## Graduate Council Curriculum Committee November 6, 2019 2:30 p.m., HPA1 room 304

#### <u>Agenda</u>

- 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

## Graduate Council Curriculum Committee November 6, 2019 2:30 p.m., HPA1 room 304

## 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-regs

## 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

- 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	7
	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.** 

<u>DIFFERENTIATED ADMISSION CYCLE proposals</u> are used for a temporary halt of all new admisison in the relevant degree program or track within a degree program. *This serves as the first* 

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 deafult 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 admiting students.

**Two year hiatus - Take a two year break from admiting students.** 

Three year hiatus - Take a three year break from admiting students.

After the proposed differentiated admisison cycle ends, the program will have to re-apply to continue the differentiated cycle longer otherwise the program will revert back to its original admisison 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 admisison 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 admisison cycle proposal.

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

<u>SUSPENSION proposals</u> 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.

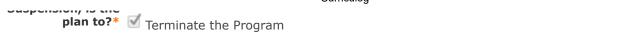
Prior to requesting the termination of a program, all students must have completed the program, separated from the university, or have enrolled in a different UCF program.

Reasons for these three types of curricular proposals may include:

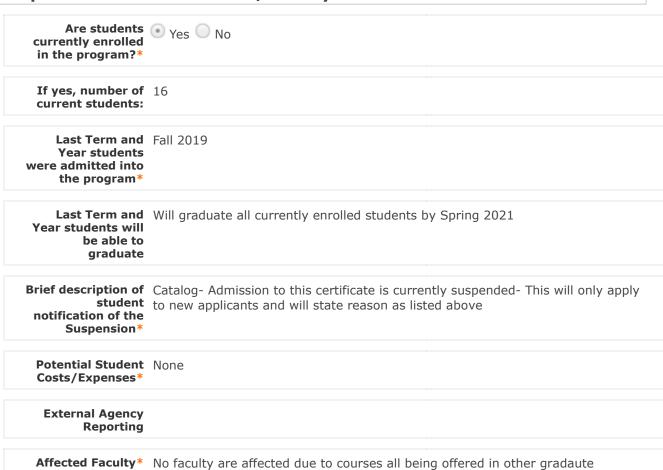
- 1) Curriculum is being revised.
- 2) Key faculty member(s) have left the university and replacements are being recruited for the program.
- 3) Accreditation standards have changed.
- 4) The University or program is re-prioritizing its resources and/or efforts.
- 5) Student demand for the program has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

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

Proposal Type:*	Graduate Program Suspension
Is this a certificate program?*	● Yes ○ No
Name of program, track and / or certificate:*	Marriage, Couples and Family Therapy Certificate
Unit(s) Housing Program:	Department of Counselor Education and School Psychology
Proposed Effective Term and Year:*	Spring 2020
Proposed End Term and Year of the Suspension:*	Spring 2021
If the suspension applies to multiple tracks, please list them here:	
Brief description of the program, track, or certificate:*	Certificate for advacned knowledge in working with couples and family systems.
Brief Rationale for the proposed program, track, or certificate suspension:*	This training is not needed for licensure based on changes in state laws, therefore not neccessary 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.
Type "N/A" in this text box*	
After the	Re-instate enrollments in the Program, track, or certificate



### **Impact on Current Students/Faculty**



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.

programs, no effect to any faculty members.

#### **Attachments**

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

Teach Out Plan\* O 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/.

BOG Suspension Form*	Attached
Dean's Faculty/Staff Impact Statement (see help text)	Attached Not Applicable

Administra	Administration Use Only		
Owi	Catalog Iership:		
Progr	am OID		
Progra	m Type		
	ee Type		
	Status*   Active-Visible   Inactive-Hidden		

Revised: 12/2016

## 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
<b>DEGREE LEVEL(S):</b> (B, M, S, PhD, etc.)M
Does the temporary suspension of new enrollments impact the <u>entire CIP code</u> or just a major? *
If YES, CIP code:
If <u>NO:</u>
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.

Revised: 12/2016

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. <a href="https://floridasmentalhealthprofessions.gov/licensing/dual-licensure-as-a-marriage-and-family-therapist/">https://floridasmentalhealthprofessions.gov/licensing/dual-licensure-as-a-marriage-and-family-therapist/</a>

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

<sup>\*</sup> 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

Revised: 12/2016

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.

	You replied on Tue 6/18/2019 12:30 PM			
	Label: UCF Delete after 10 Years (10 years) Expires: Thu 6/14/2029 3:04 PM			
ВҮ	Bonnie Yegidis Mon 6/17/2019 3:04 PM Sejal Barden; Maxine McGregor; John Super; Andrea Withington; Ana Leon; Catherine Cash			
	Dear Dr. Barden, Thank you for letting us know about this development in the College of Education. Vestudents know about this. Will you be taking the description of the program out of the Best wishes, Bonnie			

From: Sejal Barden <Sejal.Barden@ucf.edu> Sent: Monday, June 17, 2019 2:56 PM

To: Bonnie Yegidis <Bonnie.Yegidis@ucf.edu>; Maxine McGregor <Maxine.McGregor@ucf.edu>; John Super

<jsuper@ucf.edu>; Andrea Withington <Andrea.Withington@ucf.edu>

Subject: Marriage, Couples and Family Therapy Certificate

Hello Drs. Yegidis and McGregor,

I hope this email finds you well. I am writing to you as I am the coordinator for the Marriage, Couples and Family Therapy Certificate which is housed in our program, Counselor Education. We are considering closing down the certificate program as we have had low enrollment over the past several years. Further, although I was not in my role when this certificate was initiated, my guess is that 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. The good news is that, both mental heath and social work students can obtain a dual license after 3 years of having their respective licenses without any additional coursework!

https://floridasmentalhealthprofessions.gov/licensing/dual-licensure-as-a-marriage-and-family-therapist/

Our plan is to honor the certificate for all the students that are currently enrolled and start working on the phasing out process starting this Fall 2019. Please let me know what questions you have regarding this process.

Thank you! - Sejal Barden

Sejal Mehta Barden, PhD

#### 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.

8 students	Graduating Fall 2019		
2 students	Anticipated graduation: August 2020		
6 students	Will have 1 full year to complete the requirements for the certificate after suspension begins, from Spring 2020-Spring 2021	<ul> <li>Upon reviewing each of their plan of study, they all are anticipated to graduate before Spring 2021, which is why we selected this date</li> </ul>	
1 student	Enrolled, but not active and has chosen a different career route		
17 students	TOTAL students		

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 1 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.



**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 <u>not</u> type the course prefix and code.

Prefix:*	BSC	<b>Code:*</b> 5332		
Course Title:*	Invasion Biology			
Full Title:*	BSC 5332 Invasion Biology	3SC 5332 Invasion Biology		
Course Description:*	Courese exmaines the causes a	nd consequences of biological invasion.		
Credit Hours:				
Class Hours:				
Lab and Field Work				
Hours:				
Contact Hours:				
Prerequisite(s):				
Corequisite(s):				
Graded S/U?	Ves 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
<b>Utilization of Course</b>	
The course was a:	Required Course   Elective Course
Justification for Cour	se Deletion
discussions you have h	d in any UCF program or is a prerequisite for any UCF course, attach evidence of nad with impacted programs/departments/schools.
Run an Impact Report bresults.	by clicking 📒 in the top left corner of the form and answer below according to the
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 Us	e Only
Catalog Ownership:	
Course OID	
Course Type	
Status	Active-Visible Inactive-Hidden

## PeopleSoft

<b>Academic Group</b>	
Career	
Print in Catalog	
Effective Date	
Lab Fee	
CRSE_ID	

**Close Window** 

## **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

# College of Sciences - Grad Course Deletion - BSC 5949 Cooperative Education

2020-2021 Graduate Course Deletion

### **General Catalog Information**

## \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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.



**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	<b>Code:*</b> 5949
Course Title:*	Cooperative Education	
Full Title:*	BSC 5949 Cooperative Education	n
Course Description:*	No current syllabus exists.	
Credit Hours:		
Class Hours:		
Lab and Field Work Hours:		
Contact Hours:		
Prerequisite(s):		
Corequisite(s):		
<del></del>		

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
<b>Utilization of Course</b>	1
The course was a:	Required Course Elective Course
Justification for Cou	rse Deletion
discussions you have	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.  by clicking in the top left corner of the form and answer below according to the
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?	165 0 140
If not, explain:	
Notes:	Course has not been offered in 5-years.
<u>Attachment</u>	
Supporting documents from impacted units of the deletion*	□ Yes ☑ No
Administration Us	se 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	

**Close Window** 

## **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 1 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.



**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:*		<b>Code:*</b> 6949
	BSC	
Course Title:*	Cooperative Education in Biology	,
Course Trace	cooperative Education in Biolog	(
Full Title:*	BSC 6949 Cooperative Education	n in Biology
Course Description:*	No current syllabus exists.	
Credit Hours:		
:		
Class Hours:		
T		
Lab and Field Work Hours:		
<u></u>		
Contact Hours:		
<u></u>		
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
<b>Utilization of Course</b>	<u>!</u>
The course was a:	Required Course Elective Course
Justification for Cou	rse Deletion
discussions you have	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.  by clicking in the top left corner of the form and answer below according to the
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?	165 - 140
If not, explain:	
Notes:	course not offered in 5-years.
<u>Attachment</u>	
Supporting documents from impacted units of the deletion*	□ Yes ☑ No
Administration Us	se 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	

**Close Window** 

## **Impact Report for BSC 6949**

There are no results for this report.

### College of Sciences - Grad Course Deletion - PCB 5045 Conservation Biology

2020-2021 Graduate Course Deletion

### **General Catalog Information**

## \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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.



**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:*	РСВ	<b>Code:*</b> 5045	
Course Title:*	Conservation Biology		
Full Title:*	PCB 5045 Conservation Biology	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	<u>!</u>
The course was a:	Required Course Elective Course
Justification for Cou	rse Deletion
discussions you have	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.  by clicking in the top left corner of the form and answer below according to the
Is this course a required course for graduation or prerequisite for another course?	○ Yes <sup>③</sup> No
If yes, have all relevant units been informed of the deletion?	165 - 140
If not, explain:	
Notes:	This course is now taught as PCB6042.
<u>Attachment</u>	
Supporting documents from impacted units of the deletion*	□ Yes ☑ No
Administration Us	se Only
Catalog Ownership:	
Course OID	
Course Type	
Status	Active-Visible Inactive-Hidden

PeopleSoft	
Career	
Print in Catalog	
Effective Date	
Lab Fee	
CRSE_ID	

**Close Window** 

## **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 1 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.



**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 <u>not</u> type the course prefix and code.

Prefix:*	РСВ	<b>Code:*</b> 5485
Course Title:*	Models in Ecology	
Full Title:*	PCB 5485 Models in Ecology	
Course Description:*	This course has no current syllab	us.
Credit Hours:		
F		
Class Hours:		
-		
Lab and Field Work Hours:		
<u></u>		
Contact Hours:		
Prerequisite(s):		
r		
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
<b>Utilization of Course</b>	
The course was a:	Required Course Elective Course
Justification for Cou	rse Deletion
	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.
Run an Impact Report l results.	by clicking 🗧 in the top left corner of the form and answer below according to the
Is this course a required course for graduation or prerequisite for another course?	○ Yes <sup>®</sup> No
If yes, have all relevant units been informed of the deletion?	○ Yes ○ No
If not, explain:	
Notes:	course not offered in 5-years.
<u>Attachment</u>	
Supporting documents from impacted units of the deletion*	☐ Yes ☑ No
Administration Us	se 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	
<u> </u>	

**Close Window** 

## **Impact Report for PCB 5485**

Source: 2020-2021 Graduate Catalog (WORKING COPY)

**Full Course Title** PCB 5485 - Models in Ecology

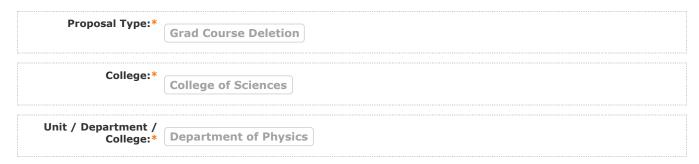
### College of Sciences - Grad Course Deletion - PHZ 5425C Electron Solid Interactions

2020-2021 Graduate Course Deletion

#### **General Catalog Information**

## \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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.



**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	<b>Code:*</b> 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):		e status or C.I. The physics and applications of electron and hands-on laboratory content.

<u> </u>	
Corequisite(s):	
Graded S/U?	○ Yes <sup>®</sup> 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
<b>Utilization of Course</b>	
The course was a:	Required Course   Elective Course
Justification for Cou	rse Deletion
•	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.
Run an Impact Report l	by clicking 🛢 in the top left corner of the form and answer below according to the
Is this course a required course for graduation or prerequisite for another course?	○ Yes <sup>②</sup> 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:	
<u>Attachment</u>	
Supporting documents from impacted units of the deletion*	☑ Yes □ No
Administration Use Only	
Catalog Ownership:	Department of Physics
Course OID	
Course Type	Physics (Continued)

Status	
	Active-Visible  Inactive-Hidden
·····	
PeopleSoft	
Academic Group	
Career	
Print in Catalog	
Effective Date	
Lab Fee	
CRSE_ID	042627

**Close Window** 

# **Impact Report for PHZ 5425C**

Source: 2020-2021 Graduate Catalog (WORKING COPY)

**Full Course Title** PHZ 5425C - lectron Solid Interactions

**Programs** Physics MS

Physics PhD

# College of Sciences - Grad Course Deletion - PHZ 5437 Nanoscale Surface Physics

2020-2021 Graduate Course Deletion

# **General Catalog Information**

# \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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 of Sciences
	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	<b>Code:*</b> 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 <sup>®</sup> 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 Cou	rse Deletion
•	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.
Run an Impact Report results.	by clicking 🗧 in the top left corner of the form and answer below according to the
Is this course a required course for graduation or prerequisite for another course?	○ Yes <sup>③</sup> 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:	
<u> Attachment</u>	
Supporting documents from impacted units of the deletion*	☑ Yes □ No
Administration Us	se Only
Catalog Ownership:	Department of Physics
Course OID	
Course Type	Physics (Continued)
Status	Δ · · · · · · · Δ · · · · · · · · · · ·

Active-Visible Inactive-Hidden

PeopleSoft	
Academi	Group
	Career
Print in	Catalog
Effecti	ve Date
	Lab Fee
	RSE_ID 044026

**Close Window** 

# **Impact Report for PHZ 5437**

Source: 2020-2021 Graduate Catalog (WORKING COPY)

**Full Course Title** PHZ 5437 - Nanoscale Surface Physics

**Programs** Physics MS

Physics PhD

# College of Sciences - Grad Course Revision - CHS 6513 Quality Assurance for Forensic Scientists

2020-2021 Graduate Course Revision

# **General Catalog Information**

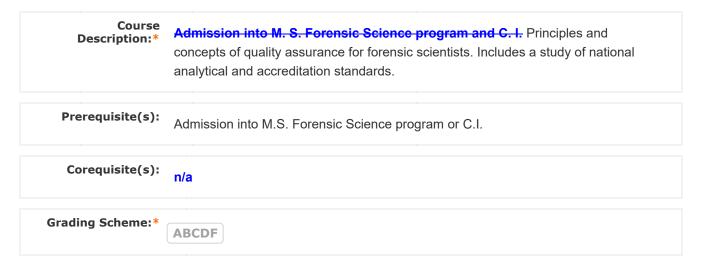
# \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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:*	<b>Department of Chemistry</b>	
Catalog by clicking		ure to import the course information from the m. Do not type the course prefix and code.
Prefix:*	CHS	Code:* 6513
Course Title:*	Quality Assurance for Forensic Scientists	
30 Character Abbreviation:*	QA for FS	
	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 <u>after</u> launch. Course revisions before launch will not be tracked.



#### **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
(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

Credit Hours:*	3
Instruction Time:*	3
Lab/Studio/Field Work Hours:*	0
Out-of-Class Hours:*	6
Total Engagement Hours:*	9
NOTE: For a repeate	able course, indicate in the syllabus what will remain the same and what will
change when the co repeated.	urse is repeated. Also indicate who approves content before a course is
Repeat for credit?*	Yes No
If yes, indicate the degree program name and the total times the course may repeated.	
•	Curriculum Committee. As a reminder, the graduate syllabus should clearly dvanced subject matter, expectations, and rigor.
	Yes No
List undergraduate split-level course:	
erm of Offering	
When will the course be offered?	Activity Log  Candice Bridge  + Even Fall
	✓ Odd Fall ✓ Even Fall — Odd Spring — Even Spring — Odd Summer — Even Summer — Every Semester — Occasional
ntended Utilizatio	on of Course
The course will be used primarily as:*	Required Course  Elective Course
ustification for Co	ourse Revision

revising this

course?\*

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

What grad MSFS, MS Chemistry, Ph.D. Chemistry,

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

What is the 20 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** 

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: <a href="https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf">https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf</a>

Course Syllabus Policy*	<b>Syllabus</b> $  extstyle  iny  extstyle  exts$		
Attachment List			
Please attach any re right corner.	quired files by navigating to the Proposal Toolbox and clicking 🖬 in the top		
Check	${oxedigm}{oxedigm}{}$ I have completed all relevant parts of the form.		
Attached	${oxedistriction{oxetion{oxedistriction{oxetion{oxedistriction{oxetion{oxedistriction{oxedistriction{oxeti$		
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**

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



# **Course Information**

Course Name:	Quality Assurance for Forensic Scientists
<b>Course ID &amp; Section:</b>	CHS 6513, Section 01
Credit Hours:	3 credits
Semester/Year:	Fall 2016
Locatoin:	Online through Webcourses
Class Duration:	August 22 - December 12, 2016

# **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**

<b>Assignment</b>	Percentage of Grade
Quizzes	40%
Final Report	40%

Discussions	20%
Total	100%

Letter Grade	Points
A	90-100
В	80-89
C	70-79
D	60-69
F	59 or below

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 you 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 <a href="Student Disability Services">Students who need accommodations must be registered with Student Disability Services</a>, 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.

# College of Sciences - Grad Course Revision - PHY 5346 Electrodynamics I

2020-2021 Graduate Course Revision

# **General Catalog Information**

# \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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	
		feature to import the course information from the form. Do <b>not</b> type the course prefix and code.
Prefix:*	PHY	<b>Code:*</b> 5346
Course Title:*	Electrodynamics I	
30 Character Abbreviation:*	<b>ED</b> Electrodynamics I	
Full Title:*	PHY 5346 Electrodynamics I	

Course Instructor (Must be Approved

Graduate Faculty/Scholars):

Department Chair 407-823-1882 Phone Number:\*

Department Chair 407-823-1882 Pept 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 <u>after</u> launch. Course revisions before launch will not be tracked.

Course Description:*	Boundary value problems Special Relativity, Relativistic Mechanics, Charges in electrostatics and magnetostatics. Maxwell's equations. EM fields in matter Electromagnetic Fields, wave generation and propagation; wave guides Electromagnetic Field Equations, Constant Electromagnetic Fields, Electromagnetic Waves, Propagation of Light, Fields of Moving Charges, resonant cavities and Radiation of Electromagnetic Waves. Fall. Fall.
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**

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: <a href="http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf">http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf</a>

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

**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?	Activ	rity Log
	Tonya Walker	
	+ No	
	Yes No	
If yes, indicate the degree program name and the total times the course		

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?	Activity Log
	Tonya Walker  + Odd Fall + 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	Required Course	Elective Course
used primarily as:	Required Course	Clective Course

#### <u>Justification for Course Revision</u>

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.

<b>Detail Discussion</b>	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
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: <a href="https://policies.ucf.edu/documents/4-403.pdf">https://policies.ucf.edu/documents/4-403.pdf</a>



#### **Attachment List**

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

	$ec{\mathscr{A}}$ I have completed all relevant parts of the form.
Attached	Activity Log
	Esperanza Soto Arcino  + I have attached a course syllabus and rationale.
	$\overline{\mathscr{A}}$ I have attached a course syllabus and rationale.

Administration (	Jse Only	
Catalog Ownership:	Department of Physics	
Course OID		
Course Type	Physics	
	Active-Visible  Inactive-Hidden	

PeopleSoft	
Academic Group	)
Career	T
Print in Catalog	
Effective Date	3
Lab Fee	
CRSE_ID	008440

## Syllabus for Electrodynamics I PHY5346 Fall 2019 University of Central Florida, Department of Physics

#### **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 4<sup>th</sup> 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).

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

<u>Course Description:</u> 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.

<u>Goals and objectives:</u> 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.

<u>Required text:</u> L.D. Landau and E.M. Lifshitz, <u>Classical Theory of Fields</u>, 4<sup>th</sup> revised edition (Elsevier Butterworth Heinemann, 1975).

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**

Course calend	uai
Date	Section/Event
Aug 27	Section 1 Velocity of propagation of interaction
	Section 2 Intervals
Aug 29	Football game
Sep 3	Section 3 Proper time
	Section 4 The Lorentz transformation
Sep 5	Section 5 Transformation of velocities
	Section 6 Four-vectors
Sep 10	Section 6 Four-vectors
Sep 12	Section 7 Four-dimensional velocity
	Section 8 The principle of least action
	Section 9 Energy and momentum
Sep 17	Section 15 Elementary particles in the theory of relativity
	Section 16 Four potential of a field
Sep 19	Section 17 Equations of motion of a charge in a field
	Section 18 Gauge invariance
<b>Sep 24</b>	Exam 1
Sep 26	Section 19 Constant electromagnetic field
	Section 20 Motion in a constant uniform electric field
Oct 1	Section 21 Motion in a constant uniform magnetic field
	Section 22 Motion in constant uniform electric and magnetic fields
Oct 3	Section 23 The electromagnetic field tensor
	Section 24 Lorentz transformation of the field
Oct 8	Section 25 Invariants of the field
	Section 26 The first pair of Maxwell's equations
Oct 10	Section 27 The action function of the electromagnetic field
	Section 28 The four-dimensional current vector
Oct 15	Section 29 The equation of continuity
	Section 30 The second pair of Maxwell equations
Oct 17	Section 31 Energy density and energy flux
	Section 32 The energy-momentum tensor
Oct 22	Section 33 Energy momentum tensor of the electromagnetic field
	Section 34 The virial theorem
Oct 24	Exam 2
	Section 35 The energy momentum tensor for macroscopic bodies
	Section 36 Coulomb's law
Oct 29	Section 37 Electrostatic energy of charges
	Section 38 The field of a uniformly moving charge
Oct 31	Section 39 Motion in the Coulomb field
	Section 40 The dipole moment
Nov 5	Section 41 Multipole moments
	Section 42 System of charges in an external field
	•

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
<b>Nov 21</b>	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

<u>Course assignments (assignments and exams):</u> 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**

<u>Missed work policy</u>: 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 <a href="http://policies.ucf.edu/documents/4-">http://policies.ucf.edu/documents/4-</a>

401.2MakeUpAssignmentsorAuthUnivEventsorCocurricularActivities.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

# https://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALJan19.pdf

<u>Late homework:</u> 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: <a href="http://osc.sdes.ucf.edu/process/roc">http://osc.sdes.ucf.edu/process/roc</a>>. 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 <a href="http://goldenrule.sdes.ucf.edu/lcFedu/">http://goldenrule.sdes.ucf.edu/lcFedu/</a> Creed: Please read this information at the website <a href="http://creed.sdes.ucf.edu/">http://creed.sdes.ucf.edu/</a>

<u>Disabilities and access statement:</u> 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)** <a href="http://sas.sdes.ucf.edu/">http://sas.sdes.ucf.edu/</a> (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 <a href="https://fctl.ucf.edu/teaching-resources/course-design/syllabus-statements/">https://fctl.ucf.edu/teaching-resources/course-design/syllabus-statements/</a>

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

# **General Catalog Information**

# \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking <sup>1</sup> 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	
		eature to import the course information from the form. Do not type the course prefix and code.
Prefix:*	PHY	<b>Code:*</b> 6347
Course Title:*	Electrodynamics II	
30 Character Abbreviation:*	ED Electrodynamics II	
Full Title:*	PHY 6347 Electrodynamics II	

Course Instructor (Must be Approved

Graduate Faculty/Scholars):

Department Chair 407-823-1882 Phone Number:\*

Department Chair 407-823-1882 Pept 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 <u>after</u> launch. Course revisions before launch will not be tracked.

Course Description:*	Dynamics Electrostatics of Conductors, Electrostatics of charged particles in electromagnetic fields. Antennas; radiation by moving charges; magnetohydrodynamics; multipole radiation Dielectrics, Steady Current, Static Magnetic Field, Superconductivity, Quasi-static Electromagnetic Field, Electromagnetic Wave Equations, and electrodynamics Propagation of materials Electromagnetic Waves. Spring.
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.

#### **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

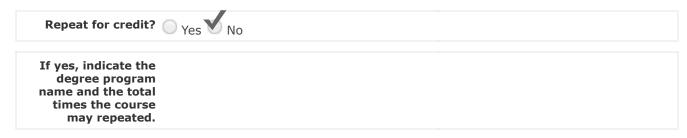
Please note the Out-of-Class hours will not appear in the graduate catalog. This field is for information only.

For further review, please see the SACSCOC

definition: <a href="http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf">http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf</a>

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

**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.



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**



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

### **Intended Utilization of Course**

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

#### <u>Justification for Course Revision</u>

What is the rationale for revising this	Correction to The course description and term taught are currently not correct in the graduate catalog and require a revision.
course?*	
Whaterad	
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 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: <a href="https://policies.ucf.edu/documents/4-403.pdf">https://policies.ucf.edu/documents/4-403.pdf</a>

Course Syllabus	${rac{ullet}{ ext{$ee l$}}}$ I have aligned this syllabus per the UCF syllabus policy.
Policy*	, , , ,

## **Attachment List**

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

Check $\ensuremath{ \   oldsymbol{                  }}$ 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 (	Jse Only	
Catalog Ownership:	Department of Physics	
Course OID		
Course Type	Physics	
	Active-Visible    Inactive-Hidden	

PeopleSoft	
Academic Group	

1	
Print in Catalog	
Effective Date	
Lab Fee	
CRSE_ID	

## Syllabus for Electrodynamics II PHY6347 Spring 2018 University of Central Florida Department of Physics

#### 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.

<u>Class location</u>: BA1 O218 <u>Discussion session</u>: TBD

#### **Course information**

Credits: 3(3,0).

Prerequisites: PHY5346 Electrodynamics I

<u>Course Description:</u> 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.

<u>Required text:</u> Text: L.D. Landau, E.M. Lifshitz, and L. P. Pitaevskii, <u>Electrodynamics of Continuous Media</u>, 2<sup>nd</sup> <u>Ed.</u>, (Elsevier Butterworth Heinemann, 1984).

#### 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

Section 30 The magnetic field of a steady current

Feb 8 Section 31 Thermodynamic relations in a magnetic field

Feb 12 Section 32 The total free energy of a magnetic substance

Feb 14 Section 33 The energy of a system of currents

Feb 20 Section 34 The self-inductance of linear conductors

#### Feb 22 Exam 2.

Feb 27 Section 53 The magnetic properties of superconductors Section 54 The superconductivity current

Mar 1 Section 58 Equations of the quasi-static field

Mar 6 Section 59 Depth of penetration of a magnetic field into a conductor

Mar 8 Section 60 The skin effect

Mar 13 Spring Break

Mar 15 Spring Break

Mar 20 Section 61 The complex resistance

Mar 22 Section 62 Capacitance in a quasi-steady current circuit

Mar 27 Section 63 Motion of a conductor in a magnetic field

#### Mar 29 Exam 3

Apr 3 Section 75 The field equatinos in a dielectric in the absence of dispersion

Apr 5 Section 77 The dispersion of the permittivity

Section 78 The permittivity at very high frequencies

Apr 10 Section 80 The field energy in dispersive media

Apr 12 Section 82 The analytical properties of the frequency-dependent permittivity

Apr 17 Section 83 A plane monochromatic wave

Section 84 Transparent media

Apr 19 Section 86 Reflection and refraction of electromagnetic waves

#### May 1 Exam 4 FINAL 10-12:50 p.m.

<u>Course assignments (assignments and exams):</u> 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.

<u>Methods of evaluation:</u> 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.

<u>Late homework:</u> 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

<u>Disabilities and access statement:</u> 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.

<u>Collaboration policy:</u> 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.

# Nicholson School of Communication and Media - Grad Course Continuation - COM 6463 Studies in Intercultural Communication

2020-2021 Graduate Course Continuation

#### **General Catalog Information**

# \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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.

Proposal Type*	Grad Course Continuation		
College:*	Nicholson School of Communica	tion and Media	
Unit / Department / College:*	Department of Communication (NSCM)		
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 <u>not</u> type the course prefix and code.			
Prefix:*	COM	Code:* 6463	
Name:*	Studies in Intercultural Communicat	ion	
Full Title:*	COM 6463 Studies in Intercultural Communication		
Course Description:*	Comprehensive survey of methodological and theoretical issues and concepts in intercultural and cross-cultural research.		
Prerequisite(s):	Graduate standing or C.I.		
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

tne 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	О	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:*	3
Lab/Studio/Field Work Hours:*	0
Out-of-Class Hours:*	6
Total Engagement Hours:*	9

#### <u>Justification for Course Continuation</u>

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 priorties. Intercultural Communication represents critical competencies in our discpline. 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

:		
	Course Syllabus	✓ I have aligned this syllabus per the UCF syllabus policy.
	Policy*	3

#### **Attachment List**

Please attach the **required updated syllabus** 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 an updated course syllabus.

Administration Us	se Only	
Catalog Ownership:		
Course OID		
Course Type	Communication	
	Active-Visible  Inactive-Hidden	

# COM 6463 Intercultural Communication Fall 2020

Section 1: Wednesday, 6:00 – 8:50 p.m., 3 credit hours, Location TBD (Downtown Campus)

Section: 001; Prerequisite: Graduate Standing and C.I.

**Instructor:** Dr. Jennifer A. Sandoval

Jennifer.Sandoval@ucf.edu

407-823-4500

I will respond to email in less than 48 hours. If you do not hear back from me please check the e-mail address or

re-send

**Office Hours: CMB 169** 

**Tues:** 11 a.m. -1 p.m. **Wed:** 10 a.m. - noon **Thurs:** 3-5 p.m. Or by appointment



#### **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:

Martin, J. N. & Nakayama, T. K. (2010). *Intercultural communication in contexts*. (5<sup>th</sup> ed.). New York: McGraw-Hill.

Sorrells, K. (2013). *Intercultural communication: Globalization and social justice*. Thousand Oaks, CA: Sage.

Many of your readings will be taken from <u>The Handbook of Critical Intercultural</u> 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 <a href="http://osc.sdes.ucf.edu/process/roc">http://osc.sdes.ucf.edu/process/roc</a>. 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 <a href="http://academicintegrity.org">http://academicintegrity.org</a>.

For more information about plagiarism and misuse of sources, see "Defining and Avoiding Plagiarism: The WPA Statement on Best Practices" < <a href="http://wpacouncil.org/node/9">http://wpacouncil.org/node/9</a>>.

### 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* <a href="http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf">http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf</a>. 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 <a href="http://goldenrule.sdes.ucf.edu/zgrade">http://goldenrule.sdes.ucf.edu/zgrade</a>.

#### **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) < <a href="http://sas.sdes.ucf.edu/">http://sas.sdes.ucf.edu/</a> (Ferrell Commons 185, <a href="mailto:sas@ucf.edu">sas@ucf.edu</a>, 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 <a href="http://emergency.ucf.edu/emergency\_guide.html">http://emergency.ucf.edu/emergency\_guide.html</a>.
- 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 <a href="http://www.ehs.ucf.edu/AEDlocations-UCF">http://www.ehs.ucf.edu/AEDlocations-UCF</a>> (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 <a href="https://my.ucf.edu">https://my.ucf.edu</a> 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 (<a href="https://youtu.be/NIKYajEx4pk">https://youtu.be/NIKYajEx4pk</a>).

#### **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 <a href="https://policies.ucf.edu/documents/4-401.pdf">https://policies.ucf.edu/documents/4-401.pdf</a>> **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/, 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

Website: http://www.uwc.ucf.edu/, Phone: 407-823-2197

**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: <a href="http://communication.cos.ucf.edu/">http://communication.cos.ucf.edu/</a> Email: <a href="mailto:nassc@ail.ucf.edu">nassc@ail.ucf.edu</a>, 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 form the resources available right here on campus.

University Police: 407-823-5555, Counseling Services: 407-823-2811, Crisis Line: 407-823-2811, Campus

**Health Center:** 407-823-2701

Websites: http://hs.sdes.ucf.edu/home.html, http://counseling.sdes.ucf.edu/

#### **Grading Procedures**

Assignment	Points Possible	Your Score	Notes
Midterm	75		
Final	75		
Discussion Facilitation	25		
Assumption Paper	25		
Concept Papers	50		
Research Proposal/Presentation	125		
Participation/Attendance	25		
TOTAL	400		

# **Assignments**

# 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.
Ш	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!
Ш	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.
Ц	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.
Ц	Bibliography
_	You should have approximately 20-25 scholarly sources in APA style
Ц	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.

#### **Tentative Course Schedule**

#### Week 1: Introduction to the Course

- Collier, Mary Jane. "Culture and Communication." *Encyclopedia of Communication Theory*. Ed. . Thousand Oaks, CA: SAGE, 2009. 280-86. *SAGE Reference Online*.
- Giri, V. N. (2009) "Intercultural Communication Theories." *Encyclopedia of Communication Theory*. Eds. Littlejohn, S. & Foss, K. Thousand Oaks, CA: Sage. 533-38. *SAGE Reference Online*.

# **Week 2:** Historical Foundations and Key Concepts

#### **Due: Sign up for Discussion Facilitation**

- Leeds-Hurwitz, W. (1990). Notes on the history of intercultural communication: The Foreign Service Institute and the mandate for intercultural training. *Quarterly Journal of Speech*, 76, 262-281.
- Moon, D. G. (1996). Concepts of culture: Implications for intercultural communication research. *Communication Quarterly*, 44, 70-84.
- Williams, R. (1985). Culture. *Keywords: A vocabulary of culture and society* (Revised ed., pp. 87-93). New York: Oxford University.

#### **Week 3:** Paradigmatic Approaches

#### **Due: Assumption Paper**

- Martin, J.N., & Nakayama, T.K. (1999). Thinking dialectically about culture and communication. *Communication theory*, 9 (1), 1-25
- Mendoza, S. L. (2005). Bridging paradigms: How not to throw out the baby of collective representation with the functionalist bathwather in critical intercultural communication. In W. J. Starosta & G.-M. Chen (Eds.), *Taking stock in intercultural communication:* Where to now? (International and Intercultural Communication Annual) (Vol. 28, pp. 237-256). Washington, D.C.: National Communication Association.
- Williams, R. (1985). Ideology. *Keywords: A vocabulary of culture and society* (Revised ed., pp. 153-157). New York: Oxford University.

Discussion	Facilitation	1:

# Week 4: Identity as Politics, Identity as Performance

- Chavez, K. (2012). Doing intersectionality: Power, privilege, and identities in political activist communities. In N. Bardhan & M. P. Orbe (Eds.), *Identity research and communication:*Intercultural reflections and future directions (pp. 21-32). Lanham, MD: Lexington Books.
- Langellier, K. M. (2010). Performing Somali identity in the diaspora. *Cultural Studies*, 24(1), 66-94. doi: 10.1080/09502380903200723
- Identity. (1966). In C. T. Onions (Ed.), *The Oxford dictionary of English etymology* (pp. 459-460). Oxford: Oxford University.

Discussion Facilitation 3:		

#### Week 5:

#### Race, Gender, & Sexuality

#### **Due: Concept Paper 1**

- Jackson II, R.L. & Moshin, J. (2010). Identity and difference: Race and the necessity of the discriminating subject. In T.K. Nakayama & R.T. Halualani (Eds). *The handbook of critical intercultural communication*. (pp. 348-363). Malden, MA: Blackwell Publishing.
- Lengel, L. & Martin S.C. (2010). Situating gender in critical intercultural communication studies. In T.K. Nakayama & R.T. Halualani (Eds). *The handbook of critical intercultural communication*. (pp. 335-347). Malden, MA: Blackwell Publishing.
- Shugart, H. (2008). Managing masculinities: The metrosexual moment. *Communication and Critical/Cultural Studies* 5(3), p. 280-300.

Discussion Facili	tation 4:		

#### Week 6:

# **Unpacking Whiteness**

- Alley-Young, G. (2008). Articulating Identity: Refining Postcolonial and Whiteness Perspectives on Race within Communication Studies. *Review of Communication*, 8(3), 307-321. doi: 10.1080/15358590701845311
- Carrillo Rowe, A. & Malhotra, S. (2006). (Un) hinging whiteness. In M. P. Orbe, B. J. Allen & L.A. Flores (Eds.) *The same and different* (pp. 166-192). Washington, D.C.: NCA.
- hooks, b. (1992). Representations of whiteness. In *Black looks: Race and representation*. (pp. 165-178). Brooklyn, NY: South End Press.

	& R.T. Halualani (Eds). <i>The handbook of critical intercultural communication</i> . (pp. 446-en, MA: Blackwell Publishing.				
<b>Discussion Facilita</b>	Discussion Facilitation 5:				
Week 7:	Beyond Representation: Body and Embodiment				
*	6). The phenomenology of racial embodiment. <i>Visible identities: Race, gender, and the self.</i> Oxford University: 179-194.				
	)). Critical reflections on a pedagogy of ability. In T. K. Nakayama & R. T. Halualani (Eds.), ok of critical intercultural communication (pp. 461-471). Malden, MA: Blackwell.				
and tempora	). A multimodal approach to identity: Theorizing the self through embodiment, spatiality, ality. <i>Journal of International and Intercultural Communication</i> , <i>5</i> (3), 226-243. /17513057.2012.689314				
Discussion Facilita	tion 6:				
Week 8:	The Politics of Institutional Diversity				
Ahmed, S. (2012).	On being included: Racism and diversity in institutional life. Durham: Duke University.				
organizational com	A proposal for concerted collaboration between critical scholars of intercultural and munication. I In T.K. Nakayama & R.T. Halualani (Eds.) <i>The handbook of critical l communication</i> . Malden, MA: Blackwell.				
working on	A critical reflection on an intercultural communication workshop: Mexicans and Taiwanese the US-Mexico border. In T.K. Nakayama & R.T. Halualani (Eds.) <i>The handbook of critical l communication</i> . Malden, MA: Blackwell.				
Discussion Facilita	tion 7:				
Week 9:	The Health Context				

Warren, J.T. (2010). It really isn't about you: Whiteness and the dangers of thinking you got it. In T.K.

### **Due: Concept Paper 2**

- Basu, A. & Dutta, M.J. (2009). Sex workers and HIV/AIDS: Analyzing participatory culture-centered health communication strategies. Human Communication Research, 35, 86-114.
- Dutta, M. J. (2007). Communicating about culture and health: Theorizing culture-centered and cultural sensitivity approaches. Communication Theory, 17(3), 304-328. doi: 10.1111/j.1468-2885.2007.00297.x
- Ramadurai, V., Sharf, B.F., & Sharkey, J.R. (2012). Rural food insecurity in the United States as an overlooked site of struggle in health communication. Health Communication, 27 (8), 794 -.

Discussion Facilitation	n 8:
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#### **Week 10:**

### **Challenging Eurocentrism and Ethnocentrism**

#### **Due: Concept Paper 2**

- Covarrubias, P. (2007). (Un)Biased in Western theory: Generative silence in American Indian communication. Communication Monographs, 74(2), 265-271.
- Dutta, M. J. (2007). Communicating about culture and health: Theorizing culture-centered and cultural sensitivity approaches. Communication Theory, 17(3), 304-328. doi: 10.1111/j.1468-2885.2007.00297.
- Miike, Y. (2010). Culture as text and culture as theory: Asiacentricity and its raison d'être in intercultural communication research In T. K. Nakayama & R. T. Halualani (Eds.), The handbook of critical intercultural communication (pp. 190-211). Malden, MA: Blackwell.

D	iscussion	Facilitati	on 9:

### **Week 11:** November 6

#### **Popular Culture and Media Representation**

Film: Race-o-rama **Due: Literature Review** 

- Shugart, H. (2003). Reinventing privilege: The new (gay) man in contemporary popular media. Critical Studies in Media Communication, 20(1), 67-91.
- Kawai, Y. (2005). Stereotyping Asian Americans: The dialectic of the model minority and the yellow peril. Howard Journal of Communications, 16(2), 109-130. doi: 10.1080/10646170590948974

litation 9:
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Week 12:	Historical Trauma and Community			
TBD				
Week 13:	Globalization, Immigration & Transnationalism			
Due:				
	g home in migration: Montagnard refugees and post-migration international & Intercultural Communication, 3(3), 228-513057.2010.487220			
. ,	Asante, M. K. (2006). The Rhetoric of Globalisation: The Europeanisation of Human Ideas. <i>Journal of Multicultural Discourses</i> , 1(2), 152-158. doi: 10.2167/md054.0			
Sorrells, K. (2010). Re-imagining intercultural communication in the context of globalization. In T. K. Nakayama & R. T. Halualani (Eds.), <i>The handbook of critical intercultural communication</i> (pp. 171-189). Oxford: Wiley-Blackwell.				
Discussion Facilitation 10:				
Week 14:	Presentations			
<b>Due: Final Paper</b>				
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

# A Brief Introduction to my Teaching Philosophy

"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.

# **Student Questionnaire**

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 ©)

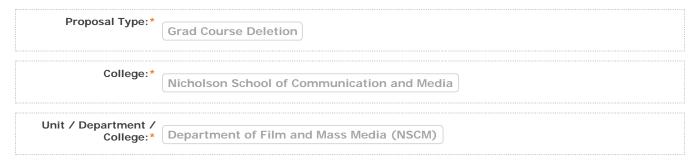
# Nicholson School of Communication and Media - Grad Course Deletion - FIL 5853 Independent Cinematic Forms

2020-2021 Graduate Course Deletion

#### **General Catalog Information**

# \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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.



**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:* 5853			
Course Title:*	Independent Cinematic Forms				
Full Title:*	FIL 5853 Independent Cinematic Forms				
Course Description:*	Evolution of low budget independent cinematic films through the works of modern and classical filmmakers within and beyond the studio system.				
Credit Hours:	3				
Class Hours:	3				
Lab and Field Work Hours:	0				
Contact Hours:	3				
Prerequisite(s):	Admission to MFA Film and Digita	al Media/Entre Dig Cin track, or C.I.			

Corequisite(s):
Graded S/U? O Yes O No
Split-Level Class: O 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 Even Summer Even Semester Occasional
<u>Utilization of Course</u>
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 Yes No required course for graduation or prerequisite for another course?
If yes, have all Yes No relevant units been informed of the deletion?
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
Supporting Yes No documents from impacted units of the deletion*
Administration Use Only
Catalog Ownership:

**CRSE\_ID** 043512

Course OID	·
Course Type	Film
Status	Active-Visible  Inactive-Hidden
PeopleSoft	
Academic Group	Nicholson School of Communication and Media
Career	
Print in Catalog	
Effective Date	
Lab Fee	

**Close Window** 

# **Impact Report for FIL 5853**

Source: 2020-2021 Graduate Catalog (WORKING COPY)

**Full Course Title** FIL 5853 - Independent Cinematic Forms

**Programs** Emerging Media MFA, Feature Film Production Track ◆◆

# 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)
Unit(s) Housing Program:	

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 <sup>®</sup> 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 <u>after</u> 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: <a href="https://communication.ucf.edu/degree/film-produ">https://communication.ucf.edu/degree/film-produ</a> 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

pui poses.

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 Tview 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

Prospective Curriculum\*

# **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 590/ 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

**ART 5280 Serial Content** 

**ART 5910 Studio Concentration I** 

**ART 6683 Time Arts** 

**History** 

**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 <u>Admissions</u> section of the Graduate Catalog. Applicants must <u>apply online</u>. All requested materials must be submitted by the established deadline.

In addition to the <u>Admissions</u>, 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

oournansm

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 partian of the

Curriculog rins portion or 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 <a href="World Education Services">World Education Services</a> (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**

Feature Film Production	*Fall Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 1		
International Applicants	Jan 15	Jan 15		

<sup>\*</sup>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.

#### reliowsnips

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 <a href="UCF Graduate Fellowships">UCF Graduate Fellowships</a>, 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**

moved from an existing program, track, or certificate into this revised program, track, or certificate?\*



If yes, state the name of the program or track where students

Number of assistantship students:		
		Source of funds:
<u>'ear 1</u>		
	_	os, fellowships, and tuition remission.)
Please complete the	following section on fin	nancial support:
Indicate likely career or student outcomes upon completion:		
Headcount:		SCHs:
<u>'ear 3</u>		
Headcount:		SCHs:
<u>'ear 2</u>		
Headcount:		SCHs:
ear 1		
depends upon this education, etc.		
state if there is licensure or certification that		
statement of who is likely to enroll and why. Please		
Provide a		
uture Students		
this change?		
current students be impacted by	One less internal electiv	ve in list of courses to choose from.
certificate?*		
Will students have the option to stay in their existing program, track, or	Yes No	
possible:		
students if		
enrolled and attach a list of students if		

fellowship):		
Number of tuition remissions:		Source of funds:
ear 2		
Number of		Source of funds:
assistantship students		Source of funds.
Number of fellowship students (specify fellowship):		
Number of tuition remissions:		Source of funds:
<u>ear 3</u>		
Number of assistantship students:		Source of funds:
Number of fellowship students (specify fellowship):		
Number of tuition remissions:		Source of funds:
attachments  Please attach the rec	quired files by navigating to	the Proposal Toolbox and clicking 🗗 in the top
right corner of the fo	orm.	
Faculty List*	Attached Not Applicable	
Support from involved units that no duplication exists*	Attached Not Applicab	ole
dministration (	Use Only	
Catalog Ownership:	_	
Program OID	7626	
Program Type		

Degree Type	
	Master of Fine Arts
	Active-Visible    Inactive-Hidden

# 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 <sup>1</sup> 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:*	
conege.	Nicholson School of Communication and Media
Unit / Department	
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 <u>not</u> type the course prefix and code.

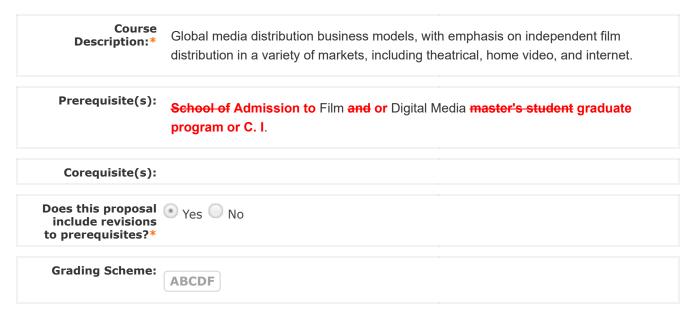
Prefix:*	FIL	Code:* 6614	
Course Title:*	Domestic and International Mc	dels of Distribution	
30 Character Abbreviation:*	Models of Distribution		
	Grad Course Revision- FIL 6614 Domestic and International Models of Distribution		
Course Instructor			

(Must be Approved
Graduate
Faculty/Scholars):

Department Chair X 32839
Phone Number:\*

Dept Chair Email\* William.Kinnally@ucf.edu

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



# **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
(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

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

Repeat for credit?	Activity Log	
	Kim Tuorto + No	
	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
course be offered:	Even Summer Devery Semester Occasional

# **Intended Utilization of 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?

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

If not a major Emerging Media MFA, Feature Film Production Track or Digital Media M. irement, what A.

What is the 20 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 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

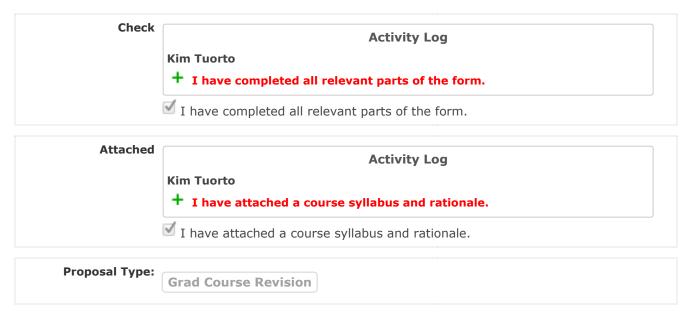
Statement regarding accommodations for active duty military students

Full details of the syllabus policy can be found at: <a href="https://policies.ucf.edu/documents/4-403.pdf">https://policies.ucf.edu/documents/4-403.pdf</a>

Course Syllabus	
Policv*	${rac{1}{2}}$ I have aligned this syllabus per the UCF syllabus policy.
1 Oney	

# **Attachment List**

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



# Administration Use Only Catalog Ownership: Course OID Course Type Film Status Active-Visible Inactive-Hidden

opleSoft	
Academic Organization	
	Nicholson School of Communication and Media
Career	
Print in Catalog	
Effective Date	
Lab Fee	
CRSE_ID	043834

# 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 Term:

Office: NSC 221 Class Meeting Days:

E-Mail: Katherine.Shults@ucf.edu Class Meeting Hours:

Office Hours: Class Location: TBD

#### 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 <a href="http://www.thinkoutsidetheboxoffice.com/store.html">http://www.thinkoutsidetheboxoffice.com/store.html</a>

<u>How to Sell Your Film Without Selling Your Soul</u> by Sheri Candler, Jon Reiss, and the Film Collaborative <a href="http://www.sellingyourfilm.com/store/">http://www.sellingyourfilm.com/store/</a>

# 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 <a href="http://www.artofimmersion.com/">http://www.artofimmersion.com/</a>

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

<u>Hamlet on the Holodeck: The Future of Narrative in Cyberspace</u> by Janet H. Murray <a href="http://www.amazon.com/dp/0262631873">http://www.amazon.com/dp/0262631873</a>

"Confronting the Challenges of Participatory Culture: Media Education for the 21st Century" aka "The White Paper" by Henry Jenkins

http://mitpress.mit.edu/sites/default/files/titles/free download/9780262513623 Confronting the Challenges. pdf

# VIII. Basis for Final Grade

Assessment	% of Final Grade
Participation/Twitter account	20%
Blog Post Assignments (3-4)	10%
Chandler Checklist	10%
Social Media Survey	10%
Festival Strategy	10%
Distribution Strategy	10%
ETD Marketing Draft	10%
ETD Marketing Final	20%

100%

Grading Scale (%)		
94-100	Α	
90-93	A-	
87-89	B+	
84-86	В	
80-83	B-	

Grading Scal	e (%)
77-79	C+
74-76	С
70-73	C-
67-69	D+
64-66	D
60-63	D-
0 - 59	F

#### 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 <a href="mailto:Katherine.Shults@ucf.edu">Katherine.Shults@ucf.edu</a> 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,

phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

**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 <a href="http://www.ehs.ucf.edu/workplacesafety.html">http://www.ehs.ucf.edu/workplacesafety.html</a> (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.

DATE	TOPIC / CONTENT	READINGS	ASSIGNMENT / [DUE]			
UNIT 1: Audience Engagement / Marketing Review						
8/19	Audience Engagement: Reiss videos	Box Office: p. 7-72, How to Sell: p. 4-26	Reiss video follow up questions			
8/26	Audience Engagement (cont.): Chandler/Wong videos		Chandler checklist [Blog post: Reiss Q's]			
9/2	NO CLASS - LAB	OR DAY	[Chandler checklist]			
9/9	Social Media: videos	Box Office: p.213-249	Social media survey			
9/16	Read/comment on classmates' blog posts		[Social media survey, Twitter account active by now]			
UNIT 2:	: Distribution Platforms					
9/23	Theatrical/Semi theatrical/Live events	Box Office: p.133-211, Burns article				
9/30	Film Festivals: video	Raindance article	Festival strategy			
10/7	Merchandise/Direct DVD: video	Box Office: p.251-281,	[Fest strategy]			
10/14	VOD, Cable, PPV  VOD article, google+ conversation					
10/21	Transmedia: Screen Australia podcast		Blog post: Podcast response			
UNIT 3:	: Rights/Sales/Markets					
10/28	Hybrid/Split Rights	Peter Broderick articles, Box Office: p. 283-341	Distribution strategy			
11/4	Foreign Sales	cont. Box Office reading	[Distro strategy] Work on ETD Marketing chapter			
11/11	NO CLASS - VETER	Work on ETD Marketing chapter				
11/18	Read/comment on classmates' blo	og posts	[Marketing chapdter draft]			
11/25	Marketing Chapter Feedback - Me	eetings	Blog post: Short/long term goals			
12/2	Work on ETD Marketing chapter - Meetings					

DATE	TOPIC / CONTENT	READINGS	ASSIGNMENT / [DUE]
12/9	PDF of Final ETD Marketing Chapter Due @ 7pm		

# 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 1 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 Com	munication and Media
Unit / Department / College:*	Department of Film and	Mass Media (NSCM)
		t feature to import the course information from the eform. Do not type the course prefix and code.
Prefix:*	FIL	<b>Code:*</b> 6640
Course Title:*	Microbudget Production Man	agement
30 Character Abbreviation:*	Microbudget Production Mgn	nt.
Full Title:*	Grad Course Revision- FIL 6	540 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 <u>after</u> 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**

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

For further review, please see the SACSCOC

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

definition: http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf Credit Hours: \* 3 **Instruction Time:\*** 3 Lab/Studio/Field 0 Work Hours:\* Out-of-Class 6 Hours:\* **Total Engagement** 9 Hours:\* 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:*	O Yes   N	0				
List undergraduate split-level course:						

# **Term of Offering**

When will the	Odd Fall Even Fall Odd Spring Even Spring Odd Summer
course be offereu?	Even Summer Devery Semester Occasional

# **Intended Utilization of Course**

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

# **Justification for Course Revision**

What is the rationale for 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?

If not a major Emerging Media - Feature Film Production Track and Digital Media students.

requirement, what will be the source of students?

What is the 20 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-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: <a href="https://policies.ucf.edu/documents/4-403.pdf">https://policies.ucf.edu/documents/4-403.pdf</a>

•	· · · · · · · · · · · · · · · · · · ·
Course Syllabus Policy*	${\color{blue} oxed{ iny I}}$ I have aligned this syllabus per the UCF syllabus policy.
Attachment List	
Please attach any re right corner.	equired files by navigating to the Proposal Toolbox and clicking 🚨 in the top
Check	${\color{blue} oxed{arphi}}$ I have completed all relevant parts of the form.
Attached	${rac{1}{2}}$ I have attached a course syllabus and rationale.
Proposal Type:	Grad Course Revision
Administration (	Jse Only
Catalog Ownership:	
Course OID	
Course Type	Film
Status	Active-Visible    Inactive-Hidden
PeopleSoft	
Academic Organization	
Academic Group	Nicholson School of Communication and Media
Career	
Print in Catalog	
Effective Date	
Lab Fee	

**CRSE\_ID** 043516

MEETING DAY/TIME: Thurs 6p-850p

INSTRUCTOR: LISA COOK

PHONE: 407-823-2758

OFFICE HOURS:

E-MAIL: lcook5@cfl.rr.com

WEBSITE:

http://sulley.dm.ucf.edu/~lcook/

MEETING ROOM: NSC 116

**CREDIT HOURS: 3** 

# **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**

А	100-93
A-	92-90
B+	89-87
В	86-83
В-	82-80
C+	79-77
С	76-73
C-	72-70
D+	67-69
D	66-63
D-	62-60
F	0-59

# 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**

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# **Campus Safety Statement**

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- 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** 

# **College of Engineering and Computer Science - Computer Vision MS**

2020-2021 Graduate Program New

# **General Catalog Information**

# \*\*Read before you begin\*\*

TURN ON help text before starting this proposal by clicking 1 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 O No			
If yes, also complete the	ne 2020-2021 Graduate Equipment	t 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 highdimensional 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 D	Description Chart, please copy an	d paste the examp	ole and format below:	
College: Link to College	ge website	Degree: PHD, MS	S, MA	
Department: Link to d	Department: Link to department website Option: Dissertation, Thesis, Non-Thesis			
Program Websites: Li	nk to program website			
Informational				
Description Chart:*	College: http://www.cecs.ucf.edu/		Degree: MS	

Informational Description Chart:*	College: http://www.cecs.ucf.edu/	Degree: MS	=
	Department: http://cs.ucf.edu/	Option: Thesis, Non-Thesis	
	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 templete 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.

Prospective Curriculum\*

# **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

#### **CAP 5610 Machine Learning**

#### **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 <a href="mailto:apply-online">apply-online</a>. 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 (<a href="www.cecs.ucf.edu/prescreen">www.cecs.ucf.edu/prescreen</a>) 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

attenueu.

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.

	*Fall			
Computer Vision MS	Priority	Fall	Spring	Summer
Domestic Applicants	Jan 15	Jul 1	Dec 1	-
International Applicants	Jan 15	Jan 15	Jul 1	-

<sup>\*</sup>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 b	e
moved from a	n
existing program	ı,
track, or certificate	ė
into this nev	N
program?	*



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 O Yes No the option to stay in their existing program, track, or certificate?\*



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 fastgrowing interests and investments in Artificial Intelligence (AI) have to be powered by a wellprepared 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	<b>SCHs:*</b> 360	
Year 2		
Headcount: 25	<b>SCHs:</b> 450	
Year 3		
Headcount: 30	<b>SCHs:</b> 540	
Please complete the following section on financial		

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 fellowship):	N/A	
Number of tuition remissions:	10	Source of funds: Industry
Year 2		

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

		Odificalog
Number of fellowship students (specify fellowship):	N/A	
Number of tuition remissions:	12	Source of funds: Inudstry
Year 3		
Number of assistantship students:	N/A	Source of funds:
Number of fellowship students (specify fellowship):		
Number of tuition remissions:	15	Source of funds: industry
Faculty List*  Support from involved units that no duplication exists*	✓ Attached  Attached ✓ Not Applicable	roposal Toolbox and clicking 👫 in the top right corner.
Administration Us	-	
Degree Type	Master of Science	
Status*	Active-Visible Inactive-H	idden
Catalog Ownership:		

Mubarak Shah, Ph.D.	Professor	Tenured
Center for Research in Computer Vision		
Abhijit Mahalanobi, Ph.D.	Assistant Professor	Tenured Track
Center for Research in Computer Vision		
Ulas Bagci, Ph.D.	Assistant Professor	Tenured Track
Center for Research in Computer Vision		
Forecasted Hire, Ph.D.	Assistant Professor	Tenured Track
Center for Research in Computer Vision		
Forecasted hire, Ph.D.	Assistant Professor	Tenure Track
Center for Research in Computer Vision		
Niels Lobo, Ph.D.	Associate Professor	Tenured
Computer Science		
Brian Moore, Ph.D.	Assistant Professor	Tenured
Mathmatics		
Nazanine Rhanavard, PhD	Assistant Professor	Tenured
ECE		
Gita Sukathankar PhD	Assistant Professor	Tenured
Computer Science		
Hassan Foroosh	Professor	Tenured

#### 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, <u>Cognitive Computation</u> and <u>International Journal of Neural Systems</u>, 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.

#### **Databases**

Database Name	UCF	UF	U Mass Amherst	Rice University
Association for Computing Machinery (ACM) Digital Library	X	Х	х	х
IEEE Xplore	Х	Х	Х	Х
Compendex (Ei Village)	Х	Х	Х	х
Web of Science	Х	Х	Х	Х
Science Direct	Х	Х	Х	х
Electronics & Communications Abstracts	Х	Х	NO	NO

Database Name	UCF	UF	U Mass	Rice
			Amherst	University
Inspec	X	X	NO	X
Computer and Information Systems Abstracts	X	X	NO	NO
Synthesis Digital Library of Engineering and	Х	Х	Х	NO
Computer Science				
arXiv.org (Open access articles for physics,	Х	Х	х	Х
mathematics, computer science, quantitative				
biology, statistics, and more provided by				
Cornell University)				

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

# **Key Journals**

Top 25 Electronic Journals in Computer Science, Artificial Intelligence - as determined by Thomson Reuters Journal Impact Factor 2017 Rankings	UCF	UF	U Mass Amherst	Rice University
International Journal of Computer Vision	X	Х	Х	Х
IEEE Transactions on Pattern Analysis and Machine Intelligence	Х	Х	Х	Х
IEEE Transactions on Cybernetics	Х	Х	Х	Х
IEEE Transactions on Fuzzy Systems	Х	Х	Х	Х
IEEE Transactions of Evolutionary Computation	Х	Х	Х	Х
IEEE Transactions on Neural Networks and Learning Systems	Х	Х	х	х
Neural Networks	Χ	X	X	Х
Information Fusion	X	Х	Х	Х
IEEE Computational Intelligence Magazine	X	X	X	X
Medical Image Analysis	X	Х	X	X
IEEE Transactions on Image Processing	Х	Х	X	X
IEEE Transactions on Affective Computing	Х	Х	X	X
International Journal of Neural Systems	NO	NO	NO	X
Knowledge-Based Systems	X	X	X	X
Neural Computing & Applications	Х	Х	Х	Х
Pattern Recognition	Х	Х	Х	Х
Applied Soft Computing	X	X	X	X
Swarm and Evolutionary Computation	X	Х	Х	Х
Artificial Intelligence Review	Χ	X	X	Х
Integrated Computer-Aided Engineering	Χ	X	X	Х
Journal of Intelligent Manufacturing	Х	Х	X	X
Decision Support Systems	Х	Х	X	Х
Cognitive Computation	NO	Х	X	NO
International Journal of Intelligent Systems	X	Χ	X	X

**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)

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

**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 of Equal Opportunity Officer

Date

Date

Signature of Library Director

Date

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

#### **General Catalog Information**

## \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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 623 and Structures	1 Continuum Biomechanics - Modeling Biological Tissues
Course Instructor (Must be Approved Graduate Faculty/Scholars):*	Dr. Luigi Perotti	
Department Chair Phone Number:*	Yoav Peles	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 <a href="https://graduatecouncil.ucf.edu/curriculum-committee/">https://graduatecouncil.ucf.edu/curriculum-committee/</a>. 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:* 6231
	DIVIE	

Course Title:*	Continuum Biomechanics
30 Character Abbreviation:*	Continuum Biomechanics
Course Type:*	Graduate Course
Course Description (25 word limit)*	Material laws for biological tissues, with / without microstructure and/or an incompressibility constraint. Models of damage, growth, remodeling, and elctro-mechanical coupling. Introduction to multiscale modeling.
Grading Scheme:*	ABCDF
Prerequisite(s):	EGM 3601.
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**

Credit Hour	1	1	1
(Formal) Instruction Time - Class Hours or Online Module, etc.		1	1
Lab/Studio/Field work	О	1	2
Out-of-Class (homework, course readings, group work, online posts, etc)	2	1	o
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

Credit Hours:* 3	
orealt riours.	
Instruction Time: * 3	
instruction fille. 5	

·	
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

١	When will the course be offered?*	$\square$ Odd Fall $\square$ Even Fall ${\color{orange} oxdot{ }}{}{}{}{}{}{}{}$
	Do onlorda.	Every Semester Occasional

#### **Intended Utilization of Course**

The course will be Requi	ed Course Flective Course
used primarily as:*	a course of Elective Course

#### Materials and Supply Fee

New Materials and Yes No Supply Fees?*	:		
Supply Fees?*			Vas No
		Supply Fees?*	163 110

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 25
estimated annual
enrollment?\*

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 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: <a href="https://policies.ucf.edu/documents/4-403.pdf">https://policies.ucf.edu/documents/4-403.pdf</a>

Course Syllabus 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
Administration Us	se Only
Catalog Ownership:	
Course Type	
Status	☐ Inactive-Hidden ☐ Active-Visable
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).

Accreditation Standards: http://mae.ucf.edu/accreditation/

#### **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.
  - o HW #1 Due

Holzapfel Ch 2.1 to 2.3

- Week 3:
  - Deformation gradient.
  - Strain tensors.
  - Rotation and stretch tensors.
  - o HW #2 Due

Holzapfel Ch 2.4 to 2.8

- Week 4:
  - The concept of stress, traction vectors, and stress tensors.
  - o Several representations of the stress tensor.
  - o HW #3 Due
  - Quiz #1

Holzapfel Ch 3

- Week 5:
  - Conservation of Mass.
  - o Conservation of linear and angular momentum.
  - Energy balance.
  - o HW #4 Due

Holzapfel Ch 4.1 to 4.5

- Week 6:
  - Entropy inequality.
  - Objectivity: rigid body motion and frame indifference.
  - o 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.
  - o HW #6 Due
  - o Quiz #2

Holzapfel Ch 6.1 to 6.7

- Week 8:
  - Biological materials with a microstructure.
  - Growth and remodeling.
  - o HW #7 Due

- Quiz #2 Holzapfel Ch 6.8 to 6.10
- Week 9:
  - Materials with internal damage.
  - Viscoelastic materials in large strains (if time allows.)
  - HW #8 Due Holzapfel Ch 6.10 to 6.11
- Week 10:
  - Electro-Mechanical coupling.
  - Active strain.
  - Active stress.
  - o HW #9 Due
  - Quiz #3
- Week 11:
  - Uniaxial and biaxial tissue stretch experiments.
  - The Newton-Raphson method in 1D.
  - o Application of the Newton-Raphson method to simulate material tests.
  - Term project discussion (during office hours).
  - o HW #10 Due
- Week 12:
  - From a material point to tissue samples and organs.
  - o An overview of the finite element method.
  - Term project discussion (during office hours).
  - o Quiz #4
- Week 13:
  - Application1: understanding cardiac kinematics.
  - Application2: modeling muscle contraction.
  - Term project discussion (during office hours).
- Week 14:
  - Term project presentation.
- Week 15:
  - o Term project presentation.
  - 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:

- 1. Textbook: Nonlinear solid mechanics: a continuum approach for engineering. Holzapfel, Gerhard A., John Wiley and Sons.
- 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)
  - a. Humphrey, J. D., R. K. Strumpf, and F. C. P. Yin. "Determination of a constitutive relation for passive myocardium: I. A new functional form." Journal of biomechanical engineering 112.3 (1990): 333-339.
  - b. Humphrey, J. D., Review Paper: Continuum biomechanics of soft biological tissues, Proc. R. Soc. London. A (2003) Vol. 459, 3-46.
  - c. Holzapfel, Gerhard A., and Ray W. Ogden. "Constitutive modelling of passive myocardium: a structurally based framework for material characterization." Philosophical Transactions of the Royal Society of London A: Mathematical. Physical and Engineering Sciences 367.1902 (2009): 3445-3475.
  - d. Nardinocchi, Paola, and Luciano Teresi. "On the active response of soft living tissues." Journal of Elasticity 88.1 (2007): 27-39.
  - e. Ambrosi, D., and S. Pezzuto. "Active stress vs. active strain in mechanobiology: constitutive issues." Journal of Elasticity107.2 (2012): 199-212.
  - f. Prevost, Thibault P., et al. "Biomechanics of brain tissue." Acta biomaterialia 7.1 (2011): 83-95.
  - g. Holzapfel, Gerhard A., Thomas C. Gasser, and Ray W. Ogden. "A new constitutive framework for arterial wall mechanics and a comparative study of material models." Journal of elasticity and the physical science of solids 61.1-3 (2000): 1-48.
  - h. Jordan, P., et al. "Constitutive modeling of porcine liver in indentation using 3D ultrasound imaging." Journal of the mechanical behavior of biomedical materials 2.2 (2009): 192-201.

#### Optional:

- 1. The Elements of Continuum Biomechanics, M. Epstein, John Wiley and Sons.
- 2. A first course in Continuum Mechanics, Y.C. Fung, Elsevier Press.
- 3. The finite element method: linear static and dynamic finite element analysis. Hughes, J.R. Thomas
- 4. Finite element procedures. Bathe KJ, 2006, Prentice Hall.

#### 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: <a href="http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf">http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf</a>)

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:

<a href="http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf">http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf</a>.

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 the letter Z. For more information about Ζ Designation, by the 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) <a href="http://sas.sdes.ucf.edu/">http://sas.sdes.ucf.edu/</a> (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 <a href="http://emergency.ucf.edu/emergency\_guide.html">http://emergency.ucf.edu/emergency\_guide.html</a>.
- 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 <a href="http://www.ehs.ucf.edu/workplacesafety.html">http://www.ehs.ucf.edu/workplacesafety.html</a> (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 (<a href="https://youtu.be/NIKYajEx4pk">https://youtu.be/NIKYajEx4pk</a>).

#### 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

2020-2021 Graduate Course New

#### **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.

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

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 - EEL 5862 Real-Time Systems	
Course Instructor (Must be Approved Graduate Faculty/Scholars):*	Zhishan Guo	
Department Chair Phone Number:*	(407)823-3327	Dept Chair Email* qu@ucf.edu

Please Note: Originators of New Course Proposals are responsible for designating the new course number. Instructions can be found at <a href="https://graduatecouncil.ucf.edu/curriculum-committee/">https://graduatecouncil.ucf.edu/curriculum-committee/</a>. 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	x:*	Number:*	5862
	le:* Real-Time Systems		

30 Character Abbreviation:*	Real-Time Systems
Course Type:*	Graduate Course Medicine (MD) Course  Graduate 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.
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**

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

Credit Hours:*	3	
Instruction Time:*		

	Curriculog
Work Hours:*	
Out-of-Class Hours:*	6
Total Engagement Hours:*	9
Variable Credit (0- 99):	
_	if a course is repeatable for credit, the concept is that the content is the same, but the h that content will be different each time it is taken.
For a repeatable course course is repeated.	e, indicate in the syllabus what will remain the same and what will change when the
Repeat for credit?*	○ Yes <sup>③</sup> No
If yes, indicate the total times the course may be used toward completion of the degree.	
erm of Offering	
When will the course be offered?*	Odd Fall Even Fall Odd Spring Even Spring Odd Summer Even Summer  Every Semester Occasional
ntended Utilization	of Course
The course will be used primarily as:*	Required Course  Elective Course
aterials and Supply	<u>/ Fee</u>
New Materials and Supply Fees?*	◯ Yes ◉ No
If yes, also complete th	ne 2020-21 Graduate Materials and Supply Fee form.
ustification for Cou	rse 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 Undergraduate and Graduate CpE, CS, and EE students source of students?\*

What is the 40 estimated annual enrollment?\*

Possible duplications and conflicts with other departments or colleges should be discussed with appropriate A PH JAMES E L. L. J. AL. L. J. A. BIL.

parties. Please detail any discussions you have had or attach relevant documents like email threads in the Attachment List Section.

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
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	I have aligned this syllabus per the UCF syllabus policy.
Policy*	. Have aligned this equation per constant period.

#### **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*	$\ ^{oxtimes}$ I have attached a course syllabus and rationale.
	Duplication support materials attached

#### **Administration Use Only**

Course Type	
Status	☐ Inactive-Hidden ☐ Active-Visable
PeopleSoft	
Academic Organization	
Academic Group	
Career	
Print in Catalog	
Effective Date	
Lab Fee	
CRSE_ID	

#### **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.

**Textbook:** Real-Time Systems, 1st Edition, J.W.W. Liu, Pearson, 2000.

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 <u>your responsibility</u> 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 <u>before</u> 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 <u>exams</u> 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.

In-class Quizzes: N/A.

**Grades:** The student should discuss grades with the instructor or TA within <u>three days</u> 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 <a href="http://osrr.sdes.ucf.edu/titleix">http://osrr.sdes.ucf.edu/titleix</a>.

**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.

### College of Engineering and Computer Science - Grad Course Addition Special Topic - BME 6938 ST: Continuum Biomechanics

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 1 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 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:*	le:* BME 6938 ST: Continuum Biomechanics	
Prefix:*	BME	Code:* 6938
Earliest semester	O Fall	<b>Year:*</b> 2020
course may be offered:*	Spring	
	Summer	
Course Title:*	ST: Continuum Biomechanics	
30 Char. Abbreviation - must begin with ST:*	ST: Contiuum Biomechanics	
<u> </u>		
Course Instructor (Must be Approved Graduate	_	

Faculty/Scholars):	Faculty/Scholars):		
Department Chair Phone Number:*	407-823-5448	Dept Chair Email: * Yoav.Peles@ucf.edu	
Course Description (25 word limit)*		with / without microstructure and/or an incompressibility wth, remodeling, and elctro-mechanical coupling.	
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**

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.



> **Total Engagement** 9 Hours:

#### <u>Justification</u>

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 multiscale 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 ab with finite element code and Matlab to carry out the course project.

students to enroll in this course?

What is the source of Mechanical and Aerospace Engineering

What is the 30 estimated annual enrollment?\*

Do you plan to 

Yes 

No request that this course become permanent?\*



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:

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: <a href="https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf">https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf</a>

Course Syllabus Policy*	${\color{blue} oxed{arphi}}$ I have aligned this syllabus per the UCF syllabus policy.
Please attach any requ	uired files by navigating to the Proposal Toolbox and clicking 📮 in the top right corner.
Check Attached*	☑ I have attached a course syllabus.
Support from involved units that no duplication exists	Duplication support materials attached
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).

Accreditation Standards: <a href="http://mae.ucf.edu/accreditation/">http://mae.ucf.edu/accreditation/</a>

#### **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.
  - o HW #1 Due

Holzapfel Ch 2.1 to 2.3

- Week 3:
  - Deformation gradient.
  - Strain tensors.
  - o Rotation and stretch tensors.
  - o 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.
  - o HW #3 Due
  - o Quiz #1

Holzapfel Ch 3

- Week 5:
  - Conservation of Mass.
  - o Conservation of linear and angular momentum.
  - Energy balance.
  - o HW #4 Due

Holzapfel Ch 4.1 to 4.5

- Week 6:
  - Entropy inequality.
  - o Objectivity: rigid body motion and frame indifference.
  - o HW #5 Due

Holzapfel Ch 4.6 to 5.4

- Week 7:
  - Hyperelastic materials constitutive equations.
  - o Incompressibility.
  - Examples of strain energy functions.
  - o Isotropic and anisotropic materials.
  - o HW #6 Due
  - o Quiz #2

Holzapfel Ch 6.1 to 6.7

- Week 8:
  - o Biological materials with a microstructure.
  - o Growth and remodeling.
  - o HW #7 Due

- Quiz #2 Holzapfel Ch 6.8 to 6.10
- Week 9:
  - Materials with internal damage.
  - Viscoelastic materials in large strains (if time allows.)
  - HW #8 Due
     Holzapfel Ch 6.10 to 6.11
- Week 10:
  - Electro-Mechanical coupling.
  - Active strain.
  - Active stress.
  - o HW #9 Due
  - o Quiz #3
- Week 11:
  - Uniaxial and biaxial tissue stretch experiments.
  - The Newton-Raphson method in 1D.
  - o Application of the Newton-Raphson method to simulate material tests.
  - Term project discussion (during office hours).
  - o HW #10 Due
- Week 12:
  - 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:
  - Application1: understanding cardiac kinematics.
  - Application2: modeling muscle contraction.
  - Term project discussion (during office hours).
- Week 14:
  - Term project presentation.
- Week 15:
  - o Term project presentation.
  - 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:

- 1. Textbook: Nonlinear solid mechanics: a continuum approach for engineering. Holzapfel, Gerhard A., John Wiley and Sons.
- 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)
  - a. Humphrey, J. D., R. K. Strumpf, and F. C. P. Yin. "Determination of a constitutive relation for passive myocardium: I. A new functional form." Journal of biomechanical engineering 112.3 (1990): 333-339.
  - b. Humphrey, J. D., Review Paper: Continuum biomechanics of soft biological tissues, Proc. R. Soc. London. A (2003) Vol. 459, 3-46.
  - c. Holzapfel, Gerhard A., and Ray W. Ogden. "Constitutive modelling of passive myocardium: a structurally based framework for material characterization." Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences 367.1902 (2009): 3445-3475.
  - d. Nardinocchi, Paola, and Luciano Teresi. "On the active response of soft living tissues." Journal of Elasticity 88.1 (2007): 27-39.
  - e. Ambrosi, D., and S. Pezzuto. "Active stress vs. active strain in mechanobiology: constitutive issues." Journal of Elasticity107.2 (2012): 199-212.
  - f. Prevost, Thibault P., et al. "Biomechanics of brain tissue." Acta biomaterialia 7.1 (2011): 83-95.
  - g. Holzapfel, Gerhard A., Thomas C. Gasser, and Ray W. Ogden. "A new constitutive framework for arterial wall mechanics and a comparative study of material models." Journal of elasticity and the physical science of solids 61.1-3 (2000): 1-48.
  - h. Jordan, P., et al. "Constitutive modeling of porcine liver in indentation using 3D ultrasound imaging." Journal of the mechanical behavior of biomedical materials 2.2 (2009): 192-201.

#### Optional:

- 1. The Elements of Continuum Biomechanics, M. Epstein, John Wiley and Sons.
- 2. A first course in Continuum Mechanics, Y.C. Fung, Elsevier Press.
- 3. The finite element method: linear static and dynamic finite element analysis. Hughes, J.R. Thomas
- 4. Finite element procedures. Bathe KJ, 2006, Prentice Hall.

#### 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: <a href="http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf">http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf</a>)

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:

<a href="http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf">http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf</a>.

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

- 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 <a href="http://www.academicintegrity.org/icai/assets/FVProject.pdf">http://www.academicintegrity.org/icai/assets/FVProject.pdf</a>.

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 bγ the letter Z. For more information about the Ζ 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) <a href="http://sas.sdes.ucf.edu/">http://sas.sdes.ucf.edu/</a> (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 <a href="http://emergency.ucf.edu/emergency\_guide.html">http://emergency.ucf.edu/emergency\_guide.html</a>.
- 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 <a href="http://www.ehs.ucf.edu/workplacesafety.html">http://www.ehs.ucf.edu/workplacesafety.html</a> (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 (<a href="https://youtu.be/NIKYajEx4pk">https://youtu.be/NIKYajEx4pk</a>).

#### 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 Special Topic - CAP 5937 ST: Mixed Reality- Virtual 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 1 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
	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 5937 ST: Mixed Reality- Virtual Reality			
Prefix:*	CAP	Code:* 5937	
	CAP		
Earliest semester	Fall	<b>Year:*</b> 2020	
course may be offered:*	<ul><li>Spring</li></ul>		
	Summer		
Course Title:* ST: Mixed Reality - Virtual Reality			
30 Char. Abbreviation - must begin with ST:*	ST: MRVR		
Course Instructor (Must be Approved Graduate	Ryan McMahan		

Faculty/Scholars):			
Department Chair Phone Number:*	(407) 823-4758	Dept Chair Email: * leavens@cs.ucf.edu	
Course Description (25 word limit)*	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	О	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.



> **Total Engagement** 9 Hours:\*

#### **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.

students to enroll in this course?\*

What is the source of Computer Science and Engineering, Modeling and Simulation, Digital Media

What is the 30 estimated annual enrollment?\*

Do you plan to Yes No request that this course become permanent?\*



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 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: <a href="https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf">https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf</a>

Course Syllabus Policy*	${\color{blue} oxed{arphi}}$ I have aligned this syllabus per the UCF syllabus policy.
Please attach any requ	ired files by navigating to the Proposal Toolbox and clicking 🔓 in the top right corner.
Check Attached*	I have attached a course syllabus.
Support from involved units that no duplication exists	Duplication support materials attached
PeopleSoft	
Academic Group	
Career	
Print in Catalog	
Effective Date	
Lab Fee	
CRSE_ID	



## CAP 5937: Special Topics in Mixed Reality – Virtual Reality

3 Credit Hours

#### **Course Syllabus**

#### **Course Information**

Course Number: CAP 5937 Term: Semester and year
Course Section: Section number Class Meeting Times: Days and time

Course Name: Special Topics in Mixed Class Location: Class location

Reality – Virtual Reality

Prerequisite(s):

Reality – Virtual Reality

None

#### **Contact Information**

Instructor:Instructor nameGTA:GTA nameOffice Location:Office locationOffice Location:Office locationOffice Hours:Days and timeOffice Hours:Days and time

Email: Instructor's UCF email Email: Instructor's UCF email

Phone: Office phone number 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

Week	Topics	Readings	Assignments
1	Mixed and virtual reality	Jerald p9-30	
2	Scene graphs and computer graphics		
3	Immersion and presence	Jerald p45-52	Homework 1 due
4	Travel techniques and wayfinding	Jerald p335-343	
5	VR sickness	Jerald p159-176	Homework 2 due
6	Selection and manipulation techniques	Jerald p325-334	
7	Spatial audio and haptics	Jerald p85-110	Homework 3 due
8	System control and user interfaces	Jerald p344-354	
9	Perception and interaction principles	Jerald p355-368	Homework 4 due
10	Physics		
11	Scenario fidelity and constraints	Jerald p223-236	Homework 5 due
12	Animations		
13	Virtual agents		Homework 6 due
14	360° videos		
15	Evaluations of MR		Homework 7 due

#### 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

• Jerald, Jason (2015). *The VR Book: Human-Centered Design for Virtual Reality*. Morgan & Claypool Publishers. ISBN-10: 1970001127.

#### 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/

*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 <a href="http://wpacouncil.org/node/9">http://wpacouncil.org/node/9</a> 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 acknowledg-ing 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 appropri-ately.

### 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 <a href="http://goldenrule.sdes.ucf.edu/zgrade">http://goldenrule.sdes.ucf.edu/zgrade</a>.

For more information about UCF's Rules of Conduct, see <a href="http://www.osc.sdes.ucf.edu/">http://www.osc.sdes.ucf.edu/</a>.

### 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 <a href="Student Accessibility Services">Student Accessibility</a> Services (Ferrell Commons, 7F, Room 185, <a href="sas@ucf.edu">sas@ucf.edu</a>, 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 <a href="http://emergency.ucf.edu/emergency\_guide.html">http://emergency.ucf.edu/emergency\_guide.html</a>.
- 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 <a href="http://www.ehs.ucf.edu/AEDlocations-UCF">http://www.ehs.ucf.edu/AEDlocations-UCF</a> (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 <a href="my.ucf.edu">my.ucf.edu</a> 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 (<a href="https://youtu.be/NIKYajEx4pk">https://youtu.be/NIKYajEx4pk</a>) 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 1 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
Earliest semester	Fall	<b>Year:*</b> 2020
course may be offered:*	<ul><li>Spring</li></ul>	
	Summer	
Course Title:*	ST: Mixed Reality - Augmen	ed reality
30 Char. Abbreviation - must begin with ST:*	ST:MRAR	
<u></u>		
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)*	AR interactions, calibration, registr	ed visualization, simultaneous localization and mapping, ation, occlusion, photometric registration, common wpoint 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**

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.



> **Total Engagement** 9 Hours:\*

### **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.

students to enroll in this course?\*

What is the source of Computer science and engineering, Modeling and Simulation, Digital Media

What is the 30 estimated annual enrollment?\*

request that this course become permanent?\*



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 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: <a href="https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf">https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf</a>

Course Syllabus Policy*	${\color{blue} { }}{\color{blue} {\sf I}}$ l have aligned this syllabus per the UCF syllabus policy.
Please attach any requ	ired files by navigating to the Proposal Toolbox and clicking 🛂 in the top right corner.
Check Attached*	☑ I have attached a course syllabus.
Support from involved units that no duplication exists	Duplication support materials attached
PeopleSoft	
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**

Course Number: CAP 6938 Term: Semester and year
Course Section: Section number Class Meeting Times: Days and time

Special Topics in Mixed Class Meeting Times: Class Meeting Times: Days and time

Course Name: Reality – Augmented Reality Class Location: Class location

Prerequisite(s): None

### **Contact Information**

Instructor:Instructor nameGTA:GTA nameOffice Location:Office locationOffice Location:Office locationOffice Hours:Days and timeOffice Hours:Days and time

Email: Instructor's UCF email Email: Instructor's UCF email

Phone: Office phone number Phone: Office phone number

### **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

Week	Topics	Readings	Assignments
1	Mixed and augmented reality	p1-32	
2	Tracking	p85-120	
3	Marker tracking	p121-131	Homework 1 due
4	Natural feature tracking	p138-155	
5	Situated visualization	p239-270	Homework 2 due
6	Simultaneous localization and mapping	p156-178	
7	AR interactions	p271-310	Homework 3 due
8	Calibration and registration	p179-194	
9	Occlusion	p195-204	Homework 4 due
10	Photometric registration and illumination	p205-226	
11	Diminished reality	p227-238	Homework 5 due
12	Viewpoint guidance	p345-354	
13	Multiple perspectives	p354-360	Homework 6 due
14	Collaboration	p361-378	
15	Future of MR		Homework 7 due

### 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

• Schmalstieg, Dieter and Tobias Hollerer (2016). *Augmented Reality: Principles and Practice*. Addison-Wesley Professional. ISBN-10: 0321883578.

### 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 <a href="http://wpacouncil.org/node/9">http://wpacouncil.org/node/9</a> 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 acknowledg-ing 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 appropri-ately.

### 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 <a href="http://goldenrule.sdes.ucf.edu/zgrade">http://goldenrule.sdes.ucf.edu/zgrade</a>.

For more information about UCF's Rules of Conduct, see <a href="http://www.osc.sdes.ucf.edu/">http://www.osc.sdes.ucf.edu/</a>.

### 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 <a href="Student Accessibility Services">Student Accessibility</a> Services (Ferrell Commons, 7F, Room 185, <a href="sas@ucf.edu">sas@ucf.edu</a>, 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 <a href="http://emergency.ucf.edu/emergency\_guide.html">http://emergency.ucf.edu/emergency\_guide.html</a>.
- 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 <a href="http://www.ehs.ucf.edu/AEDlocations-UCF">http://www.ehs.ucf.edu/AEDlocations-UCF</a> (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 <a href="my.ucf.edu">my.ucf.edu</a> 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 (<a href="https://youtu.be/NIKYajEx4pk">https://youtu.be/NIKYajEx4pk</a>) 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

### **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.

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

	Bioengineering	OC: Modeling Techniques and Methodologies in
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 <a href="https://graduatecouncil.ucf.edu/curriculum-committee/">https://graduatecouncil.ucf.edu/curriculum-committee/</a>. 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:*	Number:* 5740
BIVIE	

Course Title:*	Modeling Techniques and Methodologies in Bioengineering
30 Character Abbreviation:*	Biomedical Modeling
Course Type:*	● Graduate Course  Medicine (MD) Course
Course Description (25 word limit)*	
Grading Scheme:*	ABCDF
Prerequisite(s):	EGN 3034, PHY 2048C, or C.I.
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**

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	О
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

Credit Hours:*	3
Instruction Time:*	

Work Hours:*	
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	
	Odd Fall Even Fall Odd Spring Even Spring Odd Summer Even Summer  Every Semester Occasional

### **Intended Utilization of Course**

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

### **Materials and Supply Fee**

New Materials and Supply Fees?*	○ Yes • No

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

### <u>Justification for Course Addition</u>

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 Biomedical Engineering programs/tracks require or recommend this course for

What will be the Biomedical Engineering Master and PhD programs source of students?\*

What is the 15 estimated annual enrollment?\*

graduation?

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 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: <a href="https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf">https://policies.ucf.edu/documents/4-403.1RequiredElementsoftheCourseSyllabus.pdf</a>

Course Syllabus 🗹 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.
	I have attached a course syllabus and rationale.
	Duplication support materials attached

Administration Us	e Only	
Catalog Ownership:		
Course Type		
Status	☐ Inactive-Hidden ☐ Active-Visable	
PeopleSoft		
Academic Group		
Career		
Print in Catalog		
Effective Date		
Lab Fee		
CRSE_ID		

# 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 <u>Software:</u>

Students should have access to MATLAB and Simulink

### Calendar (subject to change):

Week	Lecture		Homework
1	Introduction; Math review	Tale 1	MATIAD mustice
		Lab I	MATLAB practice

2	Math review, MATLAB basics		
3	Heart and circulation		
4	Heart and circulation	Lab 2	Heart and circulation
5	Heart and circulation		
6	Gas exchange		
7	Gas exchange	Lab 3	Gas exchange
8	Muscle mechanics		
9	Muscle mechanics	Lab 4	Muscle mechanics
10	Model fitting and sensitivity analysis		
11	Term project progress presentation		Progress report Due
12	Cell membrane potential		
13	Cell membrane potential	Lab 5	Membrane potential
14	Volume Conduction		
15	Volume Conduction	Lab 6	Volume conduction
16	Final presentation		Final report Due

### **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:

<a href="http://policies.ucf.edu/documents/4-">http://policies.ucf.edu/documents/4-</a>

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:

<a href="http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf">http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf</a>.

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 <a href="http://www.academicintegrity.org/icai/assets/FVProject.pdf">http://www.academicintegrity.org/icai/assets/FVProject.pdf</a>.

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 <a href="http://goldenrule.sdes.ucf.edu/zgrade">http://goldenrule.sdes.ucf.edu/zgrade</a>.

### 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)

<a href="http://sas.sdes.ucf.edu/">http://sas.sdes.ucf.edu/</a> (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 <a href="http://emergency.ucf.edu/emergency">http://emergency.ucf.edu/emergency</a> 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 <a href="http://www.ehs.ucf.edu/workplacesafety.html">http://www.ehs.ucf.edu/workplacesafety.html</a> (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 (<a href="https://youtu.be/NIKYajEx4pk">https://youtu.be/NIKYajEx4pk</a>).

### 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 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 1 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	d Computer Science
Unit / Department / College:*	Department of Mechanica	and Aerospace Engineering
	_	feature to import the course information from the form. Do <b>not</b> type the course prefix and code.
Prefix:*	EML	<b>Code:*</b> 5228
Course Title:*	Modal Analysis	
30 Character Abbreviation:*	Modal Analysis	
Full Title:*	Grad Course Revision- EML 52	228 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 <u>after</u> 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):	
r rerequisite(s).	EML 3303C, EML 4225, and EML 5060.
Corequisite(s):	None
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

For further review, please see the SACSCOC

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.

definition: http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf Credit Hours: \* 3 **Instruction Time:\*** 3 Lab/Studio/Field 0 Work Hours:\* Out-of-Class 2-3 Hours:\* **Total Engagement** 6 Hours:\* 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?  $\bigcirc$  Yes  $\bigcirc$  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:\* O Yes No List undergraduate split-level course: Term of Offering When will the Odd Fall Even Fall Odd Spring Even Spring Odd Summer course be offered? Even Summer Every Semester Occasional **Intended Utilization of Course** The course will be Required Course Elective Course used primarily as:

Justification for Course Revision

> What is the rationale for

We are revising out of date course information. This course is a lecture based course but has a "C" / Labortaory designation. We are also updating pre-requisites

revising this course?\*

to remove a course that was phased out of the MAE program (EML 4220).

What grad Mechanical or Aerospace Engineering

programs/tracks require or recommend this course for graduation?

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

What is the 30 Students 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 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: <a href="https://policies.ucf.edu/documents/4-403.pdf">https://policies.ucf.edu/documents/4-403.pdf</a>

Course Syllabus Policy*	${\color{blue} { }}{\color{blue} { }}{$
Attachment List	
Please attach any re right corner.	equired files by navigating to the Proposal Toolbox and clicking 🔓 in the top
Check	${rac{ extstyle  extstyl$
Attached	${oxedigm}{oxedigm}$ 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	

# University of Central Florida Department of Mechanical & Aerospace Engineering EML 5228 – Modal Analysis Spring 2019

### Instructor

Prof. Jeffrey L. Kauffman

ENG1 313 | JLKauffman@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**

Ewins DJ (2000) *Modal Testing: Theory, Practice, and Application*, 2<sup>nd</sup> edition, John Wiley & Sons, ISBN 9780863802188

### **Suggested Texts**

He J, Fu Z-F (2001) *Modal Analysis*, Butterworth-Heinemann. ISBN 9780750650793 Maia NMM, Silva JMM (1997) *Theoretical and Experimental Modal Analysis*, John Wiley & Sons. ISBN 9780471970675

McConnell KG (1995) Vibration Testing: Theory & Practice, John Wiley & Sons. ISBN 9780471304357

### **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):

### **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 documents 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.

### Make-Up Policies

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 <a href="UCF Policy 4-401.1"><u>UCF Policy 4-401.1</u></a>. Students must notify their instructor in advance if they intend to miss class for a religious observance. For more information, see <a href="UCF Policy 5.020"><u>UCF Policy 5.020</u></a>. 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.

### **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 (<a href="http://osc.sdes.ucf.edu">http://osc.sdes.ucf.edu</a>) in accordance with university regulations. Please review the Golden Rule (<a href="http://goldenrule.sdes.ucf.edu">http://goldenrule.sdes.ucf.edu</a>) for guidelines governing university expectations of student conduct. Please also review UCF's Rules of Conduct (<a href="http://osc.sdes.ucf.edu/process/roc">http://osc.sdes.ucf.edu/process/roc</a>). According to Section 1, "Academic Misconduct," students are prohibited from engaging in:

• 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.

- 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.
- 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.
- Falsifying or misrepresenting the student's own academic work.
- 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.
- Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
- Helping another violate academic behavior standards.

For more information about Academic Integrity, consult the International Center for Academic Integrity (<a href="http://academicintegrity.org">http://academicintegrity.org</a>). For more information about plagiarism and misuse of sources, see "Defining and Avoiding Plagiarism: The WPA Statement on Best Practices" (<a href="http://wpacouncil.org/node/9">http://wpacouncil.org/node/9</a>).

Please review the procedures for academic misconduct in UCF's student handbook, The Golden Rule (<a href="http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf">http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf</a>). 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 <a href="http://goldenrule.sdes.ucf.edu/zgrade">http://goldenrule.sdes.ucf.edu/zgrade</a>.

### Accessibility

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 (<a href="http://sas.sdes.ucf.edu/">http://sas.sdes.ucf.edu/</a>, <a href="sas@ucf.edu/">sas@ucf.edu</a>, Ferrell Commons 185, 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**

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. Please make a note of the guide's physical location and review the online version at <a href="http://emergency.ucf.edu/emergency">http://emergency.ucf.edu/emergency</a> guide.html.
- Please familiarize yourselves with the evacuation routes from the classroom 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 Automated External Defibrillator; nearby AEDs can be located near the ENG1 lobby elevator and in BA1 on the 2<sup>nd</sup> and 4<sup>th</sup> floors by the elevators. For a more complete location list, see <a href="http://www.ehs.ucf.edu/AEDlocations-UCF">http://www.ehs.ucf.edu/AEDlocations-UCF</a> (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 <a href="https://my.ucf.edu">https://my.ucf.edu</a> 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: <a href="https://youtu.be/NIKYajEx4pk">https://youtu.be/NIKYajEx4pk</a>.

### **Tentative Schedule**

Week of	Reading (Ewins)	Topic
Jan 7*	A.1-A.3, A.5, 1, 2.2-2.3	Introduction and Math Review; SDOF Systems
Jan 14	2.3-2.4	SDOF & MDOF Systems, FRFs
Jan 21**	2.5-2.9	Damping
Jan 28	2.10-2.11	FRF Methods and Visualization
Feb 4	3.1-3.5, 3.8, 3.12	Experimental Testing
Feb 11	3.7-3.8	Digital Signal Processing
Feb 18	4.1-4.3.2	FRF Methods: Peak Picking
Feb 25	4.3.3, supplement	FRF Methods: Circle Fit; Least Squares Estimation
Mar 4	4.3.4-4.3.5	FRF Methods: Inverse Fit
Mar 11	No Classes – Spring Break	
Mar 18	4.4-4.5	FRF Methods: MDOF
Mar 25	4.6.1-4.6.2	TD Methods: Exponential Fit
Apr 1	4.6.3	TD Methods: Ibrahim
Apr 8	2.12, 5.1-5.3	Model Construction and Refinement
Apr 15	6.1-6.3	Model-Data Comparison, Model Updating
Apr 22	6.3	Model Updating

<sup>\*</sup> Class will not meet during the week of January 7. Two lectures and an exercise will be posted.

This syllabus is subject to change; all modifications will be announced in class and reflected on the syllabus posted on the course website.

<sup>\*\*</sup> No class on Monday, January 21 (Martin Luther King Jr. Day).

### College of Engineering and Computer Science - Grad Course Revision-EML 5271 Intermediate Dynamics

2020-2021 Graduate Course Revision

### **General Catalog Information**

# \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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 an	d Computer Science
Unit / Department / College:*	Department of Mechanica	l and Aerospace Engineering
	_	feature to import the course information from the form. Do <b>not</b> type the course prefix and code.
Prefix:*	EML	<b>Code:*</b> 5271
Course Title:*	Intermediate Dynamics	
30 Character Abbreviation:*	Intermediate Dynamics	
Full Title:*	Grad Course Revision-EML 52	71 Intermediate Dynamics
Course Instructor (Must be Approved Graduate Faculty/Scholars):	Dr. Tuhin Das	

Dept Chair Email\* Yoav.Peles@ucf.edu

Department Chair 407-823-5448
Phone Number:\*

Complete the remaining required fields and LAUNCH this proposal by clicking in the top left corner! Do not begin revisions until <u>after</u> 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.

### **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: <a href="http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf">http://www.sacscoc.org/pdf/081705/Credit%20Hours.pdf</a>

Credit Hours:*	3
Instruction Time:*	3
Lab/Studio/Field Work Hours:*	0
Out-of-Class Hours:*	2-3
Total Engagement Hours:*	6
	able course, indicate in the syllabus what will remain the same and what will urse is repeated. Also indicate who approves content before a course is
Repeat for credit?	◯ Yes ◎ No
If yes, indicate the degree program name and the total times the course may repeated.	
graduate side of the the Undergraduate C	e revising is a split-level class, please note this revision form will only impact the course. The undergraduate component of the course should be revised through Curriculum Committee. As a reminder, the graduate syllabus should clearly dvanced subject matter, expectations, and rigor.
Split-Level Class:*	◯ Yes <sup>③</sup> 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	on of Course
The course will be used primarily as:	Required Course     Elective Course
Justification for Co	ourse Revision

What is the rationale for

Revision to Undergraduate Course that serves as a Pre-Requisite

revising this course?\*

What grad Mechanical and Aerospace Engineering
programs/tracks
require or
recommend this
course for
graduation?

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

What is the 60 Students 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 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: <a href="https://policies.ucf.edu/documents/4-403.pdf">https://policies.ucf.edu/documents/4-403.pdf</a>

Course Syllabus Policy*	${\color{blue} { }^{ \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$
Attachment List	
Please attach any re right corner.	equired files by navigating to the Proposal Toolbox and clicking 🔓 in the top
Check	${oxedigm}{oxedigm}$ I have completed all relevant parts of the form.
Attached	${oxedigm}{oxedigm}$ I have attached a course syllabus and rationale.
Proposal Type:	Grad Course Revision
Administration	Uso Only
Aummstration	ose 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:**

Textbook: Greenwood, D. T., Principles of Dynamics, 2nd Ed., Prentice-Hall, 1988.

### **References:**

1. Goldstein, H., Classical Mechanics, 2nd Ed., Addison Wesley, 1980.

- 2. Moon, F.C., Applied Dynamics, 2nd Ed., Wiley-VCH, 2008.
- 3. Ginsberg, J. H., Advanced Engineering Dynamics, Harper & Row, 1988.
- 4. Kane, T. R. and Levinson, D. A., Dynamics: Theory and Applications, McGraw-Hill, 1985.

### **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):** 

Wk	Dates	Topics	Notes
1	Jan 7	Chap.1: Introductory concepts, Chap. 2: Deriv. of unit vector,	HW1 posted
		vel. and accln. in different coordinate systems.	_
2	Jan 14	Chap. 2: Derivatives in rotating systems, motion of particles in	
		rotating/moving coordinate frame	
3	Jan 21	Chap. 3: Particle dynamics, work-energy, impulse-momentum	HW1 due,
			HW2 posted
4	Jan 28	Chap. 3: Particle dynamics, linear impulse-momentum,	
		angular momentum	
5	Feb 4	Chap. 4: System of particles, work-energy, linear impulse-	HW2 due
		momentum, Exam 1 on Th, Feb 7	
6	Feb 11	Chap. 4: System of particles, angular momentum, collision	HW3 posted
		problem	
7	Feb 18	Chap. 4: Collision problem, rocket problem, Chap. 6:	HW3 due,
		Generalized coordinates, constraints	HW4 posted
8	Feb 25	Chap. 6: Lagrange's equation, virtual work, generalized forces	
9	Mar 4	Chap. 6: Lagrange's equation, <i>Exam 2 on Th, Mar 7</i>	HW4 due
10	Mar 11	Spring break	no classes
11	Mar 18	Chap. 7: Kinematics of rigid bodies, moments of inertia	HW5 posted
12	Mar 25	Chap. 7: Kinetic energy, angular momentum, translation and	
		rotation of axes	
13	Apr 1	Chap. 7: Force reduction, Euler angles	HW5 due
14	Apr 8	Chap. 8: Dynamics of rigid body, equations of motion, free	HW6 posted
		motion of rigid body	
15	Apr 15	Chap. 8: Dynamics of rigid body, motion of a top, axially	HW6 due
		symmetric bodies.	
16	Apr 22	Exam 3 on Tues, Apr 30, 4pm to 6:50pm	

**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: <a href="http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf">http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf</a>

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: <a href="http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf">http://regulations.ucf.edu/chapter5/documents/5.020ReligiousObservancesFINALOct17.pdf</a>.

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.
- 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 <a href="http://www.academicintegrity.org/icai/assets/FVProject.pdf">http://www.academicintegrity.org/icai/assets/FVProject.pdf</a>.

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 <a href="http://goldenrule.sdes.ucf.edu/zgrade">http://goldenrule.sdes.ucf.edu/zgrade</a>.

### 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) <a href="http://sas.sdes.ucf.edu/">http://sas.sdes.ucf.edu/</a> (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 <a href="http://emergency.ucf.edu/emergency">http://emergency.ucf.edu/emergency</a> 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 <a href="http://www.ehs.ucf.edu/workplacesafety.html">http://www.ehs.ucf.edu/workplacesafety.html</a> (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.

### GCCC Agenda 11-6-19

Committee Graduate Curriculum Committee
Notes
tal 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 1 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.



**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 <u>not</u> type the course prefix and code.

Prefix:*	ACG	6065
	Accounting Foundations	
	ACG 6065 Accounting Foundation	

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 ☐ Every Semester ☐ Occasional
Utilization of Course	
The course was a:	Required Course Elective Course
Justification for Cou	rse Deletion
discussions you have	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.  by clicking in the top left corner of the form and answer below according to the
Is this course a required course for graduation or prerequisite for another course?	
If yes, have all relevant units been informed of the deletion?	
If not, explain:	
Notes:	Course has not been offered in more than 5 years and is not required in any program.
<u>Attachment</u>	
Supporting	☐ Yes ☑ No

documents from impacted units of the deletion\*

Iministration Us	se Only
Catalog Ownership:	Kenneth G. Dixon School of Accounting
Course OID	
Course Type	Accounting: General
Status	Active-Visible  Inactive-Hidden
opleSoft	
Academic Group	
Career	
Print in Catalog	
Effective Date	
Lab Fee	
CRSE_ID	043734

**Close Window** 

# **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 1 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.



**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 <u>not</u> type the course prefix and code.

Prefix:*	MAN	Code:* 6244
Course Title:*	Organizational Behavior	
Full Title:*	MAN 6244 Organizational Behav	ior
Course Description:*	-	groups, and the interactions between them. Students will be e "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 Cou	rse Deletion
	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.
Run an Impact Report results.	by clicking 🛢 in the top left corner of the form and answer below according to the
Is this course a required course for graduation or prerequisite for another course?	○ Yes <sup>③</sup> 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.
<u>Attachment</u>	
Supporting documents from impacted units of the deletion*	☐ Yes ☑ No
Administration Us	se Only
Catalog Ownership:	Department of Management
Course OID	
Course Type	

Lab Fee

**CRSE\_ID** 043861

COMISC 13PC	Management
Status	Active-Visible  Inactive-Hidden
PeopleSoft	
Academic Group	
Career	
Print in Catalog	
Effective Date	

**Close Window** 

# **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 1 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.



**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 Manager	nent	
Full Title:*	MAN 6446 Applied Negotiations in Management		
Course Description:*		otiation theories and processes to human resource 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 <sup>⊙</sup> No
Split-Level Class:	◯ <sub>Yes</sub> ◯ <sub>No</sub>
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 Cou	rse Deletion
	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.
Run an Impact Report I results.	by clicking 🗐 in the top left corner of the form and answer below according to the
Is this course a required course for graduation or prerequisite for another course?	○ Yes <sup>®</sup> 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.
<u>Attachment</u>	
Supporting documents from impacted units of the deletion*	☐ Yes ☑ No
<u> </u>	
Administration Us	e Only
Catalog Ownership:	Department of Management
Course OID	
Course Type	Management

Status	Active-Visible  Inactive-Hidden	
eopleSoft		
Academic Group		
Career		
Print in Catalog		
Effective Date		
Lab Fee		
CRSE_ID	044252	

**Close Window** 

# **Impact Report for MAN 6446**

Source: 2020-2021 Graduate Catalog (WORKING COPY)

Full Course Title MAN 6446 - Applied Negotiations in Management

### 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 1 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.



**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:*	TAX	<b>Code:*</b> 6875
Course Title:*	Contemporary Tax Topics	
Full Title:*	TAX 6875 Contemporary Tax Top	ics
Course Description:*	Advanced study of current tax iss including tax policy, pending tax le	ues affecting both business and individual taxpayers, egislation and tax reform.
Credit Hours:	3	
Class Hours:	3	
Lab and Field Work Hours:	0	
Contact Hours:	3	
Prerequisite(s):	Graduate standing and <u>TAX 5015</u>	

Corequisite(s):	
Graded S/U?	◯ Yes ⊙ No
Split-Level Class:	◯ Yes <sup>©</sup> 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 Cou	rse Deletion
	ed in any UCF program or is a prerequisite for any UCF course, attach evidence of had with impacted programs/departments/schools.
Run an Impact Report I results.	by clicking $oxed{\equiv}$ in the top left corner of the form and answer below according to the
Is this course a required course for graduation or prerequisite for another course?	○ Yes <sup>®</sup> 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.
<u>Attachment</u>	
Supporting documents from impacted units of the deletion*	□ Yes ☑ No
Administration Us	e Only
Catalog Ownership:	Kenneth G. Dixon School of Accounting
Course OID	
Course Type	Taxation

<u> </u>		
Status	Active-Visible  Inactive-Hidden	
	Active-Visible Vinactive-Hidden	
DecadeCoft		
PeopleSoft		
Academic Group		
Career		
Print in Catalog		
Effective Date		
Lab Fee		
CRSE_ID	044509	

**Close Window** 

# **Impact Report for TAX 6875**

Source: 2020-2021 Graduate Catalog (WORKING COPY)

**Full Course Title** TAX 6875 - Contemporary Tax Topics

**Programs** Taxation MST

# College of Business Administration - Grad Course Revision - REE 6465 Financial Analysis of Real Estate Firms

2020-2021 Graduate Course Revision

### **General Catalog Information**

# \*\*Read before you begin\*\*

- 1. TURN ON help text before starting this proposal by clicking 1 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 Adminis	tration
Unit / Department / College:*	Department of Finance	
	_	orm. Do not type the course prefix and code.

Course Title:\* Financial Analysis Seminar of Real Estate Firms

Abbreviation:*	inancial Analysis <del>Seminar</del> of Real Estate Firms			
Full Title:*	REE 6465 Financial Analysis	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*		

Complete the remaining required fields and LAUNCH this proposal by clicking in the top left corner! Do not begin revisions until <u>after</u> 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

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

Credit Hours:*	3
Instruction Time:*	3
Lab/Studio/Field Work Hours:*	0
Out-of-Class Hours:*	6
Total Engagement Hours:*	39

**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: Real Estate MSRE Required Course V Elective Course Elective course: Business Administration MBA

### **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 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

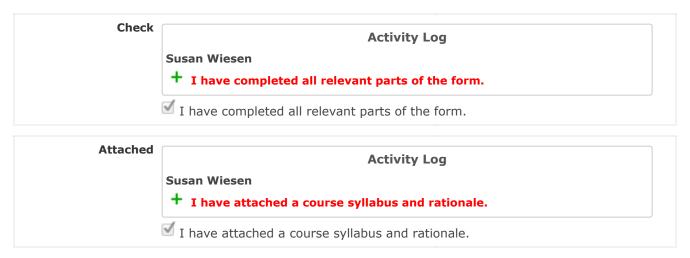
Statement regarding accommodations for active duty military students

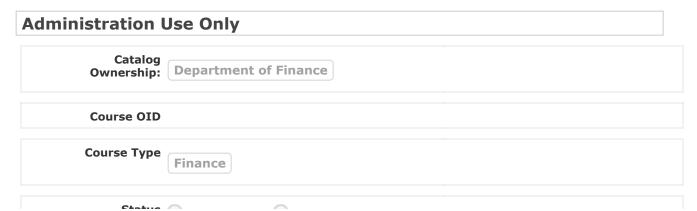
Full details of the syllabus policy can be found at: https://policies.ucf.edu/documents/4-403.pdf

Course Syllabus 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.





Status Active-Visible Inactive-Hidden

PeopleSoft		
Academic Group		
Career		
Print in Catalog		
Effective Date		
Lab Fee		
CRSE_ID	043836	



### 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

Instructor: Ann Marie Whyte, PhD

Office Location: BA1, 423

Office Hours: Before and after class

Phone: (407) 823-3945

Email: Please use Webcourses for emails

Instructor: Paul Gregg, MSA, CPA

Office Location: BA1, Room 428

Office Hours: Before and after class

Phone: (407) 823-3156

Email: Please use Webcourses for all emails

Term: Fall 2019
Class Meeting Days: Thursdays

Class Meeting Time: 6:00 p.m. to 10:00 p.m.

Class Location: Valencia West
Course Modality: Face to Face

### **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 10<sup>th</sup> 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 a10-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**

CLASS DATE	CHAPTER	TOPIC	INSTRUCTOR
Class #1	Introduction Chapters 2 and 3 Financial Statements	Syllabus review, Financial Statement Analysis using statements obtained from Bloomberg for a key home builder	Whyte
Class #2	Chapter 8: Financial Options	Options basics and Black-Scholes using spreadsheets	Whyte
Class #3	Chapter 17: Multinational Financial Management	Discussion of exchange rates and hedging strategies	Whyte
Class #4	Chapter:20 Initial Public Offerings	Discussion of the process of going public	Whyte
Class #5	Team Project Presen	stations: Comprehensive analysis for a	Whyte

Class # 6	Midterm Exam		Whyte
Class # 7	Read Annual Report & 10-K Chapter 2: Financial Statements	Overview of Annual Reports/10-Ks and financial ratios. Focus on Simon Property Group, REIT debt structures.	Gregg
Class #8	Chapter 2: Corporate Taxes Chapter 12: Forecasting	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	Gregg
Class #9	Chapter 2 and 9: EVA and WACC Chapter 19: Leases	Leases, WACC, EVA, Small Business Valuations	Gregg
Class #10	Chapter 13: Agency and Governance	Observations from the "C" Suite, activist shareholders, applied TVM. Proxy statements and performance metrics for REITs, career insights	Gregg
Class #11	"Live" Team Project Competitor Analysis Case and 10-minute presentations. Marriott case study report is due before final exam.	Two REITs are assigned at the start of class. PowerPoint Presentations due within 2 hours and 15 minutes followed by in class presentations.	Gregg
Class # 12	Mi	dterm 2/Final Exam	Gregg

### **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:

ASSIGNMENT	ТОРІС	WEIGHT
Quizzes	Various topics (individual)	10%
Home Builder Financial Analysis	Paper and PowerPoint Presentation	10%
Midterm Exam	Materials presented in first half of class	30%
Final Exam	Materials presented in last half of class	30%
Marriott case study	Final project plus in-class presentation	10%
Competitor analysis	Final project plus in-class presentation	10%
Total		100%

### **Grading scale**

LETTER GRADE	PERCENTAGE	LETTER GRADE	PERCENTAGE
А	93-100 %	С	73-76%
A-	90-92 %	C-	70-72%
B+	87-89%	D+	67-69%
В	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	F	Less than 60%

### **Grade Dissemination**

To comply with the <u>Family Educational Rights and Privacy Act (FERPA)</u>, 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**

• <u>Financial Management: Theory and Practice</u>, by Eugene F. Brigham and Michael C. Ehrhardt, 15<sup>th</sup> edition.

### 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 <a href="Student Accessibility Services">Student Accessibility Services</a> (Ferrell Commons, 7F, Room 185, <a href="sas@ucf.edu">sas@ucf.edu</a>, 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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This document is subject to change - We will advise you when the document changes, but it is also your responsibility to stay up to date with any changes announced in our meetings or on in Webcourses.