (Must be Approved Graduate Faculty/Scholars):

Department Chair Phone Number:* 407-823-0761

Dept Chair Email* aks@ucf.edu

Complete the remaining required fields and LAUNCH this proposal by clicking in the top left corner! Do not begin revisions until after launch. Course revisions before launch will not be tracked.

Course Description:* Seminar in financial Financial analysis, examining and valuations of real estate firms using financial statements, annual reports and other sources of information. Not open to students who have completed or are enrolled in GEB 6895.

Prerequisite(s): Graduate standing.

Corequisite(s):

Does this proposal include revisions to prerequisites?* Yes ☐ No

Grading Scheme: ABCDF

Credit Hour Information

As part of UCF’s accreditation with SACSCOC, we are required to have a formal model of credit hour designations. The following chart provides a general framework for faculty to use as they make course proposals. The elements will help faculty to better determine the credit hour designation for a course and help the institution with a standard approach in this determination.

Credit Hour Design Options

| Credit Hour | 1 | 1 | 1 |
| Formal Instruction Time - Class Hours or Online Module, etc. | 1 | 1 | 1 |
| Lab/Studio/Field work | 0 | 1 | 2 |
| Out-of-Class (homework, course readings, group work, online posts, etc) | 2 | 1 | 0 |
| Total Course Engagement | 3 | 3 | 3 |

Any combination of these elements that extend beyond the 3 hours of Total Course Engagement,
could be considered a 2 credit hour class. The course should try to maintain a 1:3 ratio.

1 Credit hours = 3 hours of Total Course Engagement
2 Credit hours = 6 hours of Total Course Engagement
3 Credit hours = 9 hours of Total Course Engagement
4 Credit hours = 12 hours of Total Course Engagement

Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC definition: [http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf](http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf)

<table>
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<th>Credit Hours:</th>
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<tbody>
<tr>
<td>Instruction Time:</td>
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<tr>
<td>Lab/Studio/Field Work Hours:</td>
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<td>Out-of-Class Hours:</td>
<td>6</td>
</tr>
<tr>
<td>Total Engagement Hours:</td>
<td>3 9</td>
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</table>

**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.

**Repeat for credit?** Yes No

If yes, indicate the degree program name and the total times the course may repeated.

If the course you are revising is a split-level class, please note this revision form will only impact the graduate side of the course. The undergraduate component of the course should be revised through the Undergraduate Curriculum Committee. As a reminder, the graduate syllabus should clearly demonstrate more advanced subject matter, expectations, and rigor.

**Split-Level Class:** Yes No

**List undergraduate split-level course:**

**Term of Offering**

**When will the course be offered?**
- Odd Fall
- Even Fall
- Odd Spring
- Even Spring
- Odd Summer
- Even Summer
- Every Semester
- Occasional
Intended Utilization of Course

The course will be used primarily as:

- [x] Required Course
- [x] Elective Course

Justification for Course Revision

What is the rationale for revising this course?*

About 10 years ago, students in our premium MBA programs requested that another finance class be added to their curriculum. At the direction of Associate Dean Ganesh, FIN 6465 Financial Analysis Seminar was developed for these programs. The class was also included in the Professional MSRE program. For the real estate students, we shifted the focus to real estate firms, especially REITs. We are proposing to change the numbering of FIN 6465 to REE 6XXX 6465 to reflect this change in focus. Further, we believe this change will be beneficial to the marketing of the program by adding another specialty real estate class to the curriculum. Our real estate faculty suggested we make this change and are supportive of this proposal.

What grad programs/tracks require or recommend this course for graduation?

Real Estate MSRE

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

MBA and MSRE students

What is the estimated annual enrollment?

60

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

Detail Discussion

Course Syllabus Policy

The University of Central Florida has established guidelines as it relates to the form and structure of all course syllabi. An effective syllabus provides an overview of the purpose of a course, outlines course requirements, and defines expectations for student performance. Faculty members are responsible for developing course content and selecting pedagogical approaches for their courses. Leveraging this policy to develop them will provide a consistent approach for presenting essential information that supports learning and ensures that UCF is in compliance with the standards set forth by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and other accrediting bodies.

To this end, each syllabus should include the following required elements:

- Information from the official Schedule of Classes
- Instructor and/or GTA contact information
- Explicit, public description of the course
Student learning outcomes
Sequence of course activity
Assessment and grading procedures
Course Materials and Resources
Core policy statements

- Academic integrity statement including definition(s) of and consequences for academic misconduct
- Statement directing students needing accommodations to work with faculty and with Student Accessibility Services to ensure equal access to educational activities
- Statement regarding emergency procedures and campus safety, encouraging students to be aware of their surroundings and familiar with actions to take in various types of emergencies
- Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: [https://policies.ucf.edu/documents/4-403.pdf](https://policies.ucf.edu/documents/4-403.pdf)

<table>
<thead>
<tr>
<th>Course Syllabus Policy</th>
<th>✔️ I have aligned this syllabus per the UCF syllabus policy.</th>
</tr>
</thead>
</table>

**Attachment List**

Please attach any required files by navigating to the Proposal Toolbox and clicking 📇 in the top right corner.

<table>
<thead>
<tr>
<th>Check</th>
<th>Activity Log</th>
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<tr>
<td>Susan Wiesen</td>
<td>✔️ I have completed all relevant parts of the form.</td>
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<thead>
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<th>Activity Log</th>
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<tbody>
<tr>
<td>Susan Wiesen</td>
<td>✔️ I have attached a course syllabus and rationale.</td>
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**Administration Use Only**

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<th>Department of Finance</th>
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<td>Course Type</td>
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https://ucf.curriculog.com/proposal:3025/print
### PeopleSoft

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<td>Career</td>
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<tr>
<td>Print in Catalog</td>
<td></td>
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<tr>
<td>Effective Date</td>
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Course Syllabus

PROFESSIONAL (PART-TIME) MSRE PROGRAM
EXECUTIVE DEVELOPMENT CENTER, COLLEGE OF BUSINESS

Proposed Course Syllabus

REE 6465, Financial Analysis of Real Estate Firms
3 Credit Hours

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Ann Marie Whyte, PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Location:</td>
<td>BA1, 423</td>
</tr>
<tr>
<td>Office Hours:</td>
<td>Before and after class</td>
</tr>
<tr>
<td>Phone:</td>
<td>(407) 823-3945</td>
</tr>
<tr>
<td>Email:</td>
<td>Please use Webcourses for emails</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Paul Gregg, MSA, CPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Location:</td>
<td>BA1, Room 428</td>
</tr>
<tr>
<td>Office Hours:</td>
<td>Before and after class</td>
</tr>
<tr>
<td>Phone:</td>
<td>(407) 823-3156</td>
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<tr>
<td>Email:</td>
<td>Please use Webcourses for all emails</td>
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<table>
<thead>
<tr>
<th>Term:</th>
<th>Fall 2019</th>
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<tbody>
<tr>
<td>Class Meeting Days:</td>
<td>Thursdays</td>
</tr>
<tr>
<td>Class Meeting Time:</td>
<td>6:00 p.m. to 10:00 p.m.</td>
</tr>
<tr>
<td>Class Location:</td>
<td>Valencia West</td>
</tr>
<tr>
<td>Course Modality:</td>
<td>Face to Face</td>
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Course Description
This corporate finance course builds on the concepts covered in FIN 6406 (Strategic Financial Management). The first half reviews key topics introduced in FIN 6406 from the perspective of the real estate industry including financial statement analysis for home builders and an illustration of mortgage payment calculations and amortization schedules. Several new topics will also be introduced such as financial options and international financial management, with examples illustrating how exchange rates affect the supply and demand for real estate. The second half focuses on advanced financial statement analysis of real estate firms including analyzing 10-K reports, forecasting financial statements, and applying valuation techniques.

Enrollment Requirements
FIN 6406 is a pre-requisite for this course.
Learning Objectives
At the end of the course, students will be able to:

(i) Conduct a comprehensive financial analysis of a home builder and its key competitor
(ii) Estimate basic payoffs on put and call options
(iii) Explain how exchange rates can impact the real estate sector and execute hedging strategies
(iv) Analyze a company’s financial results, identify strengths and weaknesses and develop action plans for improvement.
(v) Use management's discussion and analysis of operations from 10-K reports to analyze public companies. Review annual report chairman's letters to critique and analyze corporate strategy plans
(vi) Develop forecasts and discuss the corporate planning cycle
(vii) Calculate key valuation metrics for both small and large businesses
(viii) Understand how activist shareholders view companies, and how they add (or destroy) value.

Course Activities

Webcourses/Canvas
FIN 6465 is a Webcourses enhanced course. The syllabus is available under the “Modules” link. You can also find PowerPoint slides and selected answers to each chapter’s homework assignments under the “Modules” tab. Assignments and Quizzes will also be administered using Webcourses. If you experience problems, please call the UCF help desk at 407-823-5117.

UCF Financial Aid Policy
UCF has implemented a policy mandating a record of attendance during the first week of the semester. To that end, we have created an “Attendance Quiz” which must be completed during the first week of classes. The quiz will not count toward your final grade.

Class participation
Your participation is welcome, expected, and strongly encouraged. We welcome discussions that are relevant to the topic that involve your own work experience. Consistent class attendance will increase the likelihood that you will perform well in the course.

Class Presentations/Study Approach
Class lectures will include PowerPoint slides, discussions, and working some sample problems. PowerPoint slides are included under the Modules tab. Successful completion of the course will require the following:

- Completing the assigned readings in advance of the lecture
- Reviewing PowerPoint slides
- Completing a Webcourses assessment if applicable within the due date
Exams
There will be two exams in this course; a midterm and a final. All exams are closed book, closed notes. However, a formula sheet will be provided in advance of each exam. The exams will include problems and concepts discussed in class.

Makeup exam policy
Please plan to take both exams at their regularly scheduled times. If you miss an exam because of extenuating circumstances, you will need to make arrangements to complete the exam at the earliest possible date. The makeup will need to be taken at the EDC during normal business hours.

Quizzes
You will complete several individual quizzes in Webcourses. The quizzes will be completed at your convenience, but within the deadline. You will have unlimited attempts for each quiz and your HIGHEST score will count. It is highly recommended that you read the text and review the assigned questions and problems BEFORE attempting the assessment in order to ensure you complete the questions within a reasonable period of time. Separate homework projects and case studies will also be assigned. Please allow sufficient time in advance of the deadline to complete the assessments, as you should anticipate periodic network problems with Webcourses, family emergencies, internet interruptions etc. We highly recommend that you avoid waiting until the last minute to complete the assessment, as Webcourses problems/delayed response times are not unusual during peak periods. Mechanical problems with Webcourses (e.g. quiz did not score) must be brought to our attention as soon as possible via Webcourses email.

Home Builder Financial Analysis Project and Presentation
Each team will conduct a financial analysis of two home builders selected from a list provided by the instructor. You will need to use the Bloomberg Terminals to extract all relevant data. I may allow some time in class to work on different phases of the project. The expectation is that all students will work with their teams during this period. Each team will also do a PowerPoint presentation of your findings for about 20-30 minutes on the date indicated in the schedule below. Each team member is expected to present a portion of the analysis and the rest of the class should be prepared to ask questions. The entire class period will be devoted to the presentations. Each team must also submit a separate hard copy WORD document with your full report as well as hard copies of your PowerPoint presentations. Both the WORD document and the PPT slides should be emailed to me as well.

Marriott team project
Each team will complete a capital budgeting analysis to determine the feasibility of Marriott entering the cruise ship business. This will involve extensive research on your part. Details on the project will be provided in class.

Competitor team analysis
Each team will also complete an analysis of two competing firms. This is essentially a “live” case that will be completed under a time limitation. Each team will choose two
firms at the start of the 10th class meeting. You will then use most of the class meeting to complete your analysis. The instructor will provide more details on the project at the start of the class meeting. Each team will complete their analysis within 2.5 hours and then make a 10-minute PowerPoint presentation of their analysis. The deliverable for this project is the PowerPoints you developed during the class meeting which should be emailed to the instructor before the presentation begins.

Addressing the “Free-Rider Problem”
Since team-related assignments represent 30 percent of your overall grade, we will rely on input from each of your team members to evaluate your contribution to each team assignment. As a default position, each team member will receive the same grade for each team assignment. We strongly encourage you to be sure you are making significant contributions to each team assignment so you can receive the same grade as the overall team. However, based on input from your team members regarding your performance on each team assignment, your overall team grade may be adjusted downward if your teammates report a consistent pattern of a lack of contribution on your part. Please understand that this adjustment is inherently subjective.

Important Dates

<table>
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<th>CLASS DATE</th>
<th>CHAPTER</th>
<th>TOPIC</th>
<th>INSTRUCTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class #1</td>
<td>Introduction\nChapters 2 and 3\nFinancial Statements</td>
<td>Syllabus review, Financial Statement Analysis using statements obtained from Bloomberg for a key home builder</td>
<td>Whyte</td>
</tr>
<tr>
<td>Class #2</td>
<td>Chapter 8: Financial Options</td>
<td>Options basics and Black-Scholes using spreadsheets</td>
<td>Whyte</td>
</tr>
<tr>
<td>Class #3</td>
<td>Chapter 17: Multinational Financial Management</td>
<td>Discussion of exchange rates and hedging strategies</td>
<td>Whyte</td>
</tr>
<tr>
<td>Class #4</td>
<td>Chapter 20: Initial Public Offerings</td>
<td>Discussion of the process of going public</td>
<td>Whyte</td>
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<tr>
<td>Class #5</td>
<td>Team Project Presentations: Comprehensive analysis for a home builder</td>
<td></td>
<td>Whyte</td>
</tr>
<tr>
<td>Class # 6</td>
<td>Midterm Exam</td>
<td>Whyte</td>
<td></td>
</tr>
<tr>
<td>----------</td>
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<td>-------</td>
<td></td>
</tr>
<tr>
<td>Class # 7</td>
<td>Read Annual Report &amp; 10-K Chapter 2: Financial Statements</td>
<td>Overview of Annual Reports/10-Ks and financial ratios. Focus on Simon Property Group, REIT debt structures.</td>
<td>Gregg</td>
</tr>
<tr>
<td>Class #8</td>
<td>Chapter 2: Corporate Taxes Chapter 12: Forecasting</td>
<td>Basic corporate taxes. REIT taxes/exemptions, special real estate features of the tax code. Forecasting lecture and case study for real estate forecasts. Corporate valuations Funds from Operations (FFO) and Adjusted FFO used to value REITs</td>
<td>Gregg</td>
</tr>
<tr>
<td>Class #9</td>
<td>Chapter 2 and 9: EVA and WACC Chapter 19: Leases</td>
<td>Leases, WACC, EVA, Small Business Valuations</td>
<td>Gregg</td>
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<tr>
<td>Class #10</td>
<td>Chapter 13: Agency and Governance</td>
<td>Observations from the “C” Suite, activist shareholders, applied TVM. Proxy statements and performance metrics for REITs, career insights</td>
<td>Gregg</td>
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<tr>
<td>Class #11</td>
<td>“Live” Team Project Competitor Analysis Case and 10-minute presentations. Marriott case study report is due before final exam.</td>
<td>Two REITs are assigned at the start of class. PowerPoint Presentations due within 2 hours and 15 minutes followed by in class presentations.</td>
<td>Gregg</td>
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**Assignment Submission**

Separate directions will be provided in class for each assignment.

**Midterm and Final Exam Format**
The exams will be a mixture of problems and concepts. The midterm exam is a combination of short essay questions and more elaborate problems plus some multiple choice questions. The final exam consists of multiple choice questions. A formula sheet will be provided for each exam.

**Assessment and Grading Procedures**

Grades will be based on the following:

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<th>ASSIGNMENT</th>
<th>TOPIC</th>
<th>WEIGHT</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>Various topics (individual)</td>
<td>10%</td>
</tr>
<tr>
<td>Home Builder Financial Analysis</td>
<td>Paper and PowerPoint Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>Materials presented in first half of class</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Materials presented in last half of class</td>
<td>30%</td>
</tr>
<tr>
<td>Marriott case study</td>
<td>Final project plus in-class presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Competitor analysis</td>
<td>Final project plus in-class presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
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**Grading scale**

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<th>PERCENTAGE</th>
<th>LETTER GRADE</th>
<th>PERCENTAGE</th>
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<tr>
<td>A</td>
<td>93-100 %</td>
<td>C</td>
<td>73-76%</td>
</tr>
<tr>
<td>A-</td>
<td>90-92 %</td>
<td>C-</td>
<td>70-72%</td>
</tr>
<tr>
<td>B+</td>
<td>87-89%</td>
<td>D+</td>
<td>67-69%</td>
</tr>
<tr>
<td>B</td>
<td>83-86%</td>
<td>D</td>
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<tr>
<td>B-</td>
<td>80-82%</td>
<td>D-</td>
<td>60-62%</td>
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<tr>
<td>C+</td>
<td>77-79%</td>
<td>F</td>
<td>Less than 60%</td>
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**Grade Dissemination**

To comply with the [Family Educational Rights and Privacy Act (FERPA)](https://www.ed.gov/policy/familyrights/index.html), all grades will be recorded in Webcourses.

**Attendance Policy**

We understand that emergencies arise from time to time that may cause you to miss class. However, please be aware that the EDC strongly discourages more than two absences during the semester. If you miss more than two classes during the semester, your overall grade will be reduced by 5% for each absence in excess of 2. Exceptions will only be made for extenuating circumstances.
Please note that excessive absences will also affect your contributions to in-class team activities. Therefore, we reserve the right to adjust the grade on team assignments to reflect your absence (see policy above regarding the “Free rider problem.”)

**Required Materials**

**Required Text**


**Supplemental Materials**

- We will use various annual reports and SEC filings during the class discussions, most of which will be posted under the Webcourses Modules. You are required to have a financial calculator, preferably the HP 10BII+ model and should be well versed in using the financial calculator prior to taking this course. You are also encouraged to read the Wall Street Journal or other business magazines to the extent possible.

**Policy Statements**

*Plagiarism*

In an instructional setting, plagiarism occurs when a writer deliberately uses someone else’s language, ideas, or other original (not common-knowledge) material without acknowledging its source. This definition applies to texts published in print or on-line, to manuscripts, and to the work of other student writers.

*Responses to Academic Dishonesty, Plagiarism, or Cheating*

UCF faculty members have a responsibility for your education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to infringements of academic integrity. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see http://goldenrule.sdes.ucf.edu/zgrade.

For more information about UCF's Rules of Conduct, see http://www.osc.sdes.ucf.edu/.

*In-Class Recording Policy*

Outside of the notetaking and recording services offered by Student Accessibility Services, the creation of an audio or video recording of all or part of a class for personal use is allowed only with the advance and explicit written consent of the instructor. Such recordings are only acceptable in the context of personal, private studying and notetaking and are not authorized to be shared with anyone without the separate written approval of the instructor.

*Course Accessibility Statement*

The University of Central Florida is committed to providing access and inclusion for all persons...
with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need specific access in this course, such as accommodations, should contact the professor as soon as possible to discuss various access options. Students should also connect with Student Accessibility Services (Ferrell Commons, 7F, Room 185, sas@ucf.edu, phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable.

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