CALS Curriculum Committee Meeting
September 25, 2020
2:00 p.m.

Via Zoom: https://ufl.zoom.us/j/355458614
Meeting ID : 355458614

Members: S. Ahn, J. Brendemuhl, D. Coenen, D. Gabriel, M. Gillen, V. Hull,
P. Inglett (Chair), J. Larkin, L. Lundy, T. Martin, G. Nunez, K. Padgett-Pagliai, B. Pearson,
W. Porter, N. Roberts, J. Scheffler, M. Sharp, J. Weeks, C. Wilson, A. Wysocki

Agenda and Index for Materials

Approve Minutes from August 28, 2020 meeting

Dr. Brendemuhl: Update from UCC

Graduate New Course Proposal

1. AOM 5XXX – Applied Methods in SmartAg Systems (req. #15217)

Undergraduate New Course Proposal

2. FYC 4204 – Positive Youth Development for the Youth Professional (req. #15044)

Certificates

3. Proposed Animal Genetics Undergraduate Certificate (req. #15226)

4. Proposed Microbiome and Health On-line Graduate Certificate (req. #15264)

Curriculum

5. Proposed Executive Ph.D. Graduate Concentration in Microbiology and Cell Science (req. #14428)

Recycled items

6. HUN 6XXX – Macronutrients in Human Nutrition (req. #15206)
    Item previously recycled 8/28/2020. Comments as follows: A motion was made by
Dr. Porter to recycle this item back to the department for required updates and
resubmission. The motion was approved. Make sure to add changes to both the syllabus and

UCC form if necessary. The proposed course title needs to be more specific. It was suggested that "in Human Nutrition" be added to the title. Proposed office hours need to be added for all instructors. A graduate course submission should not have any undergraduate prerequisites listed. This section should be left blank. Specific prerequisites can cause a problem for out-of-state students during registration. There is opportunity for the instructor to discuss necessary prior knowledge during the first day of class. A more in-depth explanation of the "Time off" mentioned at the top of the syllabus needs to be included and added to the course schedule. The most recent version of the CALS Syllabus Statements need to replace the information currently on the submitted syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

7. AEC 4XXX – Communication and Leadership Development Internship (req. #14649)
        Item previously recycled 2/14/2020. Comments as follows: A motion was made by Dr. Porter to recycle this item back to the department for required changes and resubmission. The motion was approved. A list of prefixes or specific courses will be needed for item #2 in the proposed prerequisite section. If you provide only prefixes any course with those prefixes will be used. There appear to be some assignments that are not listed as part of the required work for the course (Exit interview, various forms, electronic journal entries, etc.). If these are part of the portfolio that needs to be made clearer. A concern was raised as to what would happen to a student who is unable to secure an internship. The instructor is encouraged to attend the meeting of the CALS CC, at which her submission will be re-reviewed, in person or via zoom (link available at committee site: https: //cals.ufl.edu/faculty-staff/committees/) to give a course background and field any questions.

Discussion

8. Proposed CALS CC Checklist edits

9. Dr. Turner has asked the committee to consider whether or not a statement on diversity and equity should be added to the CALS Syllabus Statements.

CALS Curriculum Committee Meeting
August 28, 2020
Submitted by James Fant

Members Present: S. Ahn, J. Brendemuhl, D. Coenen, D. Gabriel, M. Gillen, V. Hull,
P. Inglett, J. Larkin, L. Lundy, T. Martin, G. Nunez, K. Padgett-Pagliai, B. Pearson, W. Porter,
N. Roberts, J. Scheffler, M. Sharp, J. Weeks, C. Wilson

Guests: Kevin Begcy, Kristina Haselier, Estelle Martin and Raluca Mateescu

Call to Order: The College of Agricultural and Life Sciences Curriculum Committee met via
Zoom on August 28, 2020. Dr. Inglett called the meeting to order at 2:00 p.m.

**Previous agenda items and supporting material can be found on the CALS College
Committees homepage under document archives:** https://cals.ufl.edu/faculty-
staff/committees/

Approval of Minutes: A motion was made by Dr. Porter to approve the minutes from the April
10, 2020 meeting of the CALS CC. The motion was approved.

**All items approved by the committee will be forwarded to either the Graduate Curriculum
Committee (GCC), Graduate Council (GC) or the University Curriculum Committee
(UCC) once any changes requested are made and the submission is complete.**

Links: Grades – https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/
Syllabus Statements – https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf
Absences & Make-Ups – https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx
Writing Learning Objectives - https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-
objectives.pdf.

Update from UCC: Dr. Brendemuhl welcomed everyone to the start of a new cycle for the
CALS CC and thanked both continuing and new members for their service. He mentioned that
this year all undergraduate degree programs would need to update their 8-semester plans to
incorporate the UF Quest 2 requirement which becomes effective with the 2021-22 catalog. He
noted the following items that were on the APRIL UCC agenda. The proposed name change for
SFRC was tabled for further discussion with other colleges and programs. Graduate courses
NEM 6101L Nematode Morphology and Anatomy Lab and NEM 6101C to NEM 6101 by
removal of the lab component was approved as well as DIE 6241. At the MAY UCC meeting
ENY 4573-Beekeeping I, FOR 4020-Seminar in Contemporary Issues in FRC, and the graduate
course DIE 6942 were approved as was the name change for SFRC.

Graduate New Course Proposal

1. HOS 6XXX – Methods in Plant Biotechnology (req. #14788)
        This item was reviewed with item #9. Comments will apply to both items unless
otherwise stated. A motion was made by Dr. Coenen to approve this item with changes required.

The motion was approved. Make sure to fix any text on both the syllabus and UCC form if necessary. The graduate course submission should not have any undergraduate prerequisites listed. This section should be left blank. Specific prerequisites can cause a problem for out-of-state students during registration. There is opportunity for the instructor to discuss necessary prior knowledge during the first day of class. The course objectives for both submissions match. The graduate submission must have at least one (or additional) learning objective that differs from the undergraduate course and reflects a level of expected rigor for a graduate course. For assistance refer to: https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf. There was a suggestion to consider a PLS prefix for the undergraduate submission. Since edits are required it is advised to go ahead and update the CALS Syllabus Statements. These were updated recently and can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

2. HUN 6XXX – Research Projects in Nutrition and Dietetics part 2 (req. #15205)

A motion was made by Dr. Porter to approve this item with changes required. The motion was approved. Make sure to fix any text on both the syllabus and UCC form if necessary. The contact hours on the UCC form needs to be changed from 3 to 2. In the office hours section of the syllabus add an "or" before by appointment. The examples of literature to be presented needs to be added as part of the syllabus. The most recent version of the CALS Syllabus Statements need to replace the information currently on the submitted syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

3. HUN 6XXX – Macronutrients (req. #15206)

A motion was made by Dr. Porter to recycle this item back to the department for required updates and resubmission. The motion was approved. Make sure to add changes to both the syllabus and UCC form if necessary. The proposed course title needs to be more specific. It was suggested that "in Human Nutrition" be added to the title. Proposed office hours need to be added for all instructors. A graduate course submission should not have any undergraduate prerequisites listed. This section should be left blank. Specific prerequisites can cause a problem for out-of-state students during registration. There is opportunity for the instructor to discuss necessary prior knowledge during the first day of class. A more in-depth explanation of the "Time off" mentioned at the top of the syllabus needs to be included and added to the course schedule. The most recent version of the CALS Syllabus Statements need to replace the information currently on the submitted syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

4. WIS 5XXX – Molecular Ecology in Application (req. #13571)

A motion was made by Dr. Porter to recycle this item back to the department for required updates and resubmission. The motion was approved. Make sure to add changes to both the syllabus and UCC form if necessary. The same learning verb can not be used twice in the learning objectives on the UCC form. Also, these learning objectives must match on the UCC form and syllabus. A graduate course submission should not have any undergraduate prerequisites listed. This section should be left blank. Specific prerequisites can cause a problem for out-of-state students during registration. There is opportunity for the instructor to discuss necessary prior knowledge during the first day of class. The information regarding the text and required readings needs to match on both the UCC form and syllabus. There is a spelling error on

the UCC form (below). The grading scheme, percentages of final grade and category, must match on the UCC form and syllabus. There should also be dates with the lab and reading assignments. The weekly schedule needs to match on the UCC form and syllabus. An outside consultation from Soils and Water Sciences is required. Due to other edits being required the most recent version of the CALS Syllabus Statements boilerplate needs to be included. The most recent version of the CALS Syllabus Statements boilerplate needs to replace the information currently on the submitted syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

Graduate Course Change Proposals

5. SWS 6931 – Seminar (req. #14920)
This item needs to be resubmitted as a new graduate course. A motion was made by Dr. Porter to approve this item with edits required if resubmitted as a new course proposal. The motion was approved. The final course objective needs a different learning verb. The same verb should not be used twice. There was a question as to whether the course could be attended via Zoom by on-campus students. Since the course must be resubmitted the most recent version of the CALS Syllabus Statements needs to be included. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

6. SWS 6932 – Topics in Soils (req. #14898)
A motion was made by Dr. Coenen to approve this item as submitted. The motion was approved.

Undergraduate New Course Proposals

7. ANS 4XXX – Genetic Analyses of Complex Traits in Livestock (req. #15191)
A motion was made by Dr. Weeks to approve this item with changes required. The motion was approved. Make sure to add changes to both the UCC form and syllabus if necessary. The grading scheme and percentages on the UCC form need to match the syllabus. The most recent version of the CALS Syllabus Statements boilerplate needs to replace the information currently on the submitted syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

8. FYC 4XXX – Children: Trauma and Resiliency (req. #15061)
A motion was made by Dr. Porter to approve this item with edits required. The motion was approved. Make sure to add changes to both the UCC form and syllabus if necessary. The contact hours on the UCC form needs to be changed to three. The course description in the syllabus needs to match the description on the UCC form. Any extra information can be included as an overview in the syllabus. Since changes are required the new version of the CALS Syllabus Statements boilerplate needs to replace the one in the current submission. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

9. ORH 4XXX – Introduction to Plant Biotechnology (req. #14784)
	See item #1.

10. ORH 4804C – Annual and Perennial Gardening (req. #15072)
	A motion was made by Dr. Porter to approve this item with changes required. The motion was approved. Make sure to add changes to both the UCC form and syllabus if necessary. The total points scale on the UCC form and syllabus must match. Since a change is required the new version of the CALS Syllabus Statements boilerplate needs to replace the one in the current submission. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

Undergraduate Course Change Proposal

11. ENY 4210 – Insects and Wildlife (req. #15224)
	A motion was made by Dr. Porter to approve this item with changes required. The motion was approved. Make sure to add changes to both the UCC form and syllabus if necessary. The proposed prerequisites should only be prefixes and course numbers. Adding "or equivalent" is also acceptable. Any extra wording needs to be removed. If you wish to include extra information you can do so in the syllabus under a heading such as overview. The office hours in the syllabus need to include specific times. The same learning verb (discuss) can not be used twice in the learning objectives. For assistance visit: https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf. Since changes are required the new version of the CALS Syllabus Statements boilerplate needs to replace the one in the current submission. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

Certificate

12. Proposed Modification to the Biological Systems Modeling Graduate Certificate (req. #13844)
	A motion was made by Dr. Martin to approve this item with changes required. The motion was approved. Make sure to add changes to both the UCC form and syllabus if necessary. To address course capacity, please include an email from department chair to department chair ensuring there will be no issues for each new course added. The course option SWS6932 needs to be changed. Modeling Land Biogeochemistry is now SWS6813C.

Curriculum

13. Proposed Closure of M.S. Degree in Plant Molecular and Cellular Biology (req. #14870)
	A motion was made by Dr. Porter to approve this item as submitted. The motion was approved.

Recycled items

14. WIS 4XXX – Wetland Management (req. #13496)

This item was reviewed with item #15. Comments apply to both items unless otherwise stated. Make sure to add changes to both the UCC form and syllabus if necessary. A motion was made by Dr. Porter to approve this item with edits required. The motion was approved. The items will not be forwarded to the next level of the approval process until all required edits have been addressed. The course numbers on each proposed syllabus need to be changed to 4XXXC and 6XXXC. The course objectives on the UCC form must match the objectives in the syllabus. The graduate course must have at least one (or additional) learning objective that differs from the undergraduate course. That objective must reflect the rigor expected from a graduate level course. The grading schemes in each syllabus must match those on the UCC forms. Decimal points need to be added to the percentage ranges in the grading scales. The undergraduate course must have a prerequisite (junior or senior standing is acceptable). All proposed dates in each submission need to be updated for the future. Since changes are required the new version of the CALS Syllabus Statements boilerplate needs to replace the one in each current submission. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

15. WIS 6XXX – Wetland Management (req. #13763)
    See item #14.

The meeting was adjourned at **4:13** p.m.

Cover Sheet: Request 15217

New course: AOM5XXX Applied Methods in SmartAg Systems

Info

Process	Course|New|Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jonathan Watson jaw7385@ufl.edu
Created	8/14/2020 8:48:51 AM
Updated	8/26/2020 4:43:49 PM
Description of request	Request for new graduate course offered through CALS.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Agricultural and Biological Engineering 514907000	Kati Migliaccio		8/14/2020
AOM5XXX_Applied_Methods_in_SmartAg_Systems_1st_Submission.docx					8/14/2020
College	Pending	CALS - College of Agricultural and Life Sciences			8/14/2020
No document changes					
Graduate Curriculum Committee					
No document changes					
University Curriculum Committee Notified					
No document changes					
Statewide Course Numbering System					
No document changes					
Graduate School Notified					
No document changes					
Office of the Registrar					
No document changes					
College Notified					
No document changes					

Course|New for request 15217

Info

Request: New course: AOM5XXX Applied Methods in SmartAg Systems
Description of request: Request for new graduate course offered through CALS.
Submitter: Jonathan Watson jaw7385@ufl.edu
Created: 8/10/2020 9:43:04 AM
Form version: 1

Responses

Recommended Prefix AOM
Course Level 5
Course Number XXX
Category of Instruction Introductory
Lab Code None
Course Title Applied Methods in SmartAg Systems
Transcript Title App. Methods in SmartAg Sys.
Degree Type Graduate

Delivery Method(s) On-Campus
Co-Listing No

Effective Term Spring
Effective Year 2022
Rotating Topic? No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 2.5
Course Description Design, analysis, and evaluation of SmartAg methods for applications in production agriculture, biological and food engineering, forestry, land, and water resources. Students will learn hardware and software concepts used in SmartAg applications with real-world examples (e.g., UAV's, irrigation, controlled environments for plant and animals, crop modeling).
Prerequisites Applied Physics
Co-requisites N/A
Rationale and Placement in Curriculum To our knowledge, there are no course offerings at the University of Florida that introduce students to smart agriculture design, analysis, and evaluation methods in production agriculture, biological and food engineering, forestry, land, and water resources. As agriculture becomes more technical, there will be a need for courses that provides students with the training to successfully design, apply, manage, and evaluate these high-tech systems.

The Agricultural Operations Management program in the Department of Agricultural and Biological Engineering (ABE) has a broad curriculum that prepares its graduates for diverse career pathways interests. Graduates from our program go into a wide range of fields and areas such Agribusiness Management (AOM), Animal Production Management, Horticulture and Crop Management, Fishery and Aquatic Production where smart agriculture technologies may be utilized. The diversity of faculty and students and their scientific expertise makes ABE an ideal home for this course as agriculture is complex, dynamic and adaptive requiring a technical understanding of these processes and concepts.

Course Objectives Students, upon completing this course, will be able to:
a.   Demonstrate proficiency in software and programming of hardware such as microcontrollers for agricultural applications.
b.   Select appropriate unmanned aerial systems used in real-time imaging, scouting and field mapping.

c.   Apply smart agriculture technology to monitor, control and manage agricultural systems.
d.   Analyze data using statistical software packages through applied methods and techniques to solve complex problems in agriculture.
e.   Evaluate decision support tools, best management practices, and technologies used to optimize performance, yield, and profit in agricultural operations.

Course Textbook(s) and/or Other Assigned Reading No required course textbook, lecture notes will be provided as handouts and made available in Canvas, students will have assigned readings (peer reviewed journal articles). Students will also be required to purchase a hardware kit with Arduino microcontroller kit. See Sections 10-11 of syllabus for details.
Weekly Schedule of Topics See Section 9 of syllabus for details.
Grading Scheme The following grading scheme will be used in the course:

Homework Sets (16) 20%
Arduino Program and experiment exercises 20%
Mid-term Exam (Modules 1-4) 20%
Final Exam (Modules 5-8)   20%
Term Project & Paper 20%
TOTAL 100%

Instructor(s) To be determined
Attendance & Make-up Yes
Accomodations Yes
UF Grading Policies for assigning Grade Points Yes
Course Evaluation Policy Yes

CALS Curriculum Committee
Submission Checklist

NOTE: This checklist must be included with all course and certificate submissions.

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (https://approval.ufl.edu/). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

_J.A.W_ It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: https://cals.ufl.edu/faculty-staff/committees/.

_J.A.W_ Review the CALS Syllabus Policy. This document can be viewed at the committee site (https://cals.ufl.edu/faculty-staff/committees/) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

_N/A_ Joint course submissions must include both graduate and undergraduate syllabuses and a separate statement outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

_J.A.W_ The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

_J.A.W_ The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. (https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf). Do not use the words demonstrate or understand when listing learning objectives.

_J.A.W_ The course schedule should be concise and include the appropriate number of weeks in the semester.

_J.A.W_ All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

_J.A.W_ Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: https://registrar.ufl.edu/pdf/uccconsult.pdf.

_J.A.W_ Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

_J.A.W_ Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

_J.A.W_ The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

_J.A.W_ The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers.

UNIVERSITY of FLORIDA

External Consultation Results (departments with potential overlap or interest in proposed course, if any)

Department	Name and Title
Phone Number	E-mail

Comments

Department	Name and Title
Phone Number	E-mail

Comments

Department	Name and Title
Phone Number	E-mail

Comments

Rev. 10/10

AOM5XXX
APPLIED METHODS IN SMARTAG SYSTEMS
SECTION 1234
SPRING 2022

1. **Catalog Description:** *3 credits.* Design, analysis, and evaluation of SmartAg methods for applications in production agriculture, biological and food engineering, forestry, land, and water resources. Students will learn hardware and software concepts used in SmartAg applications with real-world examples (e.g., UAV's, irrigation, controlled environments for plant and animals, crop modeling). *Offered every other Spring semester.*

2. **Course Coordinator:** Dr. Jonathan Adam Watson
   a. Office location: 263 Frazier Rogers Hall
   b. Telephone: 352-294-6740
   c. E-mail address: jaw7385@ufl.edu
   d. Course site: Canvas e-Learning
   e. Office hours: By appointment

   Instructors: TBD
   a. Office Location
   b. Telephone:
   c. E-address:
   d. Course site: Canvas e-Learning
   e. Office hours:

   Teaching Assistant: XXXXX
   a. Contact: e-Learning
   b. Office hours: By appointment

   IMPORTANT: When contacting the instructors or the teaching assistant, please allow up to 48 hours for a response, not including weekends or holidays. In addition, your instructors want to ensure your assignments are graded in a timely many so please allow for 3-5 school days for your assignments to be graded and returned.

3. **Meeting Times:** Tuesdays and Thursdays XX Period (XX:XX – XX:XX)
4.
5. **Meeting Location**: XXX Frazier Rogers Hall

6. **Pre-requisites and Co-requisites:** Applied Physics.

7. **Course Recommendation:** Science-based graduate student. Working knowledge or basic understanding of general programming language such as Python, C, C++, Visual Basic, or MATLAB.

8. **Course Objectives:**
   Students, upon completing this course, will be able to:

Page | 1

a. Demonstrate proficiency in software and programming of hardware such as microcontrollers for agricultural applications.
b. Select appropriate unmanned aerial systems used in real-time imaging, scouting and field mapping.
c. Apply smart agriculture technology to monitor, control and manage agricultural systems.
d. Analyze data using statistical software packages through applied methods and techniques to solve complex problems in agriculture.
e. Evaluate decision support tools, best management practices, and technologies used to optimize performance, yield, and profit in agricultural operations.

9. **Class Schedule:** Listed assigned meeting times.

Week	Date	Module	Activity	Assignment Due
1	3-Jan	1: SmartAg Hardware	No class	
	4-Jan		No class	
	5-Jan		No class	
	6-Jan		Introductions/M1L1 Lecture	
	7-Jan		No class	HW1
2	10-Jan			
	11-Jan		M1L2	
	12-Jan			EE1
	13-Jan		M1L3	
	14-Jan			HW2
3	17-Jan	2:Software & Programming of Microcontrollers	No Class (MLK Jr. Day)	
	18-Jan		M2L1	
	19-Jan			
	20-Jan		M2L2	
	21-Jan			HW3
4	24-Jan			
	25-Jan		M2L3	
	26-Jan			EE2
	27-Jan		M2L4	HW4
	28-Jan			
5	31-Jan	3: Data in SmartAg Applications		
	1-Feb		M3L1	
	2-Feb			HW5
	3-Feb		M3L2	
	4-Feb			

	7-Feb			
	8-Feb		M3L3	EE3
6	9-Feb			HW6
	10-Feb		M3L4	
	11-Feb			
	14-Feb			
	15-Feb		M4L1	
7	16-Feb	4: Smart Irrigation		HW7
	17-Feb		M4L2	EE4
	18-Feb			
	21-Feb			
	22-Feb		Exam 1	Exam 1
8	23-Feb			HW8
	24-Feb		M5L1	
	25-Feb	5: SmartAg Applications in Controlled Environments		
	28-Feb			
	1-Mar		M5L2	
9	2-Mar			HW9
	3-Mar			EE5
	4-Mar			
	7-Mar		No Class (Spring Break)	
	8-Mar		No Class (Spring Break)	
10	9-Mar		No Class (Spring Break)	HW10
	10-Mar		No Class (Spring Break)	
	11-Mar		No Class (Spring Break)	
	14-Mar			
	15-Mar	6: Decision Support Tools for Agriculture	M6L1	
11	16-Mar			HW11
	17-Mar		M6L2	EE6
	18-Mar			
	21-Mar			
	22-Mar		M7L1	HW12
12	23-Mar			
	24-Mar		M7L2	
	25-Mar	7: Livestock Monitoring and Management Using SmartAg Technology		
	28-Mar			
	29-Mar		M7L3	HW13
13	30-Mar			EE7
	31-Mar		M7L4	
	1-Apr			

Week	Date	Module		
	4-Apr			
	5-Apr		M8L1	
14	6-Apr			HW14
	7-Apr	8: Unmanned	M8L2	
	8-Apr	Aerial Systems		EE8
	11-Apr	Applications in		
	12-Apr	Agriculture	M8L3	HW15
15	13-Apr			
	14-Apr		Project Presentations	Project & Paper
	15-Apr			
	18-Apr			
	19-Apr		Exam 2	Exam 2
16	20-Apr			HW16
	21-Apr		Reading Day	
	22-Apr		Reading Day	
	25-Apr		Finals	
	26-Apr		Finals	
17	27-Apr		Finals	
	28-Apr		Finals	
	29-Apr		Finals	

10. **Material and Supply Fees:** Students are required to purchase an Arduino starter kit, available through Amazon.com which costs approximately $60 plus tax and shipping. https://smile.amazon.com/EL-KIT-008-Project-Complete-Ultimate-TUTORIAL/dp/B01EWNUUUA/ref=sr_1_2_sspa?dchild=1&keywords=vilros+arduino+kit&qid=1597338743&sr=8-2-spons&psc=1&spLa=ZW5jcnlwdGVkUXVhbGlmaWVyPUFFMFVXTE0xMlJEVFEmZW5jcnlwdGVkSWQ9QTA0ODE5MTYzSFBFUDhaSUIwOVpUJmVuY3J5cHRlZEFkSWQ9QTAyODAxODhhQR1BSSk5VVVRDOFEmd2lkZ2V0TmFtZT1zcF9hdGYmYWN0aW9uPWNsaWNrUmVkaXJlY3QmZG9Ob3RMb2dDbGljaz10cnVl

11. **Textbook, Course pack, Technology and Software:**

Required Textbook
- No required textbook. Module handouts available from faculty in Canvas.
- Arduino programming notebook, free e-book

Course Pack
- No required course pack

Technology and Software
- Arduino programming notebook, free e-book

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Graduate Student Reading List

1   Sushanth, G., & Sujatha, S. (2018). IOT Based Smart Agriculture System. In *2018 International Conference on Wireless Communications, Signal Processing and Networking, WiSPNET 2018*. Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.1109/WiSPNET.2018.8538702

2   Mat, I., Mohd Kassim, M. R., Harun, A. N., & Yusoff, I. M. (2019). Smart agriculture using internet of things. In *2018 IEEE Conference on Open Systems, ICOS 2018* (pp. 54–59). Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.1109/ICOS.2018.8632817

3   Roy, S., Ray, R., Roy, A., Sinha, S., Mukherjee, G., Pyne, S., … Hazra, S. (2017). IoT, big data science & analytics, cloud computing and mobile app based hybrid system for smart agriculture. In *2017 8th Industrial Automation and Electromechanical Engineering Conference, IEMECON 2017* (pp. 303–304). Institute of Electrical and Electronics Engineers Inc. https://doi.org/10.1109/IEMECON.2017.8079610

4   Nageswara Rao, R., & Sridhar, B. (2018). IoT based smart crop-field monitoring and automation irrigation system. *Proceedings of the 2nd International Conference on Inventive Systems and Control, ICISC 2018*, (Icisc), 478–483. https://doi.org/10.1109/ICISC.2018.8399118

5   Shamshiri, R. R., Kalantari, F., Ting, K. C., Thorp, K. R., Hameed, I. A., Weltzien, C., … Shad, Z. (2018). Advances in greenhouse automation and controlled environment agriculture: A transition to plant factories and urban agriculture. *International Journal of Agricultural and Biological Engineering*, *11*(1), 1–22. https://doi.org/10.25165/j.ijabe.20181101.3210

6   Gutiérrez, F., Htun, N. N., Schlenz, F., Kasimati, A., & Verbert, K. (2019, August 1). A review of visualisations in agricultural decision support systems: An HCI perspective. *Computers and Electronics in Agriculture*. Elsevier B.V. https://doi.org/10.1016/j.compag.2019.05.053

7   Caria, M., Schudrowitz, J., Jukan, A., & Kemper, N. (2017). Smart farm computing systems for animal welfare monitoring. *2017 40th International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2017 - Proceedings*, 152–157. https://doi.org/10.23919/MIPRO.2017.7973408

8   Kim, J., Kim, S., Ju, C., & Son, H. Il. (2019). Unmanned aerial vehicles in agriculture: A review of perspective of platform, control, and applications. *IEEE Access*, *7*, 105100–105115. https://doi.org/10.1109/ACCESS.2019.2932119

12. Recommended Reading:

None

13. Course Outline:
1. **SmartAg Hardware (Burks)**
   a. Microcomputer and Development Board Platforms
      i. Arduino
   b. Basic interface components, resisters, capacitors, and potentiometers
   c. Sensors, such as, temperature, pressure, flow, force, strain
   d. Data loggers
   e. PLC and Relay-based control
   f. Network Hardware
   g. Applications
2. **Software & Programming of Microcontrollers (Burks)**
   a. Basic C-based programming for Arduino or other micro-controllers
      i. Structure and Flow
      ii. Calling Functions
      iii. Arithmetic Operators
      iv. Loop
      v. If statements
   b. Operating Systems
      i. Android
      ii. iOS
      iii. Windows
   c. Integrating sensors
   d. Evaluating efficacy
3. **Data in SmartAg Applications (TBD)**
   a. Data Collection
      i. Methods
   b. Software
      i. R/Python
   c. Data Analysis
4. **Smart Irrigation (TBD)**
   a. Architecture
      i. System Diagram and Flow Charts
   b. Microcontrollers
   c. GSM
   d. Sensors
      i. Temperature
      ii. Soil
      iii. Humidity
      iv. Light
   e. Actuators
5. **SmartAg Applications in Controlled Environments (Zhang)**
   a. Structural Design Characteristics

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b. Energy
    i. Automated Heating and Cooling Systems
    ii. Efficiency with Advanced Controls
    iii. Sources (e.g., integrated solar systems)
c. Lighting Systems
    i. LEDs with Timers
d. Ventilation
    i. Automatically Controlled
e. Internet of Things (IoT) Monitoring
f. Control Modules
g. Robotics and Automation for Nursery Management

6. Decision Support Tools for Agriculture (TBD)
a. Climate Decision Support Tools and Methods
    i. Agroclimate?
b. Crop modeling
    i. DSSAT
c. Best Management Practices (BMPs)
d. Smart Phone Apps
    i. Chemical Application and Weed Identification
    ii. Machinery Applications
    iii. Farm Economics
    iv. GPS
    v. Integrated Pest Management
    vi. Soils
    vii. Emergency
    viii. Livestock

7. Livestock Monitoring and Management Using SmartAg Technology (TBD)
a. Automated Feeding Systems
b. Containment and Protection
    i. Automated Grazing Management
    ii. Cattle Mustering
    iii. Theft Prevention
    iv. Fencing Damage Notification
c. Livestock Wearables & Collars
    i. Monitoring Reproductive Cycles
    ii. Animal Tracking, Tracing and Location Technologies
    iii. Health and Vitals Monitoring
    iv. Productivity
d. RFID Applications

8. Unmanned Aerial Systems Applications in Agriculture (TBD)
a. UAS for Agricultural Applications
    i. Types of UAS
        1. Multi-rotor

2. Fixed wing
    ii. Applications for UAS
        1. Real-time imaging
        2. Scouting
        3. Field mapping
    iii. Advantages and Disadvantages of UAS Platforms
    iv. Cameras and Sensors
        1. LIDAR/Laser Scanning
    v. Unmanned Aerial Vehicle Operation Software
    vi. Missing Planning
    vii. Navigation Systems
  b. Rules and Regulations for UAS Agricultural Application

14. Grading:

Assignment	Percentage of Final Grade
Homework Sets (16)	20%
Arduino Program and experiment exercises	20%
Mid-term Exam (Modules 1-4)	20%
Final Exam (Modules 5-8)	20%
Term Project & Paper	20%
TOTAL	**100%**

Students who have questions about their grades should contact their professor by e-mail. Do NOT contact the TA about grades assigned.

15. Grades and Grade Points:

Percent	Grade	Grade Points
100.00 – 93.00	A	4.00
92.99 – 90.00	A-	3.67
89.99 – 87.00	B+	3.33
86.99 – 83.00	B	3.00
82.99 – 80.00	B-	2.67
79.99 – 77.00	C+	2.33
76.99 – 73.00	C	2.00
72.99 – 70.00	C-	1.67
69.99 – 67.00	D+	1.33
66.99 – 63.00	D	1.00
62.99 – 60.00	D-	0.67
59.99 – 0.00	E	0.00

Assignments will be marked down for a sloppy presentation and, if excessive, they may be returned un-graded. All assignments must be typed and are due by the dates listed in Canvas by 11:59 PM of the due date unless otherwise specified by the instructor.

For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/.

16. **Attendance and Make-Up Work:** Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.

17. **Online Course Evaluation Process:** Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at: https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email, they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at: https://gatorevals.aa.ufl.edu/public-results/.

18. **Academic Honesty**: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "*We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.*" You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment*."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student

Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code.

19. **Software Use and Technology Assistance**: All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate.

    If you are having issues with technology and software including the Canvas site, please contact the UF Help Desk to resolve any matters. Additional information and resources about technology assistance and technical help can be found in the Canvas site on the page titled Technical Help.

20. **Services for Students with Disabilities**: The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

    0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

21. **Campus Helping Services**: Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.
    - *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575,* **www.counseling.ufl.edu**
        Counseling Services
        Groups and Workshops
        Outreach and Consultation
        Self-Help Library
        Wellness Coaching

    - U Matter We Care, **www.umatter.ufl.edu/**

    - *Career Connections Center,* First Floor JWRU, 392-1601, https://career.ufl.edu/.

    Student Complaints:

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- Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.
- Online Course: http://www.distance.ufl.edu/student-complaint-process

<u>Additional information</u>

Instructors may choose to clarify in their syllabus their teaching philosophy, expectations for classroom behavior, utilization of e-learning, and other information that will help students succeed in the course.

Cover Sheet: Request 15044

Positive Youth Development for the Youth Professional

Info

Process	Course|New|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Kathryn Ivey kbeaty@ufl.edu
Created	6/3/2020 10:58:17 AM
Updated	9/16/2020 4:08:09 PM
Description of request	This request is to create a new course within FYCS focusing on Positive Youth Development for the Youth Professional as an upper-division elective within our major.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Family, Youth and Community Sciences 514932000	Tracy Irani		6/3/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			6/3/2020
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 15044

Info

Request: Positive Youth Development for the Youth Professional
Description of request: This request is to create a new course within FYCS focusing on Positive Youth Development for the Youth Professional as an upper-division elective within our major.
Submitter: Kathryn Ivey kbeaty@ufl.edu
Created: 6/3/2020 10:01:05 AM
Form version: 1

Responses

Recommended Prefix FYC
Course Level 4
Course Number 204
Category of Instruction Advanced
Lab Code None
Course Title Positive Youth Development for the Youth Professional
Transcript Title Positive Youth Development
Degree Type Baccalaureate

Delivery Method(s) On-Campus
Co-Listing No

Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic? No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 3
Course Description This course prepares youth development professionals to provide direct service to youth and emerging adults in non-formal settings. Emphasis is placed on the application of positive youth development principles, practices, and professional skills.

Prerequisites Prerequisites: FYC3001, FYC3201, & FYC4212 – all earning a "C" or better.
Co-requisites N/A
Rationale and Placement in Curriculum This is a instructional and service-learning based course where the principles, practices, and professional skills are applied in positive youth development non-formal settings. This course prepares youth development professionals to provide direct service to youth and emerging adults in non-formal settings. This course can also serve as one of the required 4 internal electives to the major course requirements.

Course Objectives After completing this course, you will be able to:
1.   Understand principles of positive youth development (PYD).
2.   Connect the link between positive youth development to support PYD programs.
3.   Recognize everyday life of low-resourced youth today.
4.   Comprehend the concept of risk and protective factors in society today.
5.   Distinguish the developmental needs and tasks of youth.
6.   Evaluate the concept of a circle of support—an interactive or cooperative support system of family, peers, community, and caring adults.
7.   Observe the support systems necessary for youth to grow and develop healthily.
8.   Apply PYD skill-building activities.
9.   Assess your own personal strengths and weaknesses in communication skills, set personal

goals, and identify improvements.
10.	Identify the essential elements of the PYD program that work in the promotion of positive youth development.

Course Textbook(s) and/or Other Assigned Reading ASSIGNMENTS, READINGS & PODCASTS: All are found in our Canvas course in Files. All course content will be accessible via Canvas and discussed during class time. All links to course assignments are also located in each Assignment in Canvas.

READINGS:
ACT for Youth Center for Community Action. (2020). Research that supports youth development. http://www.actforyouth.net/resources/pyd/pyd_handouts_full-set.pdf

Badger, E. & Bui, Q. (2018). Detailed maps show how neighborhoods shape children for life. The New York Times. https://www.nytimes.com/2018/10/01/upshot/maps-neighborhoods-shape-child-poverty.html

Dotterweich, J. (2015). Positive Youth Development 101: A Curriculum for Youth Work Professionals. http://actforyouth.net/resources/pyd/pyd_pyd101curriculum.pdf

Dotterweich, J. (2019). Building organizational support for PYD. ACT for Youth Center of Excellence. Bronfenbrenner Center for Translational Research. Cornell University. http://actforyouth.net/resources/pyd/pyd-webinar_organizational-support-51619.pdf

Dotterweich, J. (2020). Positive youth development 101 (PowerPoint). ACT for Youth Center of Excellence. Bronfenbrenner Center for Translational Research. Cornell University. http://actforyouth.net/youth_development/professionals/manual.cfm

National Afterschool Association. (2020). Core knowledge and competencies. https://indd.adobe.com/view/52148024-4c17-42d4-9aef-dfef320cf6cf

Partnership for After School Education. (2013). Afterschool youth outcomes inventory. www.pasesetter.org

Simpkins, S. D., Riggs, N. R., Ngo, B., Vest Ettekal, A., & Okamoto, D. (2017). Designing culturally responsive organized after-school activities. Journal of Adolescent Research, 32(1),11 –36. https://doi.org/10.1177/0743558416666169

Wargo, E. (2007). Adolescents and risk: Helping young people make better choices. ACT for Youth Center Excellence. http://www.actforyouth.net/resources/rf/rf_risk_0907.pdf

Youngblade, L. M., Theokas, C., Schulenberg, J., Curry, L., Huang, I-C., & Novak, M., (2007). Risk and promotive factors in families, schools, and communities: A contextual model of positive youth development in adolescence. Pediatrics, 119(1), 47- 53. https://doi.org/10.1542/peds.2006-2089H

PODCASTS:

Dubner, S. J. (2017, July 12). When helping hurts (Ep. 295) [Audio podcast episode]. In Freakanomics. Freakanomics Radio. https://freakonomics.com/podcast/when-helping-hurts/

Winfrey, O. (2018, July 18). Brené Brown: Rising strong [Audio podcast episode]. In Oprah's SuperSoul Conversations. 121cast Pty Ltd. https://omny.fm/shows/oprah-s-supersoul-conversations/bren-brown-rising-strong

Winfrey, O. (2019, July 24). When you know better, you do better. [Audio podcast episode]. In Oprah's SuperSoul Conversations. 121cast Pty Ltd. https://omny.fm/shows/oprah-s-supersoul-conversations/when-you-know-better-you-do-better
Weekly Schedule of Topics Principles of PYD
PYD - Welcome Module
Principles of PYD Module,
Discuss CliftonStrengths
Puberty & Adolescence Module

Original file: Submitted form version 1.pdf

Complete True Colors test
Youth & Technology Module
Youth Development Programming Module
Guest Speaker: Dr. Martie Gillen, Resilience & Adverse Childhood Experiences (ACES)
Advocacy Discussed & Plan of Action Generated
Core Knowledge & Competencies in PYD
Problem Solving
Building Organizational Support
Youth Voice & Engagement Module
Problem Solving Activity for PYD w/ active listening & empathic listening involved
Guest Speaker: Jonathan Leslie, Executive Director, Project Youth Build (PYB) (formerly known as the Institute for Workforce Innovation)
Youth Work Ethics Module
Discuss expectations of UF student during the service-learning component at PYB
Meet with incoming students at PYB and observe their orientation to the program
Article Presentations--students select positive youth development based articles for approval and presentation
Begin weekly site visits to PYB followed with weekly reflections that include journal questions and various discussion-based formats
Weekly site visits--7 in total
Services Opportunities Supports (SOS) Mapping activities (3 times)
Problem Solving Activity
Design a PYD class, based on your knowledge, principles, practices, and applied skills from this semester. Include topics you & your team would like to have in this class/course that best meet the teams goals/needs for the PYD class.
1.   Brainstorm within your teams
a.   Sharing ideas without judgement
2.   Clarify as needed
3.   Narrow down your list to your "Top 10"
4.   Narrow this "Top 10" list down to your Top 3

Grading Scheme GRADING: Total course = 400 Points
•   Exam (1 exam based on course content) (100 Points)
•   Hybrid Team Project (100 Points)
•   Weekly Reflections (60 Points total)
•   Assignments due online that work in conjunction with readings, podcast(s), and guest speakers. See Canvas for details and due dates (40 Points total)
o   PYD Pre & Post Test (0 points)
o   FERPA & Youth Protection Training (YPT) (0 points)
o   PYD Modules (6 Modules = 30 points total)
•   Journal Article Presentation (100 Points total)
o   Discussion Posts (10 points)
o   Article Presentation (90 points)
•   Total Class Points = 400 Points

GRADE RANGES:
A = 93.50% and above   C = 73.50-76.49%
A- = 90.00-93.49%   C- = 70.00-73.49%
B+ = 86.50-89.99%   D+ = 66.50-69.99%
B = 83.50-86.49%   D = 63.50-66.49%
B- = 80.00-83.49%   D- = 60.00-63.49%
C+ = 76.50-79.99%   E = 59.99% and below

Instructor(s) Kate H. Fletcher, M.S., Senior Lecturer

Attendance & Make-up Yes
Accomodations Yes
UF Grading Policies for assigning Grade Points Yes
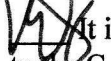**Course Evaluation Policy** Yes
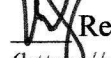
CALS Curriculum Committee
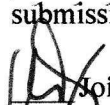# Submission Checklist

NOTE: This checklist must be included with all course and certificate submissions.

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (https://approval.ufl.edu/). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: https://cals.ufl.edu/faculty-staff/committees/.

Review the CALS Syllabus Policy. This document can be viewed at the committee site (https://cals.ufl.edu/faculty-staff/committees/) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

Joint course submissions must include both graduate and undergraduate syllabuses and a separate statement outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. (https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf). Do not use the words demonstrate or understand when listing learning objectives.

The course schedule should be concise and include the appropriate number of weeks in the semester.

All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: https://registrar.ufl.edu/pdf/uccconsult.pdf.

Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers.

Kate H. Fletcher, M.S., Senior Lecturer (she/her/hers)
Academic Advisor,
Co-Faculty Director of the UF in Galway &
Gweedore Study Abroad Program,
& FYCS Club Faculty Advisor
Family, Youth & Community Sciences Department
AEC Leadership Development Doctoral Student

Office: MCCB G085
Phone: (w) 352-273-3517; (m) 352-281-7763
Email: canvas email preferred for class correspondance; khfletch@ufl.edu
Office Hours: Zoom TBD

COURSE DESCRIPTION:
This course prepares youth development professionals to provide direct service to youth and emerging adults in nonformal settings. Emphasis is placed on the application of positive youth development principles, practices, and professional skills.
Prerequisites: FYC3001, FYC3201, & FYC4212 – all earning a "C" or better.

COURSE OBJECTIVES:
After completing this course, you will be able to:
1. Understand principles of positive youth development (PYD).
2. Connect the link between positive youth development to support PYD programs.
3. Recognize everyday life of low-resourced youth today.
4. Comprehend the concept of risk and protective factors in society today.
5. Distinguish the developmental needs and tasks of youth.
6. Evaluate the concept of a circle of support—an interactive or cooperative support system of family, peers, community, and caring adults.
7. Observe the support systems necessary for youth to grow and develop healthily.
8. Apply PYD skill-building activities.
9. Assess your own personal strengths and weaknesses in communication skills, set personal goals, and identify improvements.
10. Identify the essential elements of the PYD program that work in the promotion of positive youth development.

COURSE EXPECTATIONS:
1.) You (the student) are expected to attend each session for the semester. Successful completion of the course requires participating with class discussions, being prepared for class (assigned readings and assignments all found in Canvas), participating in the hybrid team project, presentation of a journal article, and thoughtful engagement with others both in our class, with any community partners, and quest speakers.

2.) Because there is a significant hybrid team project component to the course, there is an expectation that you will conduct yourself in a professional and respectful manner. Please regard this experience as a privilege. Please respect the expectations of each organization that allow us to work with them.

3.) Please commit to the following: engage with course materials and activities, comply with all course requirements, maintain appropriate engagement with your Teachers and classmates throughout the semester (we will use Canvas for email exchanges and WhatsApp for various correspondence), work productively in a team setting both in the classroom and during our hybrid days, and interact professionally in the classroom and in all community settings that coincide with our hybrid days.

ASSIGNMENTS, READINGS & PODCASTS:
All are found in our Canvas course in Files. All course content will be accessible via Canvas and discussed during class time. All links to course assignments are also located in each Assignment in Canvas.

READINGS:

ACT for Youth Center for Community Action. (2020). Research that supports youth development.

http://www.actforyouth.net/resources/pyd/pyd_handouts_full-set.pdf

Badger, E. & Bui, Q. (2018). Detailed maps show how neighborhoods shape children for life. The New

York Times. https://www.nytimes.com/2018/10/01/upshot/maps-neighborhoods-shape-child-

poverty.html

Dotterweich, J. (2015). Positive Youth Development 101: A Curriculum for Youth Work Professionals.

http://actforyouth.net/resources/pyd/pyd_pyd101curriculum.pdf

Dotterweich, J. (2019). Building organizational support for PYD. *ACT for Youth Center of Excellence*.

Bronfenbrenner Center for Translational Research. Cornell University.

http://actforyouth.net/resources/pyd/pyd-webinar_organizational-support-51619.pdf

Dotterweich, J. (2020). Positive youth development 101 (PowerPoint). *ACT for Youth Center of*

Excellence. Bronfenbrenner Center for Translational Research. Cornell University.

http://actforyouth.net/youth_development/professionals/manual.cfm

National Afterschool Association. (2020). Core knowledge and competencies.

https://indd.adobe.com/view/52148024-4c17-42d4-9aef-dfef320cf6cf

Partnership for After School Education. (2013). Afterschool youth outcomes inventory.

www.pasesetter.org

Simpkins, S. D., Riggs, N. R., Ngo, B., Vest Ettekal, A., & Okamoto, D. (2017). Designing culturally

responsive organized after-school activities. *Journal of Adolescent Research, 32*(1),11 –36.

https://doi.org/10.1177/0743558416666169

Wargo, E. (2007). Adolescents and risk: Helping young people make better choices. *ACT for Youth Center*

    Excellence. http://www.actforyouth.net/resources/rf/rf_risk_0907.pdf

Youngblade, L. M., Theokas, C., Schulenberg, J., Curry, L., Huang, I-C., & Novak, M., (2007). Risk and

    promotive factors in families, schools, and communities: A contextual model of positive youth

    development in adolescence. *Pediatrics, 119*(1), 47- 53. https://doi.org/10.1542/peds.2006-

    2089H

PODCASTS:

Dubner, S. J. (2017, July 12). When helping hurts (Ep. 295) [Audio podcast episode]. In Freakanomics.

    Freakanomics Radio. https://freakonomics.com/podcast/when-helping-hurts/

Winfrey, O. (2018, July 18). Brené Brown: Rising strong [Audio podcast episode]. In *Oprah's SuperSoul*

    Conversations. 121cast Pty Ltd. https://omny.fm/shows/oprah-s-supersoul-conversations/bren-

    brown-rising-strong

Winfrey, O. (2019, July 24). When you know better, you do better. [Audio podcast episode]. In *Oprah's*

    SuperSoul Conversations. 121cast Pty Ltd. https://omny.fm/shows/oprah-s-supersoul-

    conversations/when-you-know-better-you-do-better

COMMUNICATION POLICY:
- Preferred method of communication is Canvas email; however, I will correspond with you via UF email.
- Since we will be 100% online this semestser, we will have Zoom office hours.
- Please be mindful that I typically correspond and reply to emails M – F 8:00am – 4:00 pm.

GRADING: Total course = 400 Points
- **Exam** (1 exam based on course content) (100 Points)
- **Hybrid Team Project** (100 Points)
- **Weekly Reflections** (60 Points total)
- **Assignments** due online that work in conjunction with readings, podcast(s), and guest speakers. See Canvas for details and due dates (40 Points total)
  - **Positive Youth Development (PYD) Pre & Post Test** (0 points)
  - **Youth Protection Training** (0 points)
  - **PYD Modules via ACT for Youth** (6 Modules = 30 points total)
  - **Brené Brown Podcast Episode** (4 Points)
  - **When Helping Hurts Podcast Episode** (3 points)

- o **When You Know Better, You Do Better Podcast Episode** (3 points)

- **Journal Article Presentation** (100 Points total)
  - o **Discussion Posts** (10 points)
  - o **Article Presentation** (90 points)

- **Total Class Points = 400 Points**

GRADE RANGES:

A = 93.50% and above	C = 73.50-76.49%
A- = 90.00-93.49%	C- = 70.00-73.49%
B+ = 86.50-89.99%	D+ = 66.50-69.99%
B = 83.50-86.49%	D = 63.50-66.49%
B- = 80.00-83.49%	D- = 60.00-63.49%
C+ = 76.50-79.99%	E = 59.99% and below

All of the following must be true for you to be eligible to receive a grade of Incomplete or "I:"
1. You completed a major portion of the course work with a passing grade (C or better),
2. You are unable to complete course requirements because of documented circumstances beyond your control, and
3. You and the instructor have discussed the situation prior to the final week of class (except under emergency conditions).

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

STUDENTS WITH VARYING ABILITIES:
Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter, which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Policy regarding testing accommodations:
Any student who requires testing accommodations must follow university procedure for securing the accommodations. Please see https://www.dso.ufl.edu/drc/students for how to access resources and setting up accommodations.

Students who require testing accommodations should follow DRC policy for making an appointment to take the test(s) at the DRC. Do not assume that I can provide additional assistance for testing needs. If you fail to follow through on making arrangements with the DRC to take a test, you will take the test with the rest of the class and will be given the same amount of time to take the test as the rest of the class.

ACADEMIC HONESTY:
UF students are bound by The Honor Pledge, which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code." On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honorcode/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class.

CAMPUS HELPING RESOURCES:
Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's resources. The following resources are available at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

HEALTH AND WELLNESS RESOURCES:
- U Matter, We Care:
  If you or a friend is in distress, please contact umatter@ufl.edu or 352 392- 1575 so that a team member can reach out to the student.
- Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
- Sexual Assault Recovery Services (SARS)
- Student Health Care Center, 392-1161.
- University Police Department, 392-1111 (or 9-1-1 for emergencies). http://www.police.ufl.edu/

ACADEMIC RESOURCES:
- E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.
- Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. http://www.crc.ufl.edu/
- Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
- Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/
- Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/
- Student Complaints Campus: https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf
- On-Line Students Complaints: http://www.distance.ufl.edu/student-complaint- process

UF GRADING POLICIES FOR ASSIGNING GRADE POINTS REQUIRED:
Please confirm that you have read and understand the University of Florida Grading policies. Information on current UF grading policies for assigning grade points is required to be included in the course syllabus. The following link may be used directly in the syllabus:
- https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx
- https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

ONLINE COURSE EVALUATION PROCESS:
Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Click here for guidance on how to give feedback in a professional and respectful manner. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

Week	Zoom Days	In Class Activities	Assignments to be Completed Color Coded by Due Date	Hybrid Class Days & Weekly Reflections
1	July 6 ———— July 8 ———— July 10	→Take PYD Pre-test → PYD4TYP – discuss class expectations, syllabus, Canvas use, & Team Hybrid Project PYB → ACT for Youth - PYD 101 PYD Narrated by Julia Dotterweich ———————————— **Guest Speaker:** → Jonathan Leslie – Executive Director w. Project Youth Build → Discuss Hybrid Team Project	→ CliftonStrengths & True Colors – These will be discussed in class on July 15 → Article Selection Submission 7/6 ———————————— → YPT → Watch *Paper Tigers* Movie Prior to coming to class on July 13 → Article: Sign Up to Present Article 7/8 ———————————— **ACT for Youth** → PYD – Welcome Module & Principles of PYD Module	**July 10** **Begin Hybrid Team Project (HTP) – Brainstorming** Each Team Member will Brainstorm HTP ideas, goals & objectives for the PYB topic – a Googledoc is provided in Modules ———————————— Reflection Week 1 Due by 4:00pm July 10
2	July 13 ———— July 15 ———— July 17	**Guest Speaker:** → Dr. Martie Gillen on ACES → Discussion – ACES, Trauma, & Resiliency in Youth & Emerging Adults → Resiliency Research & PYD video ———————————— → Discuss CliftonStrengths → Discuss True Colors test, personality & teamwork pptx → Positive Youth Development Slides	→ Watch *Adverse Childhood Experiences: What Science Tells Us and How to Foster Resilience* Prior to coming to class on July 15 → Article: Shared Presentation Article 7/13 ———————————— Listen: *Brené Brown's Rising Strong* Podcast after class → Article Presentation Submission 7/15 ———————————— **ACT for Youth** → PYD Puberty & Adolescence Module	**July 17** **Match Your Strengths (Clifton, True Color & Interpersonal Skills) with HTP ideas, goals and objectives to be completed by You as a member the team** Begin working & collaborating on your goals & objectives – checking in with your teammates ———————————— Reflection Week 2 Due by 4:00pm July 17

3	July 20 ———— July 22 ———— July 24	→ **Emerging Adulthood ppt** → **The 5 C's.ppt** → **Core Knowledge & Competencies in PYD ppt** ———————————— → **PYD Active Listening Skills discussed & practiced with feedback loop included** → **Discuss Building Organizational Support for PYD**	→ **Article Presentation 1 Begins – 7/20** ———————————— → **Watch Webinar:** *Building Organizational Support for PYD* **Prior to coming to class on July 22** → **Article Presentation 2 – 7/22** ———————————— **ACT for Youth → Youth & Technology Module**	**July 24 Continue to work on your goals & objectives – checking in with your teammates** ———————————— **Reflection Week 3 Due by 4:00pm July 24**
4	July 27 ———— July 29 ———— July 31	**Guest Speaker: → Gerry Altamirano MRC, CRC |Assistant Dean & Director | Disability Resource Center** ———————————— →**SOS Framing explained** → **Watch Obstacles to Youth Engagement SOS Mapping "Julie" Activity w/ active listening involved (feedback loop included)**	→ **Listen:** *When You Know Better You Do Better* **- Podcast Prior to coming to class on July 27** → **Article Presentation 3 – 7/27** ———————————— → **Article Presentation 4 – 7/29** ———————————— **ACT for Youth → Youth Development Programming Module**	**July 31 Begin to write report & prepare presentation – based on your collaboration** ———————————— **Reflection Week 4 Due by 4:00pm July 31**

5	Aug 3 _____ **Aug 5** _____ Aug 7	→ **Discussion regarding When Helping Hurts podcast** → **Problem Solving Activity for PYD w/ active listening involved (feedback loop included)** _____ → **Discuss & Create Exam**	→ **Listen:** *When Helping Hurts* **- Podcast 51:54 Prior to coming to class on Aug 3** → **Article Presentation 5 & 6 – 8/3** _____ → **Article Presentation 7 – 8/5** _____ **ACT for Youth** → **Youth Voice & Engagement Module**	**Aug 7** **Prepare & Submit HTP Final Submission Draft – feedback will be provided by instructors no later than** _____ **Reflection Week 5 Due by 4:00pm Aug 7**
6	Aug 10 _____ **Aug 12** _____ Aug 14	→ **Exam Aug 10** → **Bring on the Learning Revolution Tedtalk w. Sir Ken Robinson** _____ → **Present HTP via Zoom** → **Design a PYD Course** → **Take PYD Post-test**	**ACT for Youth** →**Youth Work Ethics Module**	**Aug 14** **Submit Final HTP via Canvas Assignments** _____ **Reflection Week 6 Due by 4:00pm Aug 14**

Cover Sheet: Request 15226

Animal Genetics Certificate

Info

Process	Certificate|New|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Raluca Mateescu RALUCA@UFL.EDU
Created	8/20/2020 6:23:20 PM
Updated	8/21/2020 12:45:10 PM
Description of request	The Animal Genetics certificate will attract students and postgraduate professionals to the field and to campus, will encourage students to engage in further study of genetics. Advances in genomic technologies already revolutionizes the field of animal genetics and this certificate will prepare and train students for future educational and employment opportunities. It is imperative that our students understand the complexities of agricultural systems and are educated about the innovation, diversity and technological advances characterizing this field.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 514909000	Saundra Tenbroeck		8/21/2020
CALS CC Checklist.pdf ANSI 4XXX Genetic Analyses Complex Traits Syllabus .docx ANS 3384C Syllabus Fall 2020.docx ANS 4388 Syllabus Fall 2020.pdf ans_4382_6905_brooks.pdf					8/20/2020 8/20/2020 8/20/2020 8/20/2020 8/20/2020
College	Pending	CALS - College of Agricultural and Life Sciences			8/21/2020
No document changes					
Office of Institutional Planning and Research					
No document changes					
Associate Provost for Undergraduate Affairs					
No document changes					
University Curriculum Committee					
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					

Step	Status	Group	User	Comment	Updated
Academic Assessment Committee Notified					
No document changes					
College Notified					
No document changes					

Step	Status	Group	User	Comment	Updated
Academic Assessment Committee Notified					

Certificate|New for request 15226

Info

Request: Animal Genetics Certificate
Description of request: The Animal Genetics certificate will attract students and postgraduate professionals to the field and to campus, will encourage students to engage in further study of genetics. Advances in genomic technologies already revolutionizes the field of animal genetics and this certificate will prepare and train students for future educational and employment opportunities. It is imperative that our students understand the complexities of agricultural systems and are educated about the innovation, diversity and technological advances characterizing this field.
Submitter: Raluca Mateescu RALUCA@UFL.EDU
Created: 8/20/2020 6:15:48 PM
Form version: 1

Responses

Certificate Name Animal Genetics
Transcript Title Animal Genetics
Credits 11
Level Baccalaureate
CIP Code 01.0901
Degree Program Animal Sciences
Effective Term Earliest Available
Effective Year Earliest Available
Certificate Description This Animal Genetics certificate provides students a background in Mendelian, population and quantitative genetic inheritance, in-dept knowledge of genetic improvement and management programs, and the application of genetic principles towards the improvement of the health and production of livestock and domestic animals.
Requirements for Admission Sophomore standing or departmental permission. The certificate program accepts both UF students and non-degree seeking students.
Requirements for Completion Eleven credits that consist of the courses listed below. Students must maintain a C or better in each course to earn the certificate.
ANS3384C Genetics of Domestic Animals (3 credit hours, letter graded)
ANS4388 Canine and Feline Genetics (3 credit hours, letter graded)
ANS4382 Equine Genetics (2 credit hours, letter graded)
ANS4XXX Genetic Analyses of Complex Traits in Livestock (3 credit hours, letter graded)
Rationale and Place in Curriculum The world demand for animal-based food products is anticipated to increase by 70% by 2050. Meeting this demand with a minimal impact on the environment will require the implementation of advanced technologies, and methods to improve the genetic quality of livestock are expected to make a major contribution. The University of Florida is uniquely poised to address these challenges by increasing the knowledge about animal genetics among undergraduate students, catalyze and coordinate genetics and genomics education to achieve advances that generate societal and environmental benefits.

Animals and livestock contribute 40 % of the global value of agricultural output and contribute to the livelihoods and food security of almost a billion people worldwide. Advances in animal breeding, genetics, and genomics are facilitating a more efficient and sustainable industry. The Animal Genetics certificate will attract students and postgraduate professionals to the field and to campus, will encourage students to engage in further study of genetics. Advances in genomic technologies already revolutionizes the field of animal genetics and this certificate will prepare and train students for future educational and employment opportunities. It is imperative that our students understand the complexities of agricultural systems and are educated about the innovation, diversity and technological advances characterizing this field.

It is expected that many students enrolling in this certificate program will have a major in Animal Sciences. Students interested in companion animals and agricultural science will develop expertise in the application of emerging technologies in genomics, computational biology and system biology in genetic improvement programs addressing current and future challenges facing livestock industries. Real life examples and practical applications will be key components of this program in order to appreciate the intricacies of genetics and the future of genomic research for the improvement and

management of animals. The proposed Animal Genetics certificate is highly compatible as an academic component option within the current Animal Science major. The courses offered do not overlap with any other certificate offerings statewide.

Academic Learning Compact: The Undergraduate Certificate in Animal Genetics is offered by the Department of Animal Sciences. Completion of the certificate will enable students to think critically and apply principles and knowledge of animal genomics, computational biology, molecular and cell biology, and quantitative genetics to develop animal production systems and alternative strategies to maximize animal, human, environmental, and economic health. Students will gain knowledge to evaluate genetic diversity, develop and critically evaluate selection schemes for implementing genetic improvement in livestock and domestic animals. Students will acquire knowledge about adoption of new technology and innovative practices in genetic improvement programs while maintaining sustainability. This program provides a solid foundation for those planning careers in medicine, agriculture and the pharmaceutical industry in diverse public and private settings. Students can also combine their studies of genetics with related fields such as business or public policy, with a view to managerial positions in biotechnology fields, or positions in government or law.

Student Learning Outcomes Student Learning Outcomes:

Content
1. Identify and characterize basic principles of animal breeding and genetics, use them to predict phenotype based on genotype. (ANS3384C, ANS4388, ANS4382). Assessment types: course-related quiz/exam; writing assignment.
2. Describe the mode of inheritance for various traits in domestic and companion animals. (ANS3384C, ANS4388, ANS4382). Assessment types: course-related quiz/exam; writing assignment.
3. Classify various factors that affect the rate of genetic change in animal breeding improvement. (ANS3384C, ANS4XXX). Assessment types: course-related quiz/exam; writing assignment.

Critical Thinking
4. Describe and analyze different methods of gene mapping including linkage association analyses. (ANS3384C, ANS4388, ANS4382, ANS4XXX) Assessment types: course-related quiz/exam; writing assignment.
5. Describe the symptoms and implications of genetic disease in horses, cats and dogs. (ANS4388, ANS4382) Assessment types: course-related quiz/exam; writing assignment; final project
6. Discuss applications of biotechnology and genomics to animal breeding and genetics. (ANS3384C, ANS4388, ANS4382, ANS4XXX) Assessment types: course-related quiz/exam; writing assignment; final project

Communication
7. Evaluate and report the use of current genetic tests to plan a breeding program. (ANS4388, ANS4382, ANS4XXX). Assessment types: course-related quiz/exam; writing assignment; final project
8. Propose functional genomic approaches and develop strategies to find genes responsible for genetic variation in complex traits. (ANS4XXX). Assessment types: course-related quiz/exam; writing assignment; final project

CALS Curriculum Committee
Submission Checklist

NOTE: This checklist must be included with all course and certificate submissions.

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (https://approval.ufl.edu/). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

X___ It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: https://cals.ufl.edu/faculty-staff/committees/.

X___ Review the CALS Syllabus Policy. This document can be viewed at the committee site (https://cals.ufl.edu/faculty-staff/committees/) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

X___ Joint course submissions must include both graduate and undergraduate syllabuses and a separate statement outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

X___ The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

X   The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. (https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf). Do not use the words demonstrate or understand when listing learning objectives.

X   The course schedule should be concise and include the appropriate number of weeks in the semester.

X   All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

X   Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: https://registrar.ufl.edu/pdf/uccconsult.pdf.

X   Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

X   Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

X   The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

X   The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers.

Cover Sheet: Request 15264

Microbiome and Health Online Certificate

Info

Process	Certificate|New|Grad|Revised
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Graciela Lorca glorca@ufl.edu
Created	9/10/2020 5:10:16 PM
Updated	9/16/2020 11:53:28 AM
Description of request	We seek approval for a New Online Certificate on Microbiome and Health. This Certificate aims to provide students with knowledge in the emerging area of the microbiome and their contributions to human health.

Actions

Step	Status	Group	User	Comment	Updated
Department	Transferred	CALS - Agricultural and Life Sciences - General 514903000	Joel H Brendemuhl		9/11/2020
Microbiome and Health Online Certificate Program Plan.pdf Required Courses_syllabus.pdf Elective Courses_syllabus.pdf					9/10/2020 9/10/2020 9/10/2020
Department	Approved	CALS - Microbiology and Cell Science 514910000	Eric Triplett		9/11/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			9/11/2020
No document changes					
OIPR					
No document changes					
Graduate Council					
No document changes					
Graduate School Notified					
No document changes					
University Curriculum Committee Notified					
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					
No document changes					
Academic Assessment Committee Notified					
No document changes					

Step	Status	Group	User	Comment	Updated
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Certificate|New for request 15264

Info

Request: Microbiome and Health Online Certificate
Description of request: We seek approval for a New Online Certificate on Microbiome and Health.

This Certificate aims to provide students with knowledge in the emerging area of the microbiome and their contributions to human health.
Submitter: Graciela Lorca glorca@ufl.edu
Created: 9/10/2020 1:24:43 PM
Form version: 1

Responses

Certificate Name Microbiome and Health
Transcript Title Microbiome and Health
Credits 12
Level Graduate
CIP Code 26.0503
Degree Program Medical Microbiology and Bacteriology
Effective Term Earliest Available
Effective Year Earliest Available
Certificate Description This Certificate aims to provide students with knowledge in the emerging area of the microbiome and their contributions to human health. Recently, the field of Microbiome has become a driver in key areas of research, such as health homeostasis, disease onset and progression as well as their use as therapeutics.
Requirements for Admission For entry into University of Florida's online graduate certificate in Microbiome and Health students must have:

•   A Bachelor of Arts (BA) or Bachelor of Science (BS) degree from a regionally accredited US institution or an international equivalent undergraduate degree.
•   A strong science foundation, such as coursework related to microbiology, biology, ecology and chemistry (Note: online introductory microbiology courses are available to potential applicants if additional course work is needed, see below).
No GREs are required and students are allowed to enroll one semester at a time with no long- term commitment. Students are not required to enroll in a UF graduate degree program to complete the certificate. Completed credits earned with a grade of B or better, however, may potentially be applied to a future advanced degree in Microbiology and Cell Science at UF. Enrolled graduate students can earn this Microbiome certificate to complement their current M.S. or Ph.D. degree programs.

Requirements for Completion Requirements for completion:
To complete the certificate students must complete:
1.   Required Courses - 9 credits by selecting any of the following:

•   MCB 6670c The Microbiome (S), 3 credits, letter-graded
•   MCB 6937 Special topics: Applied Artificial Intelligence in Biological Sciences (F), 3 credits, letter-graded
•   MCB 6424: Probiotics (S), 3 credits, letter-graded
•   MCB 6937: Specials topics: Antimicrobial Resistance (F, S), 3 credits, letter-graded
•   MCB 5505: Virology (F, S), 3 credits, letter-graded

2.   Elective Courses - 3 credits by selecting any of the following:
•   MCB 6670c The Microbiome (S), 3 credits, letter-graded
•   MCB 6937 Special topics: Applied Artificial Intelligence in Biological Sciences (F), 3 credits, letter-graded
•   MCB 6424: Probiotics (S), 3 credits, letter-graded
•   MCB 6937: Specials topics: Antimicrobial Resistance (F, S), 3 credits, letter-graded
•   MCB 5505: Virology (F, S), 3 credits, letter-graded
•   MCB 6937: Bacterial Physiology (F), 3 credits, letter-graded
•   PCB 5235: Immunology (S), 3 credits, letter-graded
•   MCB 5205: Microbiology of Human Pathogens (F), 3 credits, letter-graded

Required Courses: select three of the following (9 credits total):

MCB 6670C The Microbiome (3 credits; Spring) - Increase knowledge, appreciation and use of genomics pertaining to the breadth of microbial diversity across a wide variety of organisms and habitats using methods that do not require culturing of the myriad of inhabitants. Students will use tools, practice analysis and interpretation of genomic data sets to analyze different microbiomes.

MCB 6937 Special topics: Applied Artificial Intelligence in Biological Sciences (3 credits, Fall) - Introductory course to understand some concepts of Artificial Intelligence, and the applications of these methods over Biological sciences. This course has been designed to put the emphasis in Biology, which means that the idea is to learn the concepts of some artificial intelligence strategies, why it has been used for a particular problem, and what is the answer that the researcher would obtain after using a particular strategy. Students will learn how to code in R, build R scripts, identifying the problem to tackle, and use the adequate statistical tools to address this problem. Once done, the students will learn strategies to test hypotheses through "making the computer to think about the problem and solve it".

MCB6424 Probiotics (3 credits; Spring) - This course will cover the use of microorganisms to promote a health status in the animal and human host. This course will provide a conceptual background in microbiology and immunology for the use of microorganisms for the prevention or treatment of animal and human diseases.

MCB6937 Antimicrobial Resistance (3 credits; Spring, Fall) - This course covers content related to antimicrobial resistance: the origins of antimicrobial resistance, dissemination, mechanisms, therapeutics, and impact on healthcare, agriculture, and the environment. This course mainly concentrates on resistance in bacteria, but will also discuss other organisms, including viruses, parasites, fungi, and cancer.

MCB5505 Virology (3 credits; Fall, Spring) - This course is for graduate students and is designed to introduce you to the field of virology, teach you the components of viruses, their replication strategies and the human diseases caused by common and emerging pathogen. This course will also cover the importance of viruses in maintenance of human health (e.g. the virome, gut homeostasis and involvement in development of non-viral disorders) and how viruses can be manipulated by scientists for the treatment of disease.

Elective Courses: select one of the following (3 credits total):
One of the five required courses can also be selected as an elective

MCB 6937 – Bacterial Physiology (3 credits; Fall) – This course explores the structure and physiology of bacterial cells. The principles of energy and biosynthetic metabolism will be examined in aerobic and anaerobic microorganisms. Several current research topics in microbiology will also be covered including microbial proteases, chaperones, chemotaxis, antimicrobial resistance, and adaptations of microbes in extreme environments.

PCB 5235 ¬– Immunology (3 credits; Spring) - is a comprehensive course in basic immunology designed for graduate students. Emphasis will be placed on fundamental aspects of immunology, and its application to real-world immunological research and concerns. Upon successful completion of the course, students will have a solid immunological information foundation suitable for future educational endeavors in the areas of biomedical research, or human/veterinary clinical applications. In addition, students will have a fundamental understanding of basic immunological experimental design. Student assessments in PCB 5235 will focus heavily on immunological facts, concepts, and problem solving based on the application of concepts. PCB 5235 will be co-taught with PCB 4233.

MCB 5205 - Microbiology of Human Pathogens (3 credits; Fall) - Survey of advanced topics and current scientific literature related to human host-pathogen interactions and microbial pathogenesis, focusing on emerging bacterial and viral pathogens as agents of human disease, biosecurity, molecular identification methods, spread of multi-drug resistance among bacterial pathogens, drug discovery and alternative treatment research.

Elective Course – This course does not count towards certificate program credits but may be recommended to students lacking a foundation in microbiology.

MCB 6937 Special Topics – Biology of Microorganisms (3 credits; Fall, Spring, Summer) – This course examines the structure, nutrition and growth of microorganisms; characterization of representative microorganisms and viruses; metabolic properties and introduction to microbial genetics, immunology and pathogenesis of microorganisms. Note this course is intended only for students who did not complete an upper division Microbiology course as an undergraduate student.

Suggested Semester-by-Semester Plan: The certificate program is designed to be completed in one academic year; however, there is no time limit for completed course certificate credits. Students may begin the program in any semester during the academic year and also have the option of including courses during the summer semester. Students must take a minimum of 12 credits from the course selection to complete the Microbiome and heath certificate program.

A suggested plan is as follows:

Fall Semester: (6 credits)
• MCB6937 Special topics: Applied Artificial Intelligence in Biological Sciences (F), 3 credits, letter-graded
• MCB5505: Virology (F, S) - 3 credits, letter-graded
• MCB6937: Specials topics: Antimicrobial Resistance (F, S), 3 credits, letter-graded
• MCB 6937: Bacterial Physiology (F), 3 credits, letter-graded
• MCB 5205: Microbiology of Human Pathogens (F), 3 credits, letter-graded

Spring Semester: (6 credits)
• MCB 6670C - The Microbiome (S), 3 credits, letter-graded
• MCB6424: Probiotics (S), 3 credits, letter-graded
• MCB6937: Specials topics: Antimicrobial Resistance (F, S), 3 credits, letter-graded
• MCB5505: Virology (F, S) - 3 credits, letter-graded
• PCB 5235: Immunology (S), 3 credits, letter-graded

Rationale and Place in Curriculum The requirements for the Microbiome and Health Online Certificate will provide students with expertise in this rapidly expanding field of microbiology.

Students obtaining the certificate would acquire skills to assist them in understanding key concepts in microbiome, host/microbe interactions, and advances in microbiome research. Additionally, students will develop core competency in current technologies to study the microbiome and evaluation strategies, synthesizing key primary literature in the field and building critical thinking and writing skills.

We anticipate this online certificate program will encourage and facilitate non-degree students to enroll into our online master's program. This program is unique and would build on our department's research expertise and therefore content would not overlap with other certificates at UF.

Student Learning Outcomes By the end of this certificate program graduate students should be able to:

1) Develop an in-depth comprehension and mastery of the fundamental concepts and methodology to study the microbiome;
2) Integrate the knowledge gained in microbiome field with health outcomes and its translation into therapies;
3) Analyze and discuss primary literature in the field of microbiome to improve critical thinking and evaluation skills; and
4) Refine scientific communication skills through writing scientific critiques, blogs and abstracts of primary literature articles.

CALS Curriculum Committee
Submission Checklist

NOTE: This checklist must be included with all course and certificate submissions.

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (https://approval.ufl.edu/). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

GL   It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: https://cals.ufl.edu/faculty-staff/committees/.

GL   Review the CALS Syllabus Policy. This document can be viewed at the committee site (https://cals.ufl.edu/faculty-staff/committees/) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

N/A   Joint course submissions must include both graduate and undergraduate syllabuses and a separate statement outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

GL   The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

GL The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. (https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf). Do not use the words demonstrate or understand when listing learning objectives.

GL The course schedule should be concise and include the appropriate number of weeks in the semester.

GL All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

N/A Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: https://registrar.ufl.edu/pdf/uccconsult.pdf.

GL Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

N/A Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

GL The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

GL The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers.

Microbiome and Health Online Certificate Program Plan

Overview – Catalog/Website description of certificate program

This Certificate aims to provide students with knowledge in the emerging area of the microbiome and their contributions to human health. Recently, the field of Microbiome has become a driver in key areas of research, such as health homeostasis, disease onset and progression as well as their use as therapeutics.

Rationale and place in the curriculum:
The requirements for the Microbiome and Health Online Certificate will provide students with expertise in this rapidly expanding field of microbiology.

Students obtaining the certificate would acquire skills to assist them in understanding key concepts in microbiome, host/microbe interactions, and advances in microbiome research. Additionally, students will develop core competency in current technologies to study the microbiome and evaluation strategies, synthesizing key primary literature in the field and building critical thinking and writing skills.

We anticipate this online certificate program will encourage and facilitate non-degree students to enroll into our online master's program. This program is unique and would build on our department's research expertise and therefore content would not overlap with other certificates at UF.

Certificate Program Student Learning Outcomes:

By the end of this certificate program graduate students should be able to:

1) Develop an in-depth comprehension and mastery of the fundamental concepts and methodology to study the microbiome;
2) Integrate the knowledge gained in microbiome field with health outcomes and its translation into therapies;
3) Analyze and discuss primary literature in the field of microbiome to improve critical thinking and evaluation skills; and
4) Refine scientific communication skills through writing scientific critiques, blogs and abstracts of primary literature articles.

Requirements for Entry:
For entry into University of Florida's online graduate certificate in Microbiome and Health students must have:

- A Bachelor of Arts (BA) or Bachelor of Science (BS) degree from a regionally accredited US institution or an international equivalent undergraduate degree.
- A strong science foundation, such as coursework related to microbiology, biology, ecology and chemistry (Note: online introductory microbiology courses

are available to potential applicants if additional course work is needed, see below).

No GREs are required and students are allowed to enroll one semester at a time with no long- term commitment. Students are not required to enroll in a UF graduate degree program to complete the certificate. Completed credits earned with a grade of B or better, however, may potentially be applied to a future advanced degree in Microbiology and Cell Science at UF. Enrolled graduate students can earn this Microbiome certificate to complement their current M.S. or Ph.D. degree programs.

Credits Required: 12

Requirements for completion:
To complete the certificate students must complete:

1. Required Courses - **9 credits** by selecting any of the following:

   - MCB 6670c The Microbiome (S), 3 credits, letter-graded
   - MCB 6937 Special topics: Applied Artificial Intelligence in Biological Sciences (F), 3 credits, letter-graded
   - MCB 6424: Probiotics (S), 3 credits, letter-graded
   - MCB 6937: Specials topics: Antimicrobial Resistance (F, S), 3 credits, letter-graded
   - MCB 5505: Virology (F, S), 3 credits, letter-graded

2. Elective Courses - **3 credits** by selecting any of the following:

   - MCB 6670c The Microbiome (S), 3 credits, letter-graded
   - MCB 6937 Special topics: Applied Artificial Intelligence in Biological Sciences (F), 3 credits, letter-graded
   - MCB 6424: Probiotics (S), 3 credits, letter-graded
   - MCB 6937: Specials topics: Antimicrobial Resistance (F, S), 3 credits, letter-graded
   - MCB 5505: Virology (F, S), 3 credits, letter-graded
   - MCB 6937: Bacterial Physiology (F), 3 credits, letter-graded
   - PCB 5235: Immunology (S), 3 credits, letter-graded
   - MCB 5205: Microbiology of Human Pathogens (F), 3 credits, letter-graded

Required Courses: select three of the following (9 credits total):

MCB 6670C The Microbiome (3 credits; Spring) - Increase knowledge, appreciation and use of genomics pertaining to the breadth of microbial diversity across a wide variety of organisms and habitats using methods that do not require culturing of the myriad of

inhabitants. Students will use tools, practice analysis and interpretation of genomic data sets to analyze different microbiomes.

MCB 6937 Special topics: Applied Artificial Intelligence in Biological Sciences (3 credits, Fall) - Introductory course to understand some concepts of Artificial Intelligence, and the applications of these methods over Biological sciences. This course has been designed to put the emphasis in Biology, which means that the idea is to learn the concepts of some artificial intelligence strategies, why it has been used for a particular problem, and what is the answer that the researcher would obtain after using a particular strategy. Students will learn how to code in R, build R scripts, identifying the problem to tackle, and use the adequate statistical tools to address this problem. Once done, the students will learn strategies to test hypotheses through "making the computer to think about the problem and solve it".

MCB6424 Probiotics (3 credits; Spring) - This course will cover the use of microorganisms to promote a health status in the animal and human host. This course will provide a conceptual background in microbiology and immunology for the use of microorganisms for the prevention or treatment of animal and human diseases.

MCB6937 Antimicrobial Resistance (3 credits; Spring, Fall) - This course covers content related to antimicrobial resistance: the origins of antimicrobial resistance, dissemination, mechanisms, therapeutics, and impact on healthcare, agriculture, and the environment. This course mainly concentrates on resistance in bacteria, but will also discuss other organisms, including viruses, parasites, fungi, and cancer.

MCB5505 Virology (3 credits; Fall, Spring) - This course is for graduate students and is designed to introduce you to the field of virology, teach you the components of viruses, their replication strategies and the human diseases caused by common and emerging pathogen. This course will also cover the importance of viruses in maintenance of human health (e.g. the virome, gut homeostasis and involvement in development of non-viral disorders) and how viruses can be manipulated by scientists for the treatment of disease.

Elective Courses: select one of the following (3 credits total):
One of the five required courses can also be selected as an elective

MCB 6937 – Bacterial Physiology *(3 credits; Fall)* – This course explores the structure and physiology of bacterial cells. The principles of energy and biosynthetic metabolism will be examined in aerobic and anaerobic microorganisms. Several current research topics in microbiology will also be covered including microbial proteases, chaperones, chemotaxis, antimicrobial resistance, and adaptations of microbes in extreme environments.

PCB 5235 – Immunology *(3 credits; Spring)* - is a comprehensive course in basic immunology designed for graduate students. Emphasis will be placed on fundamental aspects of immunology, and its application to real-world immunological research and concerns. Upon successful completion of the course, students will have a solid immunological information foundation suitable for future educational endeavors in the areas of biomedical research, or human/veterinary clinical applications. In addition, students will have a fundamental understanding of basic immunological experimental design. Student assessments in PCB 5235 will focus heavily on immunological facts, concepts, and problem solving based on the application of concepts. PCB 5235 will be co-taught with PCB 4233.

MCB 5205 - Microbiology of Human Pathogens *(3 credits; Fall)* - Survey of advanced topics and current scientific literature related to human host-pathogen interactions and microbial pathogenesis, focusing on emerging bacterial and viral pathogens as agents of human disease, biosecurity, molecular identification methods, spread of multi-drug resistance among bacterial pathogens, drug discovery and alternative treatment research.

Elective Course – This course does not count towards certificate program credits but may be recommended to students lacking a foundation in microbiology.

MCB 6937 Special Topics – Biology of Microorganisms (3 credits; Fall, Spring, Summer) – This course examines the structure, nutrition and growth of microorganisms; characterization of representative microorganisms and viruses; metabolic properties and introduction to microbial genetics, immunology and pathogenesis of microorganisms. Note this course is intended only for students who did not complete an upper division Microbiology course as an undergraduate student.

Suggested Semester-by-Semester Plan: The certificate program is designed to be completed in one academic year; however, there is no time limit for completed course certificate credits. Students may begin the program in any semester during the academic year and also have the option of including courses during the summer semester. Students must take a minimum of 12 credits from the course selection to complete the Microbiome and heath certificate program.

A suggested plan is as follows:

Fall Semester: (6 credits)

- MCB6937 Special topics: Applied Artificial Intelligence in Biological Sciences (F), 3 credits, letter-graded
- MCB5505: Virology (F, S) - 3 credits, letter-graded
- MCB6937: Specials topics: Antimicrobial Resistance (F, S), 3 credits, letter-graded

- MCB 6937: Bacterial Physiology (F), 3 credits, letter-graded
- MCB 5205: Microbiology of Human Pathogens (F), 3 credits, letter-graded

Spring Semester: (6 credits)

- MCB 6670C - The Microbiome (S), 3 credits, letter-graded
- MCB6424: Probiotics (S), 3 credits, letter-graded
- MCB6937: Specials topics: Antimicrobial Resistance (F, S), 3 credits, letter-graded
- MCB5505: Virology (F, S) - 3 credits, letter-graded
- PCB 5235: Immunology (S), 3 credits, letter-graded

Cover Sheet: Request 14428

A n Executive Ph.D. concentration in Microbiology and Cell Science

Info

Process	Concentration|New/Modify/Close|Grad/Pro/Interdisciplinary
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Eric Triplett ewt@ufl.edu
Created	11/7/2019 3:40:48 PM
Updated	9/11/2020 2:35:01 PM
Description of request	The Microbiology and Cell Science Department requests approval for a 60-credit concentration within our current Ph.D. program called "Executive Ph.D.". This program is expected to fulfill the need of our place-bound online M.S. degree graduates who are seeking to further their education. At the moment, we know of 20 students in our online M.S. degree program who are interested. If approved, admitted students into the concentration would conduct their dissertation work on-site through their employer. The employer would need to have the facilities to conduct the work. The research project would be led by a graduate committee of UF faculty members and would likely be on a topic of interest to the employer and UF. All requirements for the Ph.D. post-M.S. degree would be the same as for on-campus students. A similar program exists at the University of Miami.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Microbiology and Cell Science 514910000	Eric Triplett		9/11/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			9/11/2020
No document changes					
Graduate Council					
No document changes					
Graduate School Notified					
No document changes					
Office of the Registrar					
No document changes					
College Notified					
No document changes					

Concentration|New for request 14428

Info

Request: A n Executive Ph.D. concentration in Microbiology and Cell Science
Description of request: The Microbiology and Cell Science Department requests approval for a 60-credit concentration within our current Ph.D. program called "Executive Ph.D.". This program is expected to fulfill the need of our place-bound online M.S. degree graduates who are seeking to further their education. At the moment, we know of 20 students in our online M.S. degree program who are interested.
If approved, admitted students into the concentration would conduct their dissertation work on-site through their employer. The employer would need to have the facilities to conduct the work. The research project would be led by a graduate committee of UF faculty members and would likely be on a topic of interest to the employer and UF.
All requirements for the Ph.D. post-M.S. degree would be the same as for on-campus students.
A similar program exists at the University of Miami.
Submitter: Eric Triplett ewt@ufl.edu
Created: 11/7/2019 3:20:33 PM
Form version: 1

Responses

Proposed Action Create a Concentration
Degree Level D - Doctoral Degree
Thesis or Non-Thesis Thesis
Concentration Name Executive PhD
Credits 60
Effective Term Fall
Effective Year 2021
Students 10
Percentage of Credits Available Fully Online 100%
Percentage of Credits Available Off-Campus 50% or more
Is this an additional (secondary) concentration? No
All Department/Degree/Majors Adding Concentration Microbiology and Cell Science: Ph.D. in Microbiology and Cell Science

Rationale for Proposed Concentration Many of our online M.S. concentration students are place-bound and would like to pursue a Ph.D. We propose this concentration for those students who have completed our online M.S. degree and wish to pursue Ph.D. thesis work with Microbiology and Cell Science faculty on-site at their employer's location. Possible employers include, but are not limited to, federal agencies, state agencies, companies, and other academic institutions. The employer or the student would pay the tuition. There would be no stipend except a small stipend when they serve as teaching assistants in our online courses for two semesters.
The coursework, qualifying exams, and degree requirements will be the same as our current Ph.D. degree. The research would be directed by a UF Microbiology and Cell Science faculty member along with a graduate committee.
Impacts on Other Programs As the perspective students in this program are students that are not able to come to Gainesville for personal or financial reasons, no impact on any on-campus Ph.D. program is expected.
As the perspective students will be graduates of our online M.S. degree concentration, most of their coursework will be complete prior to entering this 60-credit Ph.D. concentration.

Cover Sheet: Request 15206

6

Macronutrients in Human Nutrition

Info

Process	Course|New|Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Robin Henken henken@ufl.edu
Created	7/31/2020 2:35:40 PM
Updated	9/16/2020 10:38:26 AM
Description of request	Proposal of a new graduate course

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Food Science and Human Nutrition 514915000	Susan Percival		7/31/2020
completed CALS CC Checklist.pdf					7/31/2020
College	Pending	CALS - College of Agricultural and Life Sciences			7/31/2020
No document changes					
Graduate Curriculum Committee					
No document changes					
University Curriculum Committee Notified					
No document changes					
Statewide Course Numbering System					
No document changes					
Graduate School Notified					
No document changes					
Office of the Registrar					
No document changes					
College Notified					
No document changes					

Course|New for request 15206

Info

Request: Macronutrients in Human Nutrition
Description of request: Proposal of a new graduate course
Submitter: Robin Henken henken@ufl.edu
Created: 9/15/2020 4:08:10 PM
Form version: 2

Responses

Recommended Prefix HUN
Course Level 6
Course Number XXX
Category of Instruction Intermediate
Lab Code None
Course Title Macronutrients
Transcript Title Macronutrients
Degree Type Graduate

Delivery Method(s) On-Campus
Co-Listing No

Effective Term Fall
Effective Year 2021
Rotating Topic? No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 3
Course Description Digestion, absorption, and metabolism of macronutrients in health and disease.
Prerequisites BCH6206 Advanced Metabolism
Co-requisites BCH6206 Advanced Metabolism
Rationale and Placement in Curriculum This course was specifically designed with master's dietetic intern (MSDI) students in mind, although it is open to any student. Because MSDI students complete a semester of full-time internship, they are unable to take all of our individual macronutrient courses (i.e., proteins, lipids, carbohydrates). This course provides an overview of these nutrients for a more comprehensive graduate nutrition education.
Course Objectives After completing this course students will be able to
1.   Discuss the structures of the digestive tract and the digestive and absorptive processes.
2.   Explain the role of the endocrine system on the regulation of metabolism.
3.   Evaluate current literature related to macronutrient digestion, absorption and metabolism to recommend optimal dietary intakes or patterns for the maintenance of health and reduction of disease risk.
4.   Use relevant databases for literature review and appropriate evidence to defend positions related to current nutrition controversies.

Course Textbook(s) and/or Other Assigned Reading Advanced Nutrition and Human Metabolism by Gropper, Smith, & Carr (Required).
Weekly Schedule of Topics Day   Topic
1   Henken: Introduction to course and review of the syllabus and Gastrointestinal physiology
2   Henken: Gastrointestinal physiology – macronutrient digestion and absorption
3   Henken: Gastrointestinal physiology – macronutrient digestion and absorption
4   Henken: Gastrointestinal physiology – Mucosal immunology and the microbiota
5   Sitren: Proteins and amino acids in clinical nutrition – See assigned reading to prepare for class and quiz.

6   Sitren: Proteins and amino acids in clinical nutrition
7   Exam over topics to date
8   Cheng: CHO metabolism and endocrine regulation - Read CHO chapter to prepare for class and quiz.
9   Cheng: CHO metabolism and endocrine regulation
10   Cheng: CHO metabolism and endocrine regulation
11   Cheng: CHO metabolism and endocrine regulation
12   Dahl: Fiber Function and Health - Read fiber chapter to prepare for class and quiz.
13   Dahl: Fiber Function and Health
14   Dahl: Fiber Function and Health
15   Borum: Nutritional aspects of lipid metabolism: Are Dietary Fats Bad for You?
Read lipid chapter to prepare for class and quiz.
16   Borum: Nutritional aspects of lipid metabolism: Is It Fat Metabolism or Carb Metabolism?
17   Borum: Nutritional aspects of lipid metabolism: Are Lipids Good or Bad for Cancer?
18   Borum: Nutritional aspects of lipid metabolism: Do Gut Microbiota Want Dietary Lipids or Dietary Carbs?
19   Debate on nutrition controversy Group 1 (Henken)
20   Mathews: Dietary Guidelines and patterns related to chronic disease risk – Read the articles
Dietary fat: From foe to friend? And Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report to prepare for class and the quiz. Note: articles found on e-Learning in Canvas.
21   Mathews: Dietary Guidelines and patterns related to chronic disease risk
22   Mathews: Dietary Guidelines and patterns related to chronic disease risk
23   Debate on nutrition controversy Group 2 (Henken)
24 (Final exam period) Debate on nutrition controversy Group 3 (Henken)
Attendance/Participation self-evaluation due
Debate team and peer team-work score sheets due

Grading Scheme GRADING: Percentage of final grade (see rubrics below for participation and assignments):
•   Quizzes (5 quizzes, drop lowest score)   15%
•   Participation (see attendance/participation rubric)   15%
•   Assignments   50%
•   Exam   20%
                100%
A = 94.0% to 100%; A- = 90.0% to < 94.0%; B+ = 87.0% to < 90.0%; B = 84.0% to < 87.0%; B- 80.0% to <84.0%; C+ = 77.0% to < 80.0%; C = 74.0% to <77.0%; C- = 70.0% to <74.0%; D+ = 67.0% to < 70.0%; D- = 61.0% to <64.0%; F = <61.0%

Attendance/Participation Rubric

Please use this rubric to score your attendance/participation in this course and provide an explanation for the score you've determined. The instructor will then use this information assign your final attendance and participation grade. Adopted from Carnegie Mellon – Participation Rubric 11/19/14
https://www.cmu.edu/teaching/assessment/examples/courselevel-bycollege/cfa/tools/participationrubric-cfa.pdf

Criteria Unsatisfactory-Beginning   Developing   Accomplished Exemplary
         Total
Attendance   0-16 points   17-19 points   20-22 points   23-25 points   /25
         3 or more unexcused absences 2 unexcused absences 1 unexcused absence
         Attended all class sessions or received approval for all necessary absences

Frequency
         0-16 points   17-19 points   20-22 points   23-25 points   /25
         Student does not initiate contribution & needs instructor to solicit input.   Student initiates contribution at least in half of the class sessions Student initiates contribution once in each recitation.
         Student initiates contributions more than once in each class session.
Quality
         0-16 points   17-19 points   20-22 points   23-25 points   /25
         Comments are uninformative, lacking in appropriate terminology. Heavy reliance on opinion & personal taste, e.g., "I love it", "I hate it", "It's bad" etc.   Comments are sometimes constructive, with

occasional signs of insight. Student does not use appropriate terminology; comments not always relevant to the discussion.   Comments mostly insightful & constructive; mostly uses appropriate terminology. Occasionally comments are too general or not relevant to the discussion.

        Comments always insightful & constructive; uses appropriate terminology. Comments balanced between general impressions, opinions & specific, thoughtful criticisms or contributions.

Listening   0-16 points   17-19 points   20-22 points   23-25 points   /25
        Does not listen to others; regularly talks while others speak or does not pay attention while others speak; detracts from discussion; sleeps, etc.   Student is often inattentive and needs reminder of focus of class. Occasionally makes disruptive comments while others are speaking.
        Student is mostly attentive when others present ideas, materials, as indicated by comments that reflect & build on others' remarks.   Student listens attentively when others present materials, perspectives, as indicated by comments that build on others' remarks, i.e., student hears what others say & contributes to the dialogue.
                TOTAL /100

Explanation:

Instructor(s) Course leader and digestion and absorption: Bobbi Langkamp-Henken
Fiber: Wendy Dahl
Protein: TBD
Lipids: Peggy Borum
Carbohydrates: Zhiyong Cheng
Dietary patterns: Anne Mathews
Attendance & Make-up Yes
Accomodations Yes
UF Grading Policies for assigning Grade Points Yes
Course Evaluation Policy Yes

CALS Curriculum Committee
Submission Checklist

NOTE: This checklist must be included with all course and certificate submissions.

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (https://approval.ufl.edu/). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

CHECKLIST: PLEASE MARK DONE OR N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

Done It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: https://cals.ufl.edu/faculty-staff/committees/.

Done Review the CALS Syllabus Policy. This document can be viewed at the committee site (https://cals.ufl.edu/faculty-staff/committees/) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

N/A Joint course submissions must include both graduate and undergraduate syllabuses and a separate statement outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

Done The Course Description is the catalog copy and cannot exceed 50 words. The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

Done   The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. (https://cals.ufl.edu/content/PDF/ Faculty_Staff/cals-course-objectives.pdf). Do not use the words demonstrate or understand when listing learning objectives.

Done   The course schedule should be concise and include the appropriate number of weeks in the semester.

Done   All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

N/A   Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: https://registrar.ufl.edu/pdf/uccconsult.pdf.

Done   Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

Done   Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

Done   The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

Done   The most recent version of the CALS Syllabus Statements boilerplate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers.

<p style="text-align:center">

Tentative Course Outline and Schedule
HUN XXXX Macronutrients in Human Nutrition
A team-taught course
Fall 2021 – Section 353E (3 credits)
Mondays and Wednesdays, 3:00 to 4:55 PM (periods 8 & 9), Location TBD
</p>

Note: This is a 3-credit class being taught in two 50-minute blocks twice a week as if it were a 4-credit (200 minutes/week) course. Time off will be given during the semester to reduce total classroom time to equal that of a 3-credit course (150 minutes/week).

COURSE LEADER and INSTRUCTOR:

Bobbi Langkamp-Henken, Ph.D., R.D.   FSHN Building, Room 309
Food Science and Human Nutrition Department   Cell: 352-642-3669
                                                                                          Email: henken@ufl.edu

Office Hours: Tuesdays 1:30 to 3:00 p.m. (by appointment call (352-294-3734) or email (rvinyard@ufl.edu) Rachael in the Advising Office to schedule). Other times: if my office door is open, please feel free to come in and see me.

COURSE INSTRUCTORS	**OFFICE HOURS**
Dr. Zhiyong Cheng (z.cheng@ufl.edu)	Thursdays 10 to 11 or other times by appointment
Dr. Wendy Dahl (wdahl@ufl.edu)	Tuesdays 3 to 5 p.m.
Dr. Harry Sitren (sitren@ufl.edu)	Mondays 2 to 3 p.m.
Dr. Peggy Borum (prb@ufl.edu)	Tuesdays and Fridays 2:30 to 3:30 or other times by appointment
Dr. Anne Mathews (anne.mathews@ufl.edu)	Monday and Wednesdays 2 to 3 p.m.

COURSE TA: TBD   TBD

COURSE DESCRIPTION:
Digestion, absorption, and metabolism of macronutrients in health and disease.
Corequisite or prerequisite: BCH6206 Advanced Metabolism.

COURSE OBJECTIVES: After completing this course students will be able to
1. Discuss the structures of the digestive tract and the digestive and absorptive processes.
2. Explain the role of the endocrine system on the regulation of metabolism.
3. Evaluate current literature related to macronutrient digestion, absorption and metabolism to recommend optimal dietary intakes or patterns for the maintenance of health and reduction of disease risk.
4. Use relevant databases for literature review and appropriate evidence to defend positions related to current nutrition controversies.

TEXT AND MATERIALS:
Advanced Nutrition and Human Metabolism by Gropper, Smith, & Carr (Required). Additional resources are provided on e-Learning in Canvas: http://elearning.ufl.edu. E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail athelpdesk@ufl.edu.

COURSE ACTIVITIES:
- Quizzes – In an effort to help you prepare for graduate level material presented in this course, you will be assigned readings prior to each major topic and quizzed on the material. A total of five timed quizzes will be administered through Canvas but scores from only four quizzes will count toward your grade.
- Class participation – Attendance is expected/required for all classes. You will score your attendance/participation using the included rubric. The instructor will then use that information to assign a final score.
- Assignments and debates on topics of discussion and current controversies (see section below on Assignments)

GRADING: Percentage of final grade (see rubrics below for participation and assignments):

• Quizzes (5 quizzes, drop lowest score)		15%
• Participation (see attendance/participation rubric)		15%
• Assignments		50%
• Exam		20%
		100%

A = 94.0% to 100%; A- = 90.0% to < 94.0%; B+ = 87.0% to < 90.0%; B = 84.0% to < 87.0%; B- 80.0% to <84.0%; C+ = 77.0% to < 80.0%; C = 74.0% to <77.0%; C- = 70.0% to <74.0%; D+ = 67.0% to < 70.0%; D- = 61.0% to <64.0%; F = <61.0%

TENTATIVE SCHEDULE:

Note: This is a 3-credit class being taught in two 50-minute blocks twice a week as if it were a 4-credit (200 minutes/week) course. Time off will be given during the semester to reduce total classroom time to equal that of a 3-credit course (150 minutes/week).

Week, Day	Topic
Week 1, Mon.	Henken: Introduction to course and review of the syllabus and Gastrointestinal physiology
Week 1, Wed.	Henken: Gastrointestinal physiology – macronutrient digestion and absorption
Week 2, Mon.	Henken: Gastrointestinal physiology – macronutrient digestion and absorption
Week 2, Wed.	Henken: Gastrointestinal physiology – Mucosal immunology and the microbiota
Week 3, Mon.	Sitren: Proteins and amino acids in clinical nutrition – See assigned reading to prepare for class and quiz.
Week 3, Wed.	Sitren: Proteins and amino acids in clinical nutrition
Week 4, Mon.	Off
Week 4, Wed.	Exam over topics to date
Week 5, Mon.	Cheng: CHO metabolism and endocrine regulation - Read CHO chapter to prepare for class and quiz.
Week 5, Wed.	Cheng: CHO metabolism and endocrine regulation
Week 6, Mon.	Cheng: CHO metabolism and endocrine regulation
Week 6, Wed.	Cheng: CHO metabolism and endocrine regulation
Week 7, Mon.	Off
Week 7, Wed.	Dahl: Fiber Function and Health - Read fiber chapter to prepare for class and quiz.
Week 8, Mon.	Dahl: Fiber Function and Health
Week 8, Wed.	Dahl: Fiber Function and Health
Week 9, Mon.	Off
Week 9, Wed.	Borum: Nutritional aspects of lipid metabolism: *Are Dietary Fats Bad for You?* Read lipid chapter to prepare for class and quiz.
Week 10, Mon.	Borum: Nutritional aspects of lipid metabolism: *Is It Fat Metabolism or Carb Metabolism?*
Week 10, Wed.	Borum: Nutritional aspects of lipid metabolism: *Are Lipids Good or Bad for Cancer?*
Week 11, Mon.	Borum: Nutritional aspects of lipid metabolism: *Do Gut Microbiota Want Dietary Lipids or Dietary Carbs?*
	Off
Week 11, Wed.	Debate on nutrition controversy Group 1 (Henken)
Week 12, Mon.	Mathews: Dietary Guidelines and patterns related to chronic disease risk – Read the articles *Dietary fat: From foe to friend?* And *Global Syndemic of Obesity, Undernutrition, and Climate Change: The Lancet Commission report* to prepare for class and the quiz. Note: articles found on e-Learning in Canvas.
Week 12, Wed.	Off
Week 13, Mon.	Mathews: Dietary Guidelines and patterns related to chronic disease risk
Week 13, Wed.	Mathews: Dietary Guidelines and patterns related to chronic disease risk
Week 14, Mon.	Off
Week 14, Wed.	Debate on nutrition controversy Group 2 (Henken)
Week 15, Mon	Off
24 (Final exam period)	Debate on nutrition controversy Group 3 (Henken) *Attendance/Participation self-evaluation and Debate team and peer team-work score sheets due*

ASSIGNMENTS:

Proteins and amino acids in clinical nutrition - Dr. Sitren

- It is not necessary to read the entire chapter. Please read the following pages from the print book or sections online book:

Topic	Pages in print book	Section in online book
Essentiality	178	6-1d
Sources of amino acids	178 - 179	6-2
Digestion	179 - 181	6-3
Arginine	197 - 198	6-5h
Protein synthesis	201 – 202	6-6
Catabolism of tissue proteins	229 - 230	6-10
Protein quality and protein and amino acid needs	233 - 240	6-12

- Read page 279 print book / section 8-2c Thermic Effect of Food online
- Read *The Wall Street Journal* article "How Much Protein Should You Eat Each Day?" See Canvas module on Protein and Amino Acids for a copy of the article. This will be discussed in class.

CHO & Endocrine Regulation - Dr. Cheng

The assignment for the CHO & Endocrine Regulation session will be a group project/presentation. At the first class of CHO session, the assignment topics will be provided by the instructor and randomly assigned to groups (3-4 students/group). There will be a short window of time for groups to trade topics among themselves and for group members to switch groups to better align with the topic for their group. Presentations must be 15-18 minutes in length and will be followed by 5-7 minutes of questions. The presentations must be the product of group work with all members contributing equally.

Grading Rubrics for the CHO assignment (project presentation).

Criteria	Ratings		Pts
All aspects of the assignment were addressed.	5.0 pts Full Marks	0.0 pts No Marks	
The presentation was well prepared and logically organized.	5.0 pts Full Marks	0.0 pts No Marks	
Presentation and content had obvious creativity, depth, and details.	5.0 pts Full Marks	0.0 pts No Marks	
Sources of support were current and strong, and the topic was well researched.	5.0 pts Full Marks	0.0 pts No Marks	
Major points and conclusions were clear and understood by the audience.	5.0 pts Full Marks	0.0 pts No Marks	
In answering questions, the group demonstrated understanding of their presented material and ability to integrate or extend beyond their presentation.	5.0 pts Full Marks	0.0 pts No Marks	
Speakers were organized and prepared to present.	5.0 pts Full Marks	0.0 pts No Marks	
Speakers had strong presence and were easily heard.	5.0 pts Full Marks	0.0 pts No Marks	
Speakers effectively presented their points and content.	5.0 pts Full Marks	0.0 pts No Marks	
Speakers had enthusiasm in presenting the presentation.	5.0 pts Full Marks	0.0 pts No Marks	
		Total Points: 50.0	

Fiber Function and Health - Dr. Dahl

A 10-Minute Thesis Oral Presentation (50 points)

Background

Often textbook chapters and narrative review papers describe concepts without references or by simply referencing a previous review, within which an even older review is referenced, and so on. Overtime, these concepts are repeated so many times, that they may come to be accepted as facts although the original literature is nebulous or possibly, nonexistent. The aim of this assignment is to determine if common statements about various fibers are supported by published research or not, i.e. a literature-based, myth-busting activity.

Assignment

Students will be randomly assigned a fiber-related hypothesis by September 4th. Students will research the original literature (no review papers are allowed as references related to your hypothesis) to locate human experimental evidence to support or refute the hypothesis. Students will present their findings in class September 18 or 23. Presentations will be 10 minutes followed by questions. As the presentations are split between two days, non-presenting students will be expected to pose a question to each of the presenters. Presentations should include a very brief background on your fiber's chemistry, food/supplement sources, gastrointestinal-related physiological effects, the hypothesis statement, followed by presentation of the evidence, limitations of the research evidence, and a conclusion statement. Note: There are no limits regarding publication dates of the supporting research.

Question assignments (feel free to trade topics with each other):

1. Is cellulose fermentable/degraded by colonic bacteria?
2. Is psyllium fiber is fermentable/degraded by colonic bacteria?
3. Is lignin is metabolized by colonic bacteria?
4. Does pectin intake decrease bile acid reabsorption?
5. Does hydrolyzed guar gum intake lower serum cholesterol?
6. Is beta-glucan a prebiotic fiber?
7. Are galactooligosaccharides exclusively fermented by *Bifidobacteria*?
8. Is chemically modified starch (R4) a prebiotic fiber?
9. Does psyllium fiber intake decrease intestinal transit time?
10. Does pectin intake delay gastric emptying?
11. Does guar gum intake decrease glucose absorption?
12. Does wheat bran intake increase water content of stools?
13. Do gas (flatulence) symptoms from α-galactosides intake decrease over time?
14. Does oligosaccharide intake increase Lactobacilli in the fecal microbiota?
15. Does wheat bran increase bowel movement (stool) frequency in healthy adults?
16. Does hemicellulose intake affect mineral (e.g. zinc or iron) absorption?
17. Does fructan intake affect magnesium absorption?
18. Does fructan intake increase fecal mass (weight)?
19. Do resistant dextrins increase stool frequency or improve stool form in constipated adults?

Assignment for Nutritional Aspects of Lipid Metabolism (Dr. Borum): TBA

For this assignment you will pretend that you are a medical resident whose patient had a lipid-related question. You will write a detailed question and then answer the question. Your questions should be expanded on the idea of one of the scenarios/questions (see examples below and full list on E-Learning). Your answer should be written at two different educational levels. First write the response that the resident should tell the patient and then the

response that the resident should give the attending physician. Remember that each patient is unique, and your information is only useful to the patient if the patient can use it. The patient may recognize that the internet has good, bad, and ugly information and it can be difficult to distinguish among them. The patient is depending on you to provide good information that that is the best available. The attending is a physician scientist who is big on practicing evidence-based medicine and has really gotten into precision medicine. The attending physician says that the reference list better include the latest references and the explanation should be concise and almost case report publication ready. Once your drafts have been prepared, you will exchange drafts with an assigned classmate. Post suggestions to the E-Learning Discussion Board to improve the drafts of your classmate.

<p align="center">Examples of Questions/Scenarios</p>

45-year-old male
My brother just died of a massive heart attack at 52 years of age and our dad died of what was probably a heart attack at 48 years of age. I want to play with my grand babies as they grow up. I have decided that I am going to eat really low fat. When my wife and I go to the grocery store, we are only going to buy products that say, "low fat "or "reduced fat on them". Don't you think that will help me live longer?

35-year-old high school teacher who just moved into town
You know doc, a few months before I moved, I was told that I have a fatty liver. I read a bit on it and realized that is not good. So, for the last few months, I have avoided all fatty foods. It is not so bad; I have always had a sweet tooth. But do not worry. I am eating healthy. I do not drink soda, but instead drink fruit juice at every meal and sometimes between meals because I do not like water. I have sherbet instead of fatty ice cream. I have stopped eating candy bars with all that fat as a snack and instead, I suck on a piece of hard candy most of the day. My fatty liver is probably gone by now, don't you think?

25-year-old new father
You know doc, being a dad has given me a new perspective on being healthy. I have always loved milk, cheese, yogurt, etc. One of my coworkers said that we should avoid dairy products because they are bad for us. What is he talking about?

Grading Rubric

	Ranking Range		Points
Question is well defined in adequate detail.	3.0 pts Full marks	0.0 pts No marks	
Draft of question and draft of responses posted to E-Learning on time	2.0 pts Full marks	0.0 pts No marks	
Consultation for classmate is clear and improves draft	8.0 pts Full marks	0.0 pts No marks	
Consultation for classmate is posted on time	2.0 pts Full marks	0.0 pts No marks	
Information for patient is clear and concise	5.0 pts Full marks	0.0 pts No marks	
Information for patient is practical	5.0 pts Full marks	0.0 pts No marks	
Information for patient is evidence based	5.0 pts Full marks	0.0 pts No marks	
Information for attending is clear and concise	5.0 pts Full marks	0.0 pts No marks	
Information for attending is evidence based	5.0 pts Full marks	0.0 pts No marks	
References are appropriate and of high quality	7.0 pts Full marks	0.0 pts No marks	
Elements of precision medicine have been addressed	3.0 pts Full marks	0.0 pts No marks	
Total points: 50			

Assignment for Dietary Guidelines and patterns related to chronic disease risk - Dr. Mathews

Nutrition Policy Position Brief

Students will work independently on this assignment. This assignment is completed in three steps: 1) selection/approval of policy topic and reference list, 2) submission of first draft of policy position brief to be critiqued by classmate, 3) final policy position brief for submission.

Your policy position brief should be modeled after Health Policy Position Statements of the Society of Behavioral Medicine. (You **do not** need to create the infographic that accompanies many position statements found on the SBM website.) Examples can be found here: https://www.sbm.org/advocacy/policy-positions Additional details to be provided in class and on E-Learning Canvas.

Grading Rubric for Nutrition Policy Brief

Criteria	Ratings		Pts
Topic submitted and approved on time. Topic should be relevant to DGAs, Dietary Patterns. Any specific population the policy will target is clearly stated.	5.0 pts Full Marks	0.0 pts No Marks	
Robust reference list from peer reviewed sources (15 minimum)	5.0 pts Full Marks	0.0 pts No Marks	
Completed first draft uploaded to Canvas on time for peer review	5.0 pts Full Marks	0.0 pts No Marks	
First draft includes all required sections, does not exceed page length limitations	5.0 pts Full Marks	0.0 pts No Marks	
Completed peer review of another student's policy draft submitted on Canvas by due date/time.	5.0 pts Full Marks	0.0 pts No Marks	
Peer review is professional and thorough.	5.0 pts Full Marks	0.0 pts No Marks	
Final nutrition policy position brief submitted on time	2.0 pts Full Marks	0.0 pts No Marks	
Policy is clearly stated and specific	8.0 pts Full Marks	0.0 pts No Marks	
Policy brief is evidence based, well supported, and recognizes limitations and challenges to implementation	8.0 pts Full Marks	0.0 pts No Marks	
Policy brief is well written and free of grammar errors	2.0 pts Full Marks	0.0 pts No Marks	
Total Points: 50			

Debates:

Topics: Topics will be voted on by the class and students will draw for teams and topics.
1. The Dietary Reference Intake for protein for older adults should be increased.
2. Soy protein should not be regularly included as a major source of protein as part of a healthy diet for individuals of all ages because the health risks are too great.
3. School lunch programs should use plant-based meatless (faux-beef) products in place of all beef.
4. A low carbohydrate (ketogenic) diet is superior to a low-fat diet for weight loss.
5. The dairy group should be eliminated in MyPlate.

Expectations:
1. Review relevant literature on both sides of the debate.
2. Anticipate arguments from the opposing side to formulate rebuttals.
3. Meet with your team prior to the debate to prepare strategy and practice.
4. Organize points into a logical format to present to the class – PowerPoint slides may be used.

Format:

Team member	Description	Time (minutes)
Affirmative team speaker 1	Opening statement: present the topic and arguments in support	5 to 10
Opposing team speaker 1	Opening statement: present the topic and arguments in opposition	5 to 10
Break	Teams discuss strategy	5
Affirmative team speaker 2	Further arguments in support, identifies areas of conflict and answers questions that may have been raised by the opposition speaker	5 to 10
Opposing team speaker 2	Further arguments in opposition, identifies areas of conflict and answers questions that may have been raised by the affirmative speaker	5 to 10
Break	Prepare rebuttal	5
Opposing team speaker 3	Defend opposing arguments and defeat the supporting arguments without adding new information	5
Affirmative team speaker 3	Defend supporting arguments and defeat the opposing arguments without adding new information	5
Opposing team	Second rebuttal and closing arguments	5
Affirmative team	Second rebuttal and closing arguments	5
Audience	Discussion, questions, thoughts, opinions, and vote	15

Peer teamwork evaluations for debate: Your grade will be determined by your peers (i.e., the average score from your peers) and scored as follows:

Peer being evaluated:_____ by:_____(initials)	Possible Points	Assigned Points
Communication – communicates effectively and in a timely manner (0=not effective or timely, 10=very effective or timely)	1.0	
Attendance – has attended all planning and preparation meetings and has been on time (0=very poor attendance and always late, 10=great attendance and on time)	1.0	
Responsibility – has assumed equal responsibility for their share of the project (0=others have had to assume these responsibilities, 10=completed their share of the responsibilities)	2.0	
Attitude – has maintained a positive attitude during the project (0=very poor attitude, 10=very positive attitude)	1.0	
Total	5.0	
Comments		

Debate grading rubric:

Criteria	4 points	3 points	2 points	1 points	0 point	Total Points
Information	All information was clear, accurate and thorough	Most information was clear, accurate and thorough	Most information was clear and accurate, but was not usually thorough	Some information was accurate, but there were some minor inaccuracies	Information had some major inaccuracies OR was usually not clear	
Rebuttal	All counterarguments were accurate, relevant and strong	Most counterarguments were accurate, relevant and strong	Most counterarguments were accurate, relevant, but several were weak	Some counter arguments were weak and irrelevant	Counterarguments were not accurate and/or relevant	
Use of facts	Every major point was well supported with the highest quality evidence	Every major point was adequately supported with the highest quality of evidence	Every major point was supported with the highest quality of evidence but the relevance of some was questionable	Some points were supported well, others were not	None of the points were supported	
Organization	All arguments were clearly tied to the topic and organized in a tight, logical fashion	Most arguments were clearly tied to the topic and organized in a tight, logical fashion	Most arguments were clearly tied to the topic but not organized in a tight, logical fashion	Some arguments were tied to the topic but not logical in presentation	Arguments were not tied to the topic	
Understanding of topic	The team clearly understood the topic in depth and presented their information forcefully and convincingly	The team clearly understood the topic in depth and presented their information well	The team seemed to understand the main points of the topic and presented those with ease	The team seemed to understand the main points of the topic, but didn't present with ease	The team did not show an adequate understanding of the topic	
Peer score for debate					Average score from peers (20 pts max)	
Instructor score for debate					Average score from instructors (20 pts max)	
Peer teamwork evaluations (see rubric above)					Average score from peers (5 pts max)	
Points for winning the debate					2 points	
List of references submitted 1 week before the debate					3 points	
					Total (50 points)	
Comments						

Adapted from http://course1.winona.edu/shatfield/aire/classdebate.pdf

Attendance/Participation Rubric

Please use this rubric to score your attendance/participation in this course and provide an explanation for the score you've determined. The instructor will then use this information assign your final attendance and participation grade. *Adopted from Carnegie Mellon – Participation Rubric 11/19/14 https://www.cmu.edu/teaching/assessment/examples/courselevel-bycollege/cfa/tools/participationrubric-cfa.pdf*

Criteria	Unsatisfactory-Beginning	Developing	Accomplished	Exemplary	Total
Attendance	**0-16 points**	**17-19 points**	**20-22 points**	**23-25 points**	**/25**
	3 or more unexcused absences	2 unexcused absences	1 unexcused absence	Attended all class sessions or received approval for all necessary absences	
Frequency	**0-16 points**	**17-19 points**	**20-22 points**	**23-25 points**	**/25**
	Student does not initiate contribution & needs instructor to solicit input.	Student initiates contribution at least in half of the class sessions	Student initiates contribution once in each recitation.	Student initiates contributions more than once in each class session.	
Quality	**0-16 points**	**17-19 points**	**20-22 points**	**23-25 points**	**/25**
	Comments are uninformative, lacking in appropriate terminology. Heavy reliance on opinion & personal taste, e.g., "I love it", "I hate it", "It's bad" etc.	Comments are sometimes constructive, with occasional signs of insight. Student does not use appropriate terminology; comments not always relevant to the discussion.	Comments mostly insightful & constructive; mostly uses appropriate terminology. Occasionally comments are too general or not relevant to the discussion.	Comments always insightful & constructive; uses appropriate terminology. Comments balanced between general impressions, opinions & specific, thoughtful criticisms or contributions.	
Listening	**0-16 points**	**17-19 points**	**20-22 points**	**23-25 points**	**/25**
	Does not listen to others; regularly talks while others speak or does not pay attention while others speak; detracts from discussion; sleeps, etc.	Student is often inattentive and needs reminder of focus of class. Occasionally makes disruptive comments while others are speaking.	Student is mostly attentive when others present ideas, materials, as indicated by comments that reflect & build on others' remarks.	Student listens attentively when others present materials, perspectives, as indicated by comments that build on others' remarks, i.e., student hears what others say & contributes to the dialogue.	
				TOTAL	**/100**

Explanation:

COVID Response Statement: Our class sessions may be audio visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Grades and Grade Points: For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

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- *U Matter We Care*, If you or someone you know is in distress, please contact us at 352-392-1575 or visit www.umatter@ufl.edu to refer or report a concern and a team member will reach out to the student in distress.
- *Career Connections Center*, First Floor JWRU, 392-1601, https://career.ufl.edu/

- ***Student complaints,*** Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/. Online Course: http://www.distance.ufl.edu/student-complaint-process
- ***Student Health Care Center***, Call 352-392-1161 for 24/7 information to help you find the care you need, or visit www.shcc.ufl.edu/.
- ***University Police Department***, Visit www.police.ufl.edu/ or call 352-392-1111 (or 9-1-1 for emergencies).
- ***UF Health Shands Emergency Room / Trauma Center***, For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; www.ufhealth.org/emergency-room-trauma-center.
- ***Field and Fork Food Pantry*** located behind the FSHN Bldg (520 Newell Dr) is available to assist members of the campus community who experience food insecurity.
- ***Student Success Initiative*** http://studentsuccess.ufl.edu

Services for Students with Disabilities: The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. 0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

Cover Sheet: Request 14649

Communication and Leadership Development Internship

Info

Process	Course|New|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Lisa Lundy lisalundy@ufl.edu
Created	1/27/2020 9:32:33 AM
Updated	9/16/2020 1:48:25 PM
Description of request	Creation of a new course to replace two existing courses. We currently have "AEC 4943 Leadership Development Internship" and "AEC 4948 Agricultural Communication Internship" - We'd like to terminate these two courses and create one internship that reflects our specialization in Communication and Leadership Development.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Agricultural Education and Communication 514926000	Brian Myers		1/27/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			1/27/2020
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 14649

Info

Request: Communication and Leadership Development Internship
Description of request: Creation of a new course to replace two existing courses. We currently have "AEC 4943 Leadership Development Internship" and "AEC 4948 Agricultural Communication Internship" - We'd like to terminate these two courses and create one internship that reflects our specialization in Communication and Leadership Development.
Submitter: Lisa Lundy lisalundy@ufl.edu
Created: 9/16/2020 1:43:36 PM
Form version: 5

Responses
Recommended Prefix AEC
Course Level 4
Course Number XXX
Category of Instruction Advanced
Lab Code None
Course Title Comm and Lead Dev Internship
Transcript Title Comm and Lead Dev Int
Degree Type Baccalaureate

Delivery Method(s) On-Campus, Off-Campus, Online
Co-Listing No

Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic? No
Repeatable Credit? Yes
If repeatable, # total repeatable credit allowed 6
Amount of Credit Variable
If variable, # min 2
If variable, # max 6
S/U Only? No
Contact Type Supervision of Student Interns
Weekly Contact Hours .5
Course Description An individual program whereby students are apprenticed to officials to gain practical experience in agricultural organizations, industry, extension, reporting, writing, editing, photography, graphics, broadcasting, advertising or public relations.
Prerequisites AEC3070c(C) & AEC3414(C) or AEC3413(C) & AEC4031(C) & (2.4 or higher overall GPA)

Co-requisites N/A
Rationale and Placement in Curriculum Students may take an internship for academic credit any semester after the above requirements are met.

The internship is not required; The students have an option for an approved elective which we would substitute if a better fit for the student's program.
Course Objectives Apply skills including communication, teamwork, conflict resolution, leadership, and project management.
Think critically about issues facing the agricultural industry.

Course Textbook(s) and/or Other Assigned Reading N/A
Weekly Schedule of Topics Week 1   Begin Internships
Week 2 Weekly journal/reflection
Week 3 Weekly journal/reflection
Week 4 Weekly journal/reflection
Week 5 Weekly journal/reflection
Week 6 Weekly journal/reflection

Week 7 Weekly journal/reflection
Week 8 Weekly journal/reflection
Week 9 Spring Break
Week 10   Weekly journal/reflection
Week 11   Weekly journal/reflection
Week 12   Weekly journal/reflection
Week 13   Weekly journal/reflection
Week 14   Weekly journal/reflection
Week 15   Weekly journal/reflection
Week 16   Portfolios Due

Grading Scheme Assignment   Percent of Grade
Portfolio   30
Weekly Journal/Reflection   70

Instructor(s) Becky Raulerson
Attendance & Make-up Yes
Accomodations Yes
UF Grading Policies for assigning Grade Points Yes
Course Evaluation Policy Yes

CALS Curriculum Committee
Submission Checklist

NOTE: This checklist must be included with all course and certificate submissions.

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (https://approval.ufl.edu/). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as "Proposal of a new undergraduate course" is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

✓ It is required when making a submission that you consult your department's representative to the CALS CC. A list of current members can be found on the committee site located at: https://cals.ufl.edu/faculty-staff/committees/.

✓ Review the CALS Syllabus Policy. This document can be viewed at the committee site (https://cals.ufl.edu/faculty-staff/committees/) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

✓ Joint course submissions must include both graduate and undergraduate syllabuses and a separate statement outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

✓ The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

✓ The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. (https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf). Do not use the words demonstrate or understand when listing learning objectives.

✓ The course schedule should be concise and include the appropriate number of weeks in the semester.

✓ All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

✓ Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: https://registrar.ufl.edu/pdf/uccconsult.pdf.

✓ Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable.

✓ Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

✓ The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

✓ The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers.

AEC 49XX

Communication and Leadership Development Internship

Instructor details here

Office Hours
Will be listed by the instructor.

Course Description:
An individual program whereby students are apprenticed to officials to gain practical experience in agricultural organizations, industry, extension, reporting, writing, editing, photography, graphics, broadcasting, advertising or public relations.

Course Objectives:
- Apply skills including communication, teamwork, conflict resolution, leadership, and project management.
- Think critically about issues facing the agricultural industry.

Prerequisites:

To be eligible for the internship, students must have:
1. A 2.4 or higher overall GPA
2. Completed 15 hours of communication and leadership courses, with no grade lower than a C.
3. Nine of the 15 hours must be the following courses with no grade lower than a C:
      AEC 3070c: Digital Media Production in Agricultural & Life Sciences
      AEC 3414: Leadership Development *OR*
      AEC 3413: Working with People: Interpersonal Leadership Skills
      AEC 4031: The Communication Process in Agricultural and Life Sciences

Students may take an internship for academic credit any semester after the above requirements are met.

Internship Applications:
Internship applications must be submitted to the university supervisor no later than five weeks immediately prior to the start of an internship.

Internship Approval:
Students are to secure their own internships. Students will be given several sources and internship site possibilities to begin their search. But students are responsible for landing the

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internship. The internship must be communication- or leadership-related. It does not have to be agricultural, per se.

Students will submit their application form, with the contact information of the internship site supervisor. The university supervisor will determine, based on the completed application form, if the internship is acceptable. A student's application submission constitutes an agreement to accept assignment to a site where it is determined that the objectives of the internship program can best be achieved.

Credit Hours:
Students receive variable credit, based on the number of work hours they perform. Students enrolled in the internship for six credit hours are expected to perform approximately 400 hours (10 weeks at 40 hours a week) of job-related work – as designed and approved by the internship site supervisor and university supervisor.

Students may do more than one internship, but the total number of credits may not exceed six credits. Following is a scale of work hours to credit hours:

Credit Hours	Approx. Work Hours
2	133
3	200
4	267
5	333
6	400

Students' responsibilities in the internship also include academic work, in addition to regular on-the-job requirements. Specific on-the-job expectations will be outlined in the Training Plan. This plan lists both the core requirements, as well as other requirements outlined by the internship site supervisor in conjunction with the university supervisor.

Grading:
The final grade is determined from student assignments, which includes a portfolio/evaluative report and weekly journal/reflection entries. Students will also be evaluated by internship site supervisors, based upon how well they accomplish the tasks designated on the Training Plan. Final responsibility for assigning the grade rests with the university supervisor.

Evaluation of grades

Assignment	Percent of Grade
Portfolio	30
Weekly Journal/Reflection	60
Internship Accountability Assignments (Exit Interview, Rating Sheets, Training Agreement, Training Plan, etc.)	10

Unless otherwise noted, every component will be evaluated on 100 points. Your final grade for the course will be calculated on the previous percentages, which will then lead to your final letter grade as based on the following scale:

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Grading Scale:

A = 93 – 100%	B- = 80 – 82.99%	D+ = 66 – 69.99%
A- = 90 – 92.99%	C+ = 76 – 79.99%	D = 63 – 65.99%
B+ = 86 – 89.99%	C = 73 – 75.99%	D- = 60 – 62.99%
B = 83 – 85.99%	C- = 70 – 72.99%	E = below 60%

Note: For information on current UF policies for assigning grade points, see
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Internship Assignments (submitted via Canvas)

Students enrolled in AEC 49XX must produce formal internship portfolios before receiving a grade. To assist students in this process, students must maintain a daily journal and a portfolio. Following are the assignments required during the internship:

- **Weekly journal/reflection** – Students are to reflect on the happenings of each week and commit to writing their perceptions of these incidents. (Students may wish to record journal entries daily, instead of weekly.) Students are encouraged to be open with their thoughts. The aim of the journal is self-discovery. Students are required to e-mail the weekly journal entry to the university supervisor no later than noon on the Monday following the completed week. The complete, weekly journal will be submitted as part of the student's portfolio. Students should provide – but are not limited to – the following information in their journal entries:
    - What did you do that week? What skills did you learn? Was the job function the same type of work as you had done previously? Did you do anything unusual? Travel? Meet anyone?
    - How much time was spent on various projects and activities?
    - What did you learn through your activity/activities? What can you do to improve?

- **Portfolio** – Interns will maintain a portfolio – a record of all exhibits of work and other job-related materials, as appropriate. Examples of these materials may include published newspaper/magazine articles, news releases, photographs, video productions, pamphlets, brochures, graphics, educational materials, memorandums, and reports. Interns must describe the contribution they had in the materials they include in their portfolio. (For example if a brochure is provided in the portfolio, what did the intern do? Did the intern design the entire brochure, provide the pictures, or write the text?) Some materials provided in the portfolio may not be as easy to "see." For example, interns may be part of planning for a conference. The intern should provide a detailed narrative of what the intern did to help plan and carry out the conference.
    - The portfolio should be typewritten, edited, and packaged in the most professional manner the intern can muster. Just as the internship showed the student's abilities, so should the portfolio. Interns should consider the portfolio as a

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presentation of their best professional face to the world. The portfolios will be kept for at least a year in the Department of Agricultural Education and Communication so students should not include original materials they wish to have returned immediately. Students may choose to create a digital/online portfolio instead of a print version. Students would include only materials from the internship in the digital portfolio.

o   At the end of the internship, an evaluative report (three to five pages) must be submitted to the university supervisor. This report describes the internship experience, comments on the strong and weak points of the internship, evaluates the intern's level of preparation for the internship, evaluates the worth of the internship, suggests what could be done by both the employer and the student to make the experience better, and gives advice for future interns. The evaluative report also serves as a self-critique of the intern's abilities and learning experiences over the course of the internship.

o   In addition, the intern will provide a one-paragraph abstract/summary of the evaluative report to the university supervisor in electronic format, as well as photographs (also in electronic format) taken during the internship. The abstract and photos will become part of a Communication and Leadership Development Internship Web site. For examples of what to include, please see https://aec.ifas.ufl.edu/media/aecifasufledu/formsdocs/undergraduate/Telg_Internship_Summaries.pdf

Exit Interview:
The internship site supervisor will conduct an exit interview at the end of the internship to evaluate the progress made over the course of the semester. Students should treat the exit interview/evaluation as if students were "really" employed.

Forms to Submit:
These forms will be available in Canvas and should be completed by the person described below at the following times during the internship.

Weekly Journal Electronic Form – Completed by the intern (student) and submitted via Canvas to the university supervisor each week.

Internship Training Agreement – Completed by the intern (student), internship site supervisor, and university supervisor and submitted to the university supervisor via Canvas no later than the completion of the first week of the internship.

Internship Training Plan – Completed by the intern and the internship site supervisor. The Training Plan should be submitted via Canvas within the first two weeks of the internship.

Intern Rating Sheet – Completed by the internship site supervisor at the end of the internship. The internship site supervisor submits the Rating Sheet via Canvas to the university supervisor at the completion of the internship.

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Grades and Grade Points

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    Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching

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    - Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.
    - Online Course: http://www.distance.ufl.edu/student-complaint-process

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AEC XXXX – CLD INTERNSHIP

	Key Dates: *Other weekly assignments and information posted in Canvas.*
Week 1	Begin Internships
Week 2	Weekly journal/reflection
Week 3	Weekly journal/reflection
Week 4	Weekly journal/reflection
Week 5	Weekly journal/reflection
Week 6	Weekly journal/reflection
Week 7	Weekly journal/reflection
Week 8	Weekly journal/reflection
Week 9	*Spring Break*
Week 10	Weekly journal/reflection
Week 11	Weekly journal/reflection
Week 12	Weekly journal/reflection
Week 13	Weekly journal/reflection
Week 14	Weekly journal/reflection
Week 15	Weekly journal/reflection
Week 16	**Portfolios Due**

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CALS Curriculum Committee
Submission Checklist

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_____ You MUST comply with ~~Review~~ the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site (https://cals.ufl.edu/faculty-staff/committees/) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

_____ Joint course submissions must include both graduate and undergraduate syllabuses and a separate statement outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

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the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl (brendj@ufl.edu) for further instruction)