CALS Curriculum Committee Meeting
August 28, 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 April 10, 2020 meeting

Dr. Brendemuhl: Update from UCC

Graduate New Course Proposals

1. HOS 6XXX – Methods in Plant Biotechnology (req. #14788)

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

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

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

Graduate Course Change Proposals

5. SWS 6931 – Seminar (req. #14920)

6. SWS 6932 – Topics in Soils (req. #14898)

Undergraduate New Course Proposals

7. ANS 4XXX – Genetic Analyses of Complex Traits in Livestock (req. #15191)

8. FYC 4XXX – Children: Trauma and Resiliency (req. #15061)

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

10. ORH 4804C – Annual and Perennial Gardening (req. #15072)

Undergraduate Course Change Proposal

11. ENY 4210 – Insects and Wildlife (req. #15224)

Certificate

12. Proposed Modification to the Biological Systems Modeling Graduate Certificate (req. #13844)

Curriculum

13. Proposed Closure of M.S. Degree in Plant Molecular and Cellular Biology (req. #14870)

Recycled items

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

This item was originally recycled on 8/23/19. Comments as follows: A motion was made by Dr. Sharp to recycle this item back to the department for required changes and resubmission. The motion was approved. A syllabus for the graduate level co-taught course needs to be included with this submission to assure there is an appropriate amount of difference between the two. A memo to the committee needs to be included laying out the differences between the two courses. The category of instruction on the UCC1 form needs to be changed from advanced to joint. A lab code of "C" was indicated on the UCC1 form but was not included in the request title or on the syllabus. This needs to be removed or added to all proposed course numbers throughout the submission. The title of this proposed course does not match the title on the attached syllabus or the graduate level proposal. These must all match. Decimal points need to be added to the grading scale (A (94% or greater), A- (90% - 93.9%), B+ (87% - 89.9%), etc.). This will help avoid any concerns of rounding up when grades are given. The link to the university attendance policy (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx) needs to be included with class attendance policy in the syllabus. The boilerplate including CALS syllabus statements needs to be replaced with the most recent version. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

The item was recycled again on 2/14/20. Comments as follows: This item was reviewed along with item #7. Comments apply to both items unless otherwise stated. A motion was made by Dr. Sharp to recycle this item back to the submitter for required changes and resubmission. The motion was approved. The proposed course title for both courses must be the same and the title must match on both the UCC form and syllabus. An external consultation is required from the Soil and Water Sciences Department Chair (Matt Whiles). The undergraduate course must have a prerequisite. If no specific course is necessary, "Junior or Senior" standing is acceptable. Instructor permission is implied. The course description in the syllabus must match the description on the UCC form and it cannot exceed 50 words. This must be the same description that is in the catalog. Any additional information you wish to include in the syllabus needs to be listed under another

heading such as course background or additional information. The course objective learning verbs need to be improved for both courses and the graduate course must have at least one objective that differs from the undergraduate course. Please refer to: https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf for assistance with learning verbs. In addition to the management/monitoring plan there must be at least one other graded assignment difference between the two courses at the graduate level. The link to the universities attendance policy (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx) needs to be included in the syllabus. Each syllabus must contain the most recent version of the CALS syllabus statements boilerplate. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf. Although it is not required for your submission you may want to consider reviewing the new CALS Curriculum Committee checklist. You can find this under Curriculum Committee – Information & Documents on the committee site: https://cals.ufl.edu/faculty-staff/committees/. This checklist will be a required document for all course submissions beginning in March.

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

This item was originally recycled on 4/12/19. Comments as follows: A motion was made by Dr. Kolaczkowski to recycle this item back to the department for required changes and resubmission. The motion was approved. There is concern over the proposed course title being too general. An additional outside consultation is required from Soil and Water Science. This consult form needs to be completed by the department chair. If this is to be a joint offered course the undergraduate syllabus needs to be included as well as the submission of the undergraduate course. In addition, a separate document outlining the assessment differences between undergraduate and graduate students must be included. The course objectives need to include learning verbs that reflect the rigor of a graduate level course. Replace all references to WIS6943 in the submission with WIS 6XXX. The most recent version of the CALS syllabus statements boilerplate needs to be included in the syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

Item recycled again on 2/14/20. Comments as follows: See item #6 (WIS 4XXX also recycled – comments for both submissions).

CALS Curriculum Committee Meeting
April 10, 2020
Submitted by James Fant

Members Present: J. Brendemuhl, J. C. Bunch, D. Coenen, D. Gabriel, M. Gillen, P. Inglett, J. Larkin, T. Martin, A. Mathews, G. Nunez, K. Padgett-Pagliai, B. Pearson, W. Porter, N. Roberts, J. Scheffler, M. Sharp, J. Weeks

Guests: Cameron Jack and Kristina Haselier

Call to Order: The College of Agricultural and Life Sciences Curriculum Committee met via Zoom on April 10, 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 March 13, 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 noted the following items that were on the MARCH UCC: 1) MCB 4XXX-Virology Laboratory (approved) and 2) AOM 4060 – Agri-food Systems Innovation (approved). He noted the following items approved by the GCC: New graduate courses – ENY 6XXX-Apiculture I; ALS 6XXX-Multivariate Statistics for Agricultural and Life Sciences; ENY 6XXX-Molecular Biology of Insects and Nematodes; and FYC 6XXX-Capstone Project. The APRIL UCC has the following on the agenda. Graduate courses NEM 6101L Nematode Morphology and Anatomy Lab and NEM 6101C to NEM 6101 by removal of the lab component. Lastly, he mentioned that the checklist is working and since this was the last meeting he thanked everyone for their service to the CALS CC.

Graduate New Course Proposal

1. AEC 6XXX – Developing and Conducting Needs Assessments in Extension Settings (req. #14817)

A motion was made by Dr. Porter to approve this item as submitted. The motion was approved.

Undergraduate Course Change Proposal

2. ENY 4573 – Beekeeping I (req. #14840)

A motion was made by Dr. Sharp to approve this item with a minor change required. The motion was approved. Potential office hours need to be included in the syllabus.

The meeting was adjourned at **2:40** p.m.

Cover Sheet: Request 14788

new graduate course

Info

Process	Course|New|Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Kevin Padilla kbegcy.padilla@ufl.edu
Created	3/3/2020 4:26:59 PM
Updated	4/15/2020 10:37:47 AM
Description of request	Proposal of a new graduate course

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Environmental Horticulture 514918000	Dean Kopsell		4/15/2020
CALS-CC-Checklist.docx Syllabus_MethodsinPlantBiotech.docx					3/3/2020 3/3/2020
College	Pending	CALS - College of Agricultural and Life Sciences			4/15/2020
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 14788

Info

Request: new graduate course
Description of request: Proposal of a new graduate course
Submitter: Kevin Padilla kbegcy.padilla@ufl.edu
Created: 3/2/2020 7:33:13 PM
Form version: 1

Responses

Recommended Prefix HOS
Course Level 6
Course Number XXX
Category of Instruction Intermediate
Lab Code None
Course Title Methods in Plant Biotechnology
Transcript Title Methods in Plant Biotech
Degree Type Graduate

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 Plant biotechnology is a highly interdisciplinary field with new advances and techniques emerging at a fascinating speed. This graduate level course is designed as a comprehensive exploration to established and new methodologies used in the field of Plant Biotechnology.
Prerequisites (PLS3004C & AGR3303 or PLP3002C)
Co-requisites N/A
Rationale and Placement in Curriculum Plant biotechnology has promptly developed into one of the most prolific, expanding and influential areas of the plant sciences. To keep students competitive and prepared for their next steps in their careers it is necessary for them to understand key concepts that are driving modern agriculture. This course aims to: (I) Provide students with solid basis and sound knowledge in the area of Plant Biotechnology and (II) develop skills in critical reading and how to review scientific literature.
Course Objectives The overall objective of this course is to provide an environment for students to develop critical thinking on biotechnological tools for plant improvement. Principles and applications of plant biotechnology from the cellular to whole-plant levels will be covered.

Upon completion of this course students will be able to:
- Describe regulation of gene expression and implications for plant transformation.
- Distinguish plant culture techniques and culture types.
- Evaluate several methods for stable and transient plant transformation.
- Design strategies for plant genetic manipulation against biotic and abiotic stressors.
- Hypothesize on strategies to increase important traits including yield and fruit/seed quality.

Course Textbook(s) and/or Other Assigned Reading Textbook:
Plant Biotechnology: The genetic manipulation of plants (Second Edition) by A. Slater, N Scott and M, Fowler.

Complementary reading:

I. Vasil IK (2008). A short history of plant biotechnology. Phytochemistry Reviews. 7:387-394
II. Tiang CL; He Y; Pawlowski WP (2012). Chromosome organization and dynamics during interphase, mitosis, and meiosis in plants. Plant Physiol. 158:26–34
III. Bao Z; Clancy MA; Carvalho RF; Elliott K; Folta KM (2017) Identification of novel growth regulators in plant populations expressing random peptides. Plant Physiol. 175: 619–627
IV. Kyndt, T. et al. (2015). The genome of cultivated sweet potato contains Agrobacterium T-DNAs with expressed genes: an example of a naturally transgenic food crop. Proc. Natl Acad. Sci. USA 112:201419685
V. Engler C; Gruetzner R; Kandzia R; Marillonnet S (2009). Golden gate shuffling: a one-pot DNA shuffling method based on type IIs restriction enzymes, PLoS One. 4: e5553
VI. Curtis MD; Grossniklaus U (2003) A gateway cloning vector set for high-throughput functional analysis of genes in planta. Plant Physiol. 133, 462– 469.
VII. Cermak, T. et al. (2017) A Multipurpose Toolkit to Enable Advanced Genome Engineering in Plants. Plant Cell 29, 1196–1217
VIII. Miao C, Xiao L, Hua K, Zou C, Zhao Y, et al. (2018) Mutations in a subfamily of abscisic acid receptor genes promote rice growth and productivity. PNAS 115: 6058–63
IX. Shimatani Z., Kashojiya S., Takayama M., Terada R., Arazoe T., Ishii H., et al. (2017). Targeted base editing in rice and tomato using a CRISPR-Cas9 cytidine deaminase fusion. Nat. Biotechnol. 35, 441–443.
X. Han, J. et al. (2020). TALEN-based editing of TFIIAy5 changes rice response to Xanthomonas oryzae pv. Oryzae. Scientific Reports. 10, 2036.
XI. Bruggeman AJ; Kuehler D; Weeks DP (2014). Evaluation of three herbicide resistance genes for use in genetic transformations and for potential crop protection in algae production. Plant Biotechnol J. 12: 894-902
XII. Ye X; Al-Babili S; Kloti; Zhang J; Lucca P; Beyer P; Potrykus I. (2000) Engineering the provitamin A (-carotene) biosynthetic pathway into (carotenoid-free) rice endosperm. Science 287,303–305.

Weekly Schedule of Topics Date Topics

Jan	6	(M)	Introduction to the Class; History of Plant Biotechnology
Jan	8	(W)	Paper discussion I:
Jan	13	(M)	DNA, Chromatin, Chromosome structure and Regulation of Gene Expression
Jan	15	(W)	Paper discussion II:
Jan	20	(M)	Plant tissue culture and growth regulators
Jan	22	(W)	Paper discussion III:
Jan	27	(M)	Holiday - No UF Classes
Jan	29	(W)	Fundamental skills in DNA sequence analysis – Hands-on activity
Feb	3	(M)	Agrobacterium Mediated gene transfer and biolistic
Feb	5	(W)	Paper discussion IV:
Feb	10	(M)	Midterm I
Feb	13	(W)	In silico Vector construction – Hands-on activity
Feb	17	(M)	Principles of cloning, vectors, restriction enzymes
Feb	19	(W)	Paper discussion V:
Feb	24	(M)	Gateway and GoldenGate strategies
Feb	26	(W)	Paper discussion VI:
Mar	2	(M)	No UF Classes
Mar	4	(W)	No UF Classes
Mar	9	(M)	Overexpression and RNAi
Mar	11	(W)	Paper discussion VII:
Mar	16	(M)	CRISPR
Mar	18	(W)	Paper discussion VIII:
Mar	23	(M)	Midterm II
Mar	25	(W)	Paper discussion IX:
Mar	30	(M)	TALEN and VIGS
Apr	1	(W)	Paper discussion X:
Apr	6	(M)	Strategies for engineering herbicide and disease resistance
Apr	8	(W)	Paper discussion XI:
Apr	13	(M)	Golden Rice
Apr	15	(W)	Paper discussion XII:
Apr	20	(M)	Molecular Farming
Apr	22	(W)	Review Session

Apr 27 (M) Review Session

Grading Scheme Course grades will be based on 1000 points. There will be two partial midterms and a final exam. Quizzes will be given each Wednesday and require no more than 15 minutes to complete.
Missed exams/quizzes will count as a zero unless an arrangement to take a make-up is made PRIOR to the test date.

Total: 1000 points
Midterm 1: 150 points
Midterm 2: 150 points
Writing essays: 200 points
Final Exam: 300 points
Weekly Quizzes: 15 points each / 150 points total
Class participation (active interaction in class) and discussions: 50 points
The grading scale WILL NOT be adjusted or curved.

CRITICAL DATES
Midterm I Exam (February 10th)
Midterm II Exam (March 23rd)
Final Exam (April 27th)
Quizzes: Every Wednesday - 15 minutes.

Instructor(s) Dr. Kevin Begcy Padilla
Environmental Horticulture Department
Office: 1535 Fifield Hall
University of Florida, Gainesville, FL 32611
Email: kbegcy.padilla@ufl.edu
Phone: (352) 273 4528

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.

_ KB _ 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/ .

_KB___ 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.

__KB__ 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.

__KB__ 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.

_KB___ 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.

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

__KB__ 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.

__KB__ 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 .

__KB__ 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.

_KB___ 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.

_KB___ 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.

_KB___ 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.

HOS6932
METHODS IN PLANT BIOTECHNOLOGY
(3 credits)

INSTRUCTOR

Dr. Kevin Begcy Padilla
Environmental Horticulture Department
Office: 1535 Fifield Hall
University of Florida, Gainesville, FL 32611
Email: kbegcy.padilla@ufl.edu
Phone: (352) 273 4528
Office Hours:
Every Monday from 8:00am – 11:00am or by appointment. Please send me an e-mail.

MEETING DAYS, TIMES AND LOCATION:

Monday: 8th and 9th Periods (3:00pm – 4:55pm).
Wednesday: 8th Period (3:00pm – 3:50pm).
Room: PSF4

PREREQUISITES: PLS3004C, AGR3303, PLP3002C

COURSE DESCRIPTION

Plant biotechnology is a highly interdisciplinary field with new advances and techniques emerging at a fascinating speed. This graduate level course is designed as a comprehensive exploration to established and new methodologies used in the field of Plant Biotechnology.

COURSE LEARNING OBJECTIVES

The overall objective of this course is to provide an environment for students to develop critical thinking on biotechnological tools for plant improvement. Principles and applications of plant biotechnology from the cellular to whole-plant levels will be covered.

Upon completion of this course students will be able to:

- Describe regulation of gene expression and implications for plant transformation.
- Distinguish plant culture techniques and culture types.
- Evaluate several methods for stable and transient plant transformation.
- Design strategies for plant genetic manipulation against biotic and abiotic stressors.
- Hypothesize on strategies to increase important traits including yield and fruit/seed quality.

COURSE STRATEGY

- This course will focus on offering students the opportunity to learn biotechnological methods used in plant biotechnology. A strong emphasis will be given to develop critical thinking ability to design experiments using biotechnological tools for plant improvement.
- Teaching lessons will include discussions of state-of-the-art literature on plant biotechnology, hands-on activities and problem sets.
- Students will write a weekly 1-page critical essay where they would focus on the strengths and weaknesses of the paper discussed each week. Font: Arial 12pt; 1.5 spacing. This activity will be used to develop skills in critical reading and how to review scientific literature.

TEXT AND MATERIALS

Textbook:

Plant Biotechnology: The genetic manipulation of plants (Second Edition) by A. Slater, N Scott and M, Fowler.

Class material and additional reading material will be posted on Canvas weekly.

PAPER DISCUSSIONS

I. Vasil IK (2008). A short history of plant biotechnology. Phytochemistry Reviews. 7:387-394

II. Tiang CL; He Y; Pawlowski WP (2012). Chromosome organization and dynamics during interphase, mitosis, and meiosis in plants. Plant Physiol. 158:26–34

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VI. Curtis MD; Grossniklaus U (2003) A gateway cloning vector set for high-throughput functional analysis of genes in planta. *Plant Physiol.* **133**, 462– 469.

VII. Cermak, T. et al. (2017) A Multipurpose Toolkit to Enable Advanced Genome Engineering in Plants. Plant Cell **29**, 1196–1217

VIII. Miao C, Xiao L, Hua K, Zou C, Zhao Y, et al. (2018) Mutations in a subfamily of abscisic acid receptor genes promote rice growth and productivity. PNAS 115: 6058–63

IX. Shimatani Z., Kashojiya S., Takayama M., Terada R., Arazoe T., Ishii H., et al. (2017). Targeted base editing in rice and tomato using a CRISPR-Cas9 cytidine deaminase fusion. Nat. Biotechnol. 35, 441–443.

X. Han, J. *et al.* (2020). TALEN-based editing of TFIIAy5 changes rice response to Xanthomonas oryzae pv. Oryzae. *Scientific Reports.* **10**, 2036.

XI. Bruggeman AJ; Kuehler D; Weeks DP (2014). Evaluation of three herbicide resistance genes for use in genetic transformations and for potential crop protection in algae production. Plant Biotechnol J. 12: 894-902

XII. Ye X; Al-Babili S; Kloti; Zhang J; Lucca P; Beyer P; Potrykus I. (2000) Engineering the provitamin A (β-carotene) biosynthetic pathway into (carotenoid-free) rice endosperm. Science 287,303–305.

GRADING

Course grades will be based on 1000 points. There will be two partial midterms and a final exam. Quizzes will be given each Wednesday and require no more than 15 minutes to complete.
Missed exams/quizzes will count as a zero unless an arrangement to take a make-up is made **PRIOR** to the test date.

Total: 1000 points
Midterm 1: 150 points
Midterm 2: 150 points
Writing essays: 200 points
Final Exam: 300 points
Weekly Quizzes: 15 points each / 150 points total
Class participation (active interaction in class) and discussions: 50 points
The grading scale WILL NOT be adjusted or curved.

CRITICAL DATES

Midterm I Exam (February 10th)
Midterm II Exam (March 23rd)
Final Exam (April 27th)
Quizzes: they will be given each Wednesday and require no more than 15 minutes to complete

GRADE DISTRIBUTION

A	100.0 - 93.1%	A-	93.0 - 90.1%		
B+	90.0 - 86.1%	B	86.0 - 83.1%	B-	83.0 - 80.1%
C+	80.0 - 74.1%	C	74.0 - 72.1%	C-	72.0 - 70.1%
D+	70.0 - 64.1%	D	64.0 - 62.1%	D-	62.0 - 59.1%
E	59.0% or below				

PROGRAM AND TENTATIVE SCHEDULE

Date			Topics	Learning Modules
Jan	6	(M)	Introduction to the Class; History of Plant Biotechnology	Plant Genomes: The organization and expression of plant genes
Jan	8	(W)	Paper discussion I:	
Jan	13	(M)	DNA, Chromatin, Chromosome structure and Regulation of Gene Expression	
Jan	15	(W)	Paper discussion II:	
Jan	20	(M)	Plant tissue culture and growth regulators	
Jan	22	(W)	Paper discussion III:	
Jan	27	(M)	Holiday - No UF Classes	
Jan	29	(W)	Fundamental skills in DNA sequence analysis – Hands-on activity	Plant Tissue Culture and Techniques for Plant transformation
Feb	3	(M)	Agrobacterium Mediated gene transfer and biolistic	
Feb	5	(W)	Paper discussion IV:	
Feb	10	(M)	Midterm I	
Feb	13	(W)	In silico Vector construction – Hands-on activity	
Feb	17	(M)	Principles of cloning, vectors, restriction enzymes	Cloning and vectors for Plant Transformation
Feb	19	(W)	Paper discussion V:	
Feb	24	(M)	Gateway and GoldenGate strategies	
Feb	26	(W)	Paper discussion VI:	
Mar	2	(M)	No UF Classes	Spring Break
Mar	4	(W)	No UF Classes	
Mar	9	(M)	Overexpression and RNAi	
Mar	11	(W)	Paper discussion VII:	

Mar	16	(M)	CRISPR	Biotechnological strategies for plant improvement
Mar	18	(W)	Paper discussion VIII:	
Mar	23	(M)	Midterm II	
Mar	25	(W)	Paper discussion IX:	
Mar	30	(M)	TALEN and VIGS	
Apr	1	(W)	Paper discussion X:	
Apr	6	(M)	Strategies for engineering herbicide and disease resistance	Biotechnological manipulation of important traits
Apr	8	(W)	Paper discussion XI:	
Apr	13	(M)	Golden Rice	
Apr	15	(W)	Paper discussion XII:	
Apr	20	(M)	Molecular Farming	
Apr	22	(W)	Review Session	
Apr	27	(M)	Review Session	

EXPECTATIONS

Students are expected to spend 2-3 hours on the course material for EVERY hour spent in the classroom. The reading assignment list will be posted during the first week of the class. It is subject to change as the course progresses. Students are expected to be courteous and respectful to their fellow students and not interfere with their learning. You are expected to be on time. Students are asked to stow their cell phones before entering the classroom.

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/.

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/.

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.

SOFTWARE USE

All faculty, staff and students 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.

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/

CAMPUS HELPING RESOURCES

Students experiencing crises or personal problems that interfere with their general wellbeing 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:

• Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/.

• Online Course: http://www.distance.ufl.edu/student-complaint-process

Cover Sheet: Request 15205

Research Projects in Nutrition and Dietetics – part 2

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 2:12:45 PM
Updated	7/31/2020 4:39:32 PM
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 HUNXXX Syllabus Res Proj in Nutr DIE Spr 2021 7-31-20.docx HUNXXX Syllabus Res Proj in Nutr DIE Spr 2021 7-31-20.pdf					7/31/2020 7/31/2020 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 15205

Info

Request: Research Projects in Nutrition and Dietetics – part 2
Description of request: Proposal of a new graduate course.
Submitter: Robin Henken henken@ufl.edu
Created: 7/31/2020 1:47:01 PM
Form version: 1

Responses

Recommended Prefix HUN
Course Level 6
Course Number XXX
Category of Instruction Intermediate
Lab Code None
Course Title Research Projects in Nutrition and Dietetics – part 2
Transcript Title Res Proj Nutr Diet Part 2
Degree Type Graduate

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

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

Amount of Credit 2

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 3
Course Description Introduction to the research process part 2: carrying out the study and analyzing, interpreting, and presenting the data. Group research projects planned during the prerequisite course will be carried out in this course.
Prerequisites FOS6915
Co-requisites N/A
Rationale and Placement in Curriculum This course provides research for nonthesis masters dietetic intern students.
Course Objectives After completing this course, students will be able to.
1. Evaluate strengths, weaknesses, and potential bias of published randomized, controlled trials based on the CONSORT guidelines and checklist.
2. Carry out a research project using appropriate research methods using standard operating procedures and the CONSORT guidelines for randomized, controlled clinical trials.
3. Analyze and present data in appropriate format (tables, charts, graphs).
4. Communicate study results through an oral presentation.
5. Complete study closure activities (e.g., de-identify study documents, close out the study with the IRB, scan study documents, finalize regulatory binder)

Course Textbook(s) and/or Other Assigned Reading Required reading:
Kendall JM. Designing a research project: randomised controlled trials and their principles. Emerg Med J. 2003;20(2):164-168.
Moher D, Hopewell S, Schulz KF, et al. CONSORT 2010 explanation and elaboration: updated guidelines for reporting parallel group randomised trials. BMJ. 2010;340:c869.

Examples of literature presented as part of this course Spring 2020
Glosz CM, Schaffner AA, Reaves SK, et al. Effect of nutritional interventions on micronutrient status in pregnant Malawian women with moderate malnutrition: a randomized, controlled trial. Nutrients. 2018;

10:879.
Hossein-nezhad A, Spira A, Holic MF. Influence of vitamin D status and vitamin D3 supplementation on genome wide expression of white blood cells: a randomized double-blind clinical trial. PLOS ONE. 2013; 8:e58725.
Iannotti LL, Lutter CK, Steward CP, et al. Eggs in early complementary feeding and child growth: a randomized controlled trial. Pediatrics. 2017; 140(1):e20163459.
Jalambo M, Karim N, Naser I, Sharif R. Effects of iron supplementation and nutrition education on haemoglobin, ferritin and oxidative stress in iron-deficient female adolescents in Palestine: randomized control trial. EMHJ. 2018; 6:560
Ozen N, Tosun N, Yamanel L, et al. Evaluation of the effect on patient parameters of not monitoring gastric residual volume in intensive care patients on a mechanical ventilator receiving enteral feeding: a randomized clinical trial. J Crit Care. 2016; 33:137.
Ptomey LT, Steger FL, Lee J, et al. Changes in energy intake and diet quality during an 18-month weight management randomized controlled trial in adults with intellectual and developmental disabilities. J Acad Nutr Diet. 2018; 118:1087.
Zhao R, Wang Y, Huang Y, et al. Effects of fiber and probiotics on diarrhea associated with enteral nutrition in gastric cancer patients: a prospective randomized and controlled trial. Medicine. 2017; 96:43.

Weekly Schedule of Topics DATE

TOPIC
January 7 Review course syllabus and worksheets from last semester.
Discuss timeline for initiation of IRB-approved study/studies

Read assigned articles on randomized, controlled trials (RCT's)
14

Discuss study SOP's and QA forms
Discuss the regulatory binder and deviation and AE tables
Update study progress
21

Update study progress and RCT article presentation and discussion #1

SOP's and QA forms due

Begin study if IRB has approved study
28

Update study progress and RCT article presentation and discussion #2
February 4 Update study progress and RCT article presentation and discussion #3
11

Update study progress and RCT article presentation and discussion #4
18

Update study progress and RCT article presentation and discussion #5
25

Update study progress and RCT article presentation and discussion #6

Mid-point peer teamwork evaluations are due (please submit on Canvas).
March 4 Spring Break
11

Update study progress and RCT article presentation and discussion #7
Discuss data entry/coding/QA and statistical analyses
18

Update study progress and RCT article presentation and discussion #8

Discuss data analyses, tables and figures
25

Discuss data analyses, tables and figures

Complete preliminary analysis on primary outcome

Upload first draft of tables and figures to Dr. H 24 hours before class begins
April 1 Presentation of data tables and figures
8 Presentation of first draft of PowerPoint with study results (i.e., seminar)

Upload seminar slides to Dr. H 24 hours before class begins
15 Presentation of second draft of PowerPoint with study results (i.e., seminar)

Upload seminar slides to Dr. H 24 hours before class begins
Final Exam Period: TBA PowerPoint presentation of the study with invited guests (see rubric)

Complete (upload onto Canvas)
•

Final PowerPoint presentation (due 24 hours prior to start of class)
•

Course/instructor evaluations (link to evaluations on Canvas)
•

Final peer teamwork evaluations
•

Study closure procedures
•

Attendance/Participation Rubric

Grading Scheme GRADING: Points
Article presentation 15
Written SOP's and QA forms 15
PowerPoint presentation of your study results 30
Peer teamwork evaluations
Mid-point evaluation 10
Final evaluation 10
Complete study closure procedures 10
Attendance and participation 10

Total 100
A = 100-94.0; A- = <94.0-90.0; B+ = <90.0-87.0; B = <87.0-84.0; B- <84.0-80.0; C+ = <80.0-77.0; C = <77.0-74.0; etc.

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/

Instructor(s) Bobbi Langkamp-Henken
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.

Tentative Course Outline and Schedule for Spring 2020
HUNXXXX: Research Projects in Nutrition and Dietetics – part 2 (2 credits)
Thursdays, Periods 4 & 5 (10:40 a.m. to 12:35 p.m.)
Location TBA

INSTRUCTOR:

Bobbi Langkamp-Henken, Ph.D., R.D.
Food Science and Human Nutrition Department
FSHN Building, Room 309

Office Phone: 352-294-3721
Cell Phone: 352-642-3669
Email: henken@ufl.edu

Office Hours: Tuesdays 1:30 to 3:00 p.m. by appointment (call 352-294-3700 to schedule). Other times: if my office door is open, please feel free to come in and see me.

COURSE DESCRIPTION:
Introduction to the research process part 2: carrying out the study and analyzing, interpreting, and presenting the data. Group research projects planned during the prerequisite course will be carried out in this course. Prerequisite: FOS6915 Research Planning (section for MSDI students).

COURSE OBJECTIVES: After completing this course, students will be able to.
1. Evaluate strengths, weaknesses, and potential bias of published randomized, controlled trials based on the CONSORT guidelines and checklist.
2. Carry out a research project using appropriate research methods using standard operating procedures and the CONSORT guidelines for randomized, controlled clinical trials.
3. Analyze and present data in appropriate format (tables, charts, graphs).
4. Communicate study results through an oral presentation.
5. Complete study closure activities (e.g., de-identify study documents, close out the study with the IRB, scan study documents, finalize regulatory binder)

As a result of completing the assignments and activities associated with this course, students will work toward or achieve the following competencies:

- CRDN 1.2: Apply evidence-based guidelines, systematic reviews and scientific literature.
- CRDN 1.5: Conduct projects using appropriate research methods, ethical procedures and data analysis.
- CRDN 4.4: Apply current nutrition informatics to develop, store, retrieve and disseminate information and data.
- CRDN 5.1: Conduct literature reviews and interpret and evaluate food, nutrition, and nutrition education research, consumer issues, and nutrition education materials and programs

TEXT AND MATERIALS:
No text is required; however, access to databases and journals for literature review and statistical analyses relevant to your research project is required.
Required reading:

Kendall JM. Designing a research project: randomised controlled trials and their principles. Emerg Med J. 2003;20(2):164-168.

Moher D, Hopewell S, Schulz KF, et al. CONSORT 2010 explanation and elaboration: updated guidelines for reporting parallel group randomised trials. BMJ. 2010;340:c869.

Additional readings/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.

STUDENT EVALUATION:
Students will be evaluated on assignments, presentations, participation, and peer evaluations. Attendance is required for all classes.

ABSENCES 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/.

ASSIGNMENTS:

- **Article presentation.** Search PubMed and select a relevant article to present. The article should be a randomized, controlled clinical trial related to your research topic, if possible, or another nutrition-related topic. Email your article to the class 48 hours prior to presentation. Present the study hypothesis and methods. Briefly present the study results. Show major tables or graphs from the paper instead of summarizing the findings in a bullet list. Evaluate strengths, weaknesses, and potential bias of the trial based on the 2010 CONSORT guidelines and checklist. Discuss what was done well and what was missing from the report. How might this have biased the authors' findings? All students are expected to read each article prior to coming to class and help discuss the article.
- **Written standard operating procedures (SOP's) for carrying out the study and quality assurance (QA) forms for checking procedures and data entry.** As a group, write step-by-step directions for recruiting participants, conducting the research, and "cleaning up" your data. Scripts for what to say to participants may also be prepared to maintain consistency among study investigators. Using these scripts, we will role play interactions with pretend participants. Prepare QA checklists to use after each visit to confirm that data were entered correctly and that all required paperwork has been completed.
- **PowerPoint presentation of your study results.** As a group, put together a presentation of your study. Include an introduction, brief review of literature, study hypothesis or purpose, aims, methods, results (presented in appropriate format), summary, limitations, conclusions, practice points, and references.
- **Peer teamwork evaluations.** At the mid-point and end of the semester you will evaluate your peers who are helping with your research project.
- **Study closure activities.** At the conclusion of the study complete all activities related to closing an Institutional Review Board (IRB) approved study (i.e., de-identify and scan study documents, complete IRB study closure documents, and finalize the regulatory binder.
- **Class attendance and 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.

GRADING:	**Points**
Article presentation	15
Written SOP's and QA forms	15
PowerPoint presentation of your study results	30
Peer teamwork evaluations	
Mid-point evaluation	10
Final evaluation	10
Complete study closure procedures	10
Attendance and participation	10
Total	**100**

A = 100-94.0; A- = <94.0-90.0; B+ = <90.0-87.0; B = <87.0-84.0; B- <84.0-80.0; C+ = <80.0-77.0; C = <77.0-74.0; etc.

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/

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/.

Tentative Course Schedule

DATE		TOPIC
January	7	Review course syllabus and worksheets from last semester. Discuss timeline for initiation of IRB-approved study/studies **Read assigned articles on randomized, controlled trials (RCT's)**
	14	Discuss study SOP's and QA forms Discuss the regulatory binder and deviation and AE tables Update study progress
	21	Update study progress and **RCT article presentation and discussion #1** **SOP's and QA forms due** **Begin study if IRB has approved study**
	28	Update study progress and **RCT article presentation and discussion #2**
February	4	Update study progress and **RCT article presentation and discussion #3**
	11	Update study progress and **RCT article presentation and discussion #4**
	18	Update study progress and **RCT article presentation and discussion #5**
	25	Update study progress and **RCT article presentation and discussion #6** **Mid-point peer teamwork evaluations are due (please submit on Canvas).**
March	4	***Spring Break***
	11	Update study progress and **RCT article presentation and discussion #7** Discuss data entry/coding/QA and statistical analyses
	18	Update study progress and **RCT article presentation and discussion #8** Discuss data analyses, tables and figures
	25	Discuss data analyses, tables and figures **Complete preliminary analysis on primary outcome** **Upload first draft of tables and figures to Dr. H 24 hours before class begins**
April	1	Presentation of data tables and figures
	8	Presentation of first draft of PowerPoint with study results (i.e., seminar) **Upload seminar slides to Dr. H 24 hours before class begins**
	15	Presentation of second draft of PowerPoint with study results (i.e., seminar) **Upload seminar slides to Dr. H 24 hours before class begins**
Final Exam Period:	TBA	PowerPoint presentation of the study with invited guests (see rubric) **Complete (upload onto Canvas)** • **Final PowerPoint presentation (due 24 hours prior to start of class)** • **Course/instructor evaluations (link to evaluations on Canvas)** • **Final peer teamwork evaluations** • **Study closure procedures** • **Attendance/Participation Rubric**

GRADING RUBRICS:

Article presentation: You will receive the full 15 points if

	Points
1. the article is emailed to class 2 days prior to presentation.	2
2. the article is a randomized, controlled clinical trial.	3
3. major findings of the article are presented using the graphs and tables from the paper.	3
4. evaluate strengths, weaknesses, and potential bias based on the 2010 CONSORT guidelines and checklist.	7

Study standard operating procedures (SOP's) and QA forms: You will receive the full 15 points if

	Points
1. Step-by-step directions comply with IRB approved documents	5
2. Steps are logical and cover all aspects of the study	5
3. QA forms capture all aspects of the study procedures where human error could be introduced.	5

PowerPoint presentation of your study: You will receive the full 30 points if the

	Points
1. data are presented in such a way that they specifically address/answer the specific aims/study questions.	5
2. data are presented in the appropriate format (line graph vs. bar graph vs. table).	5
3. tables and figures are formatted in the appropriate style required by the Journal of Academy of Nutrition and Dietetics.	5
4. table titles and footnotes and figure legends are appropriate (e.g., define abbreviations, describe statistics) and easy to understand.	5
5. presentation includes an introduction, brief review of literature, study hypothesis or purpose, aims, methods, results, summary, limitations, conclusions, practice points, and references.	10

Peer teamwork evaluations: 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, 2=very effective or timely)	2	
Attendance – has attended all planning and preparation meetings and has been on time (0=very poor attendance and always late, 2=great attendance and on time)	2	
Responsibility – has assumed equal responsibility for their share of the project (0=others have had to assume these responsibilities, 4=completed their share of the responsibilities)	4	
Attitude – has maintained a positive attitude during the project (0=very poor attitude, 2=very positive attitude)	2	
Total	10	
Comments		

Study closure activities: You will receive the full 10 points if

	Points
1. Study materials are de-identified and scanned.	3
2. IRB study closure documents are completed.	3
3. The regulatory binder and all study materials are organized and submitted to Dr. Henken.	4

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	**0-1.6 points**	**1.7-1.9 points**	**2.0-2.2 points**	**2.3-2.5 points**	**/2.5**
	3 or more unexcused absences	2 unexcused absences	1 unexcused absence	Attended all class sessions or received approval for all necessary absences	
Frequency	**0-1.6 points**	**1.7-1.9 points**	**2.0-2.2 points**	**2.3-2.5 points**	**/2.5**
	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	**0-1.6 points**	**1.7-1.9 points**	**2.0-2.2 points**	**2.3-2.5 points**	**/2.5**
	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	**0-1.6 points**	**1.7-1.9 points**	**2.0-2.2 points**	**2.3-2.5 points**	**/2.5**
	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	**/10.0**

Explanation:

OTHER INFORMATION:

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 this course unless I give explicit permission for you to collaborate on course tasks (e.g. in-class assignments). 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.

Software Use: All faculty, staff and students 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.

Campus Helping Resources: 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/cwc/ Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching.
- ***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 Resource Center***, First Floor JWRU, 392-1601, www.career.ufl.edu/
- ***Student Complaints***: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/
- ***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.

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/

Glosz CM, Schaffner AA, Reaves SK, et al. Effect of nutritional interventions on micronutrient status in pregnant Malawian women with moderate malnutrition: a randomized, controlled trial. Nutrients. 2018; 10:879.

Hossein-nezhad A, Spira A, Holic MF. Influence of vitamin D status and vitamin D3 supplementation on genome wide expression of white blood cells: a randomized double-blind clinical trial. PLOS ONE. 2013; 8:e58725.

Iannotti LL, Lutter CK, Steward CP, et al. Eggs in early complementary feeding and child growth: a randomized controlled trial. Pediatrics. 2017; 140(1):e20163459.

Jalambo M, Karim N, Naser I, Sharif R. Effects of iron supplementation and nutrition education on haemoglobin, ferritin and oxidative stress in iron-deficient female adolescents in Palestine: randomized control trial. EMHJ. 2018; 6:560

Ozen N, Tosun N, Yamanel L, et al. Evaluation of the effect on patient parameters of not monitoring gastric residual volume in intensive care patients on a mechanical ventilator receiving enteral feeding: a randomized clinical trial. J Crit Care. 2016; 33:137.

Ptomey LT, Steger FL, Lee J, et al. Changes in energy intake and diet quality during an 18-month weight management randomized controlled trial in adults with intellectual and developmental disabilities. J Acad Nutr Diet. 2018; 118:1087.

Zhao R, Wang Y, Huang Y, et al. Effects of fiber and probiotics on diarrhea associated with enteral nutrition in gastric cancer patients: a prospective randomized and controlled trial. Medicine. 2017; 96:43.

Cover Sheet: Request 15206

Macronutrients

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	7/31/2020 4:40:30 PM
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 Syllabus Macronutrients 7-31-20.docx Syllabus Macronutrients 7-31-20.pdf					7/31/2020 7/31/2020 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
Description of request: Proposal of a new graduate course
Submitter: Robin Henken henken@ufl.edu
Created: 7/31/2020 2:17:57 PM
Form version: 1

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 BCH4024 or BCH3025
Co-requisites N/A
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 3 or more unexcused absences	17-19 points 2 unexcused absences	20-22 points 1 unexcused absence	23-25 points Attended all class sessions or received approval for all necessary absences	/25
Frequency	0-16 points Student does not initiate contribution & needs instructor to solicit input.	17-19 points Student initiates contribution at least in half of the class sessions	20-22 points Student initiates contribution once in each recitation.	23-25 points Student initiates contributions more than once in each class session.	/25
Quality	0-16 points 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.	17-19 points	20-22 points Comments are sometimes constructive, with	23-25 points	/25

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.

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

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

COURSE LEADER and INSTRUCTOR:

Bobbi Langkamp-Henken, Ph.D., R.D.
Food Science and Human Nutrition Department
FSHN Building, Room 309
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)	TBD
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)	Email Dr. Mathews to schedule an appointment
COURSE TA: TBD	TBD

COURSE DESCRIPTION:
Digestion, absorption, and metabolism of macronutrients in health and disease.
Prerequisites: BCH4024 or BCH3025 and a principles of nutrition course.

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 readings/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:

This is a 3-credit class being taught in two 50-minute blocks twice a week as if it were a 4-credit course. Time off will be given during the semester to reduce classroom time to that of a 3-credit course.

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*

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.

Examples of Questions/Scenarios

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:

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/

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/.

Absences 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/.

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 this course unless I give explicit permission for you to collaborate on course tasks (e.g. in-class assignments). 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.

Software Use: All faculty, staff and students 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.

Campus Helping Resources: 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/cwc/ Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching.
- ***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 Resource Center***, First Floor JWRU, 392-1601, www.career.ufl.edu/
- ***Student Complaints***: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/
- ***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.

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 13571

WIS5XXX Molecular ecology in application

Info

Process	Course|New|Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	James Austin austinj@ufl.edu
Created	2/2/2019 11:45:14 AM
Updated	8/19/2020 1:40:52 PM
Description of request	This course has been taught previously as WIS6934. I am seeking a permanent number for this class.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Wildlife Ecology and Conservation 514947000	Eric Hellgren		4/8/2020
uccconsult_WEC_Austin Graduate Molecular Ecology.pdf					3/12/2019
College	Pending	CALS - College of Agricultural and Life Sciences			4/8/2020
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 13571

Info

Request: WIS5XXX Molecular ecology in application
Description of request: This course has been taught previously as WIS6934. I am seeking a permanent number for this class.
Submitter: Joel H Brendemuhl brendj@ufl.edu
Created: 7/22/2020 2:27:44 PM
Form version: 2

Responses

Recommended Prefix WIS
Course Level 5
Number XXX
Category of Instruction Introductory
Lab Code C
Course Title Molecular ecology in application
Transcript Title Mol. ecol. in applic.
Degree Type Graduate

Delivery Method(s) On-Campus
Co-Listing No
Co-Listing Explanation N/A
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 focuses on topics ranging from species delineation to the studying mating systems. A mix of lectures, reading discussions and practical exercises will introduce students to the general approaches used in molecular ecology. A term project proposal will be required.

Prerequisites WIS3553C(C) or equivalent.

Co-requisites none
Rationale and Placement in Curriculum This course is aimed at new graduate students whom are planning to focus on molecular ecological applications, or for students interested in learning about the applications of molecular genetic/genomic markers to the study of organismal ecology.
Course Objectives • Gain a fundamental understanding of the theoretical framework for selected aspects of molecular ecology
- Develop a broad understanding of the ecological questions that can be addressed using modern molecular techniques
- Learn and implement basic approaches and tools relevant for molecular ecology
- Develop and refine critical thinking and communication skills

Course Textbook(s) and/or Other Assigned Reading The text listed be low will be considered, but none are perfect. Most readings will be in the form of current primary literature.
Allendorf et al. 2013. Conservation and genetics of popualtions (2nd ed.)

Primary readings (partial exemplar list):
Allendorf FW. 2017. Genetics and the conservation of natural population: allozymes to genomes. Molecular Ecology 26:420-430.
Andrews et al. 2013. A road map for molecular ecology. 22: 2605-2626

Larson et al. 2014. Gene flow and the maintenance of species boundaries. Molecular Ecology 23:1668-1678.
Rissler LJ. 2016. Union of phylogeography and landscape genetics. Proceedings of the National Academy of Sciences USA. 113: 8079-8086.
Weekly Schedule of Topics Week 1-3: Molecular markers in ecology (reduced representation libraries; transcriptome and genome sequencing; targeted sequencing).
Week 4: Project design and planning (sampling design; power analysis)
Week 5: Analysis of single populations (quantification of diversity; heterozygosity and fitness; effective population size).
Week 6: Analysis of multiple populations (gene flow, differentiation, genetic structure)
Week 7-8: Phylogeography (networks, bifurcating trees, coalescent modeling)
Week 9-10: Species, populations, individuals (cryptic, sibling and sister species; hybrids and hybrid zones; evolutionary significant units)
Week 11-12: Behavioral ecology (mating systems, kinship; dispersal; predator-prey dynamics)
Week 13-14: Landscape genetics (landscape effects on dispersal; disease transmission)
Week 15: Conservation genetics (inbreeding, genetic load, genetic restoration, captive breeding)

Links and Policies http://www.wec.ufl.edu/courses/grad_courses.php
Grading Scheme Student assessment will include weekly assignments, either lab-oriented (e.g., projects in R) and/or reading assignment for discussion during class meetings. There will be individual term projects and a final exam.
Lab assignments - 25%
Reading assignments - 10%
Individual projects - 40%
Final exam 25%
Instructor(s) James Austin

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.

N/A 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.

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.

JA 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.

JA___ 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.

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

Department	Name and Title
Biology	Marta L. Wayne, Professor & Chair
Phone Number	**E-mail**
352-392-9925	mwlayne@ufl.edu

Comments

Biology approves this course, and appreciates the pre-requisite of Evolution or Population Genetics. This course will be a nice addition to the curriculum.

Department	Name and Title
Phone Number	**E-mail**

Comments

Department	Name and Title
Phone Number	**E-mail**

Comments

Molecular ecology in application(WISXXXX)

Fall 2021, 3 credits

Day (TBA), periods TBA, Time TBA (Loc TBA)

Instructors:
Dr. James Austin
e-mail: austinj@ufl.edu
Office: Bldg 116
2322 Mowry Rd.
Office Ph: 846-0646
Office hours: TBA

Course Description

This course focuses on topics ranging from species delineation to the studying mating systems. A mix of lectures, reading discussions and practical exercises will introduce students to the general approaches used in molecular ecology. A term project proposal will be required

This course is aimed at new graduate students whom are planning to focus on molecular ecological applications, or for students interested in learning about the applications of molecular genetic/genomic markers to the study of organismal ecology and evolution. The course will focus on a variety of topics, from species delineation to studying mating systems.

The course is a mix of lectures, reading discussions and practical exercises that will introduce students to some of the general approaches used to apply genetic tools to research questions.

Course learning objectives

- Over the course of the semester students will learn to practice critical thinking in molecular ecology project design and implementation.
- Over the course of the semester students will analyze and interpret genetic data applied to a variety of research applications in molecular ecology.
- By the end of the course students will design and write a research project proposal.
- By the end of the course students will be able to practice critical thinking in molecular ecology project design and implementation.

Prerequisites

Graduate students: It is *highly recommended* that students have taken at least one upper division course in evolution or population genetics, as a general understanding of the latter will be necessary. We will review basic

population genetics and molecular genetics in the first weeks. Permission of the instructor is required prior to enrolling.

Students will require access to a laptop for exercises in R.

Assigned readings

There is no textbook for this course, however a good resource that can be used as extra reading is Rowe, Sweet & Beebee. 2007. *An Introduction to Molecular Ecology*, 3rd Ed. Oxford Univ. Press, London.

Selected articles from recent literature will be required most weeks, which we will make available on *E-Learning*. Readings will consist of meta-analyses and reviews, primary empirical research papers, and methodological papers. The list below will be updated with more relevant primary literature from semester to semester.

Tentative readings may include:

- Andrew et al. 2013. A road map for molecular ecology. Molecular Ecology 22:2605-2626. https://doi.org/10.1111/mec.12319
- Flanagan et al. 2018. Guidelines for planning genomic assessment and monitoring of locally adaptive variation to inform species conservation. Evolutionary Applications 11:1035-1052. https://doi: 10.1111/eva.12569
- Keenen et al. 2013. diveRsity: An Rpackage for the estimation and exploration of population genetics parameters and their associated errors. Methods in Ecology and Evolution 4:782-788. https://doi:10.1111/2041-210X.12067
- Parobek et al. 2017. skeleSim: and extensible, general framework for population genetic simulation in R. Moelcuar Ecology Resources 17:101-109. https://doi:10.1111/1755-0998.12607
- Flanagan and Jones. 2019. The future of parentage analysis: From microsatellites to SNPs and beyond. Molecular Ecology 28:544-567. https://doi:10.1111/mec.14988
- Hoban et al. 2016. Finding the genomic basis of local adaptation: pitfalls, practical solutions, and future directions. American naturalist 188:379-397. https://doi:10.1086/688018
- Rellstab et al. 2015. A practical guide to environmental association analysis in landscape genomics. Molecular Ecology 24:4348-4370. https://doi:10.1111/mec.13322

Grading

Your grades will be assessed using a number of variables: a take home exam, assignments based on practicum, and a project proposal.

	Cumulative Points	%
Lecture quizzes (weekly)	130	~10
Data analysis assignments	600	~49
Proposal	300	~25
Final exam	200	~16

Grading structure: A 94+; A- 90 - 93.9; B+ 87 - 89.9;

B 83 – 86.9; B- 80 – 82.9; C+ 77 – 79.9; C 73 – 76.9;
C- 70 – 72.9; D+ 67 – 69.9; D 63 – 66.9; D- 60 – 62.9;
E < 60

Lecture quizzes: Brief recorded lectures will be provided through Canvas and must viewed prior to meeting for tutorials. Each weeks Lecture(s) will be accompanied by an online quiz.

Assignments: Assignments will be exercises extending from the in class practical demonstrations. Typically there will be one assignment due every other week that incorporates knowledge gained over the previous one or two modules. Students will be expected to analyze and interpret data sets and provide lab reports along with any R scripts. Report rubrics will be available on Canvas.

Proposal: You will develop a proposal that incorporates a molecular ecological approach. We are hoping that most of you will be able to use this toward your graduate proposals. Proposals will be 3-5 pages (single spaced).

Exam: There will be one take home exam that will cover most of the lecture material and readings covered in the course. The exam will be an open-book, and will likely include a combination of essay and problem-solving questions.

Schedule:

Schedule (tentative) of topics and important deadlines. Each module corresponds to approximately one weeks-worth of lectures and practica.

Modules	Module Topic
1	Introduction
2	Molecular Ecology in practice
3	Molecular tools: genome sequencing and genome reduction
4	Project design and planning (sample design, power analyses)
5	SNP filtering for success
7	Analyses of populations (quantification of diversity, effective population size)
6	Coalescent simulations for inference and forecasting
8	Inbreeding and individual fitness
9	Genetic methods for delineating populations
10	Quantifying connectivity (gene flow, dispersal, population assignment)
11	Genome scans for selection
12	Relatedness and kinship
13	Landscape genomics
14	Conservation genetics
15	Proposal discussions

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/.

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/.

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/.

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.

Software Use:

All faculty, staff and students 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.

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/

Campus Helping Resources

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 Success Initiative, http://studentsuccess.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

Additional information
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 14920

SWS 6931 - Professional Development in Soil Water and Ecosystem Sciences

Info

Process	Course|Modify|Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Michael Sisk mjsisk@ufl.edu
Created	4/17/2020 12:29:25 PM
Updated	4/21/2020 8:58:20 AM
Description of request	Modify Graduate Level Course, Change Title, Change Credits, Change Course Description, Etc..

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Soil and Water Science 514921000	Matthew Whiles		4/17/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			4/17/2020
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|Modify for request 14920

Info

Request: SWS 6931 - Professional Development in Soil Water and Ecosystem Sciences
Description of request: Modify Graduate Level Course, Change Title, Change Credits, Change Course Description, Etc..
Submitter: Michael Sisk mjsisk@ufl.edu
Created: 4/17/2020 12:21:28 PM
Form version: 1

Responses

Current Prefix SWS
Course Level 6
Number 931
Lab Code None
Course Title Seminar
Effective Term Earliest Available
Effective Year Earliest Available
Requested Action Other (selecting this option opens additional form fields below)
Change Course Prefix? No

Change Course Level? No

Change Course Number? No

Change Lab Code? No

Change Course Title? Yes
Current Course Title Seminar
Proposed Course Title Professional Development in Soil and Water Sciences
Change Transcript Title? Yes
Current Transcript Title Seminar
Proposed Transcript Title (30 char. max) Professional Development SWS
Change Credit Hours? Yes
Current Credit Hours 1
Proposed Credit Hours 2
Change Variable Credit? No

Change S/U Only? No

Change Contact Type? No
Current Contact Type Regularly Scheduled

Change Rotating Topic Designation? No

Change Repeatable Credit? Yes
Repeatable Credit From Repeatable to Non-repeatable
Maximum Repeatable Credits 2
Change Course Description? Yes
Current Course Description Presentation of literature, methods of proposed thesis research, and selected topics.
Proposed Course Description (500 characters max) This course serves as a professional

development component to graduate coursework in soil and water sciences and related fields. Topics include common skills and challenges in academia and professional employment.
Change Prerequisites? No

Change Co-requisites? No

Rationale SWS 6931 - Seminar - 1 Credit was taught by many years by a faculty member who is now retired, a new faculty member is now teaching the course, discussed needing to revamp the course to make it a more beneficial experience for graduate students in the area of furthering their professional development. This revamping of course was supported by SWS Faculty & changes were approved by SWS Academic Programs Committee.

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.

N/A 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.

Course Syllabus

SWS 6931: Professional Development in Soil, Water, and Ecosystem Sciences [2 credit hours]

Instructor:	Dr. Sam Smidt
Email:	ssmidt@ufl.edu
Office Phone:	352-294-3120
Office Location:	McCarty A, G153
Office Hours:	M and W, 2:00-2:50pm, or by appointment
Course Format:	Hybrid: Can be attended in person for on-campus students or through Zoom for distance students. Live attendance is required.
Course Time:	3:00-3:50pm, M and W
Course Location:	TBD, announced at the beginning of the semester.
Course Website:	https://elearning.ufl.edu/
Seminar Website:	https://mediasite.video.ufl.edu/Mediasite/Catalog/catalogs/swsseminars
Course Description:	This course serves as a professional development component to graduate coursework in soil and water sciences and related fields. Topics include common skills and challenges in academia and professional employment. This course is available to both MS and PhD students and is offered every fall and spring semester.
Required Texts:	No textbook is required. Students will be asked to download articles, book chapters, and reports throughout the semester (see Reading List).
Communication:	Direct communication will come through official University of Florida email via Canvas. Each student is responsible for these messages, and emails should be checked daily.
Canvas:	All grades, content, and resources will be posted to the course site.
General Policies:	Assignments are to be individual own work unless otherwise stated. All relevant content will be made available through the course website. Students must receive instructor approval prior to any late activity. This course is designed on respect; disrespectful actions will be resolved as necessary.
Course Evaluation:	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/.

Course Structure

This course meets regularly in-person during the week, and all content follows the course schedule.

Course Objectives

By the end of this course, students will be able to:

1. Identify university resources available to graduate students in the Soil and Water Sciences Department or related disciplines.
2. Discuss diverse academia issues that students commonly encounter during a graduate career.
3. Develop useful products for graduate or professional tasks (e.g., CV, poster, thesis proposal).
4. Make accurate and efficient oral presentations.
5. Build mentoring and teaching skills.
6. Develop collegiality among faculty, students, and colleagues.

Course Grades

Presentation Critiques:	20 points total, 20% of total grade	20 Points
Assignments:	10 points each, 5 assignments, 50% of your total grade	50 points
Course Participation:	10 points each, 3 assessments, 30% of your total grade	30 Points
	TOTAL	100 Points

Grade Description

Presentation Critiques: Each student will provide a ½ page (single spaced) critique of an assigned seminar presentation. We will openly discuss these critiques in-person during the course. Rubrics focused on critique quality and insight will be provided for determining grades.

Assignments: Assignments are listed on the course schedule and will be discussed in class. All assignment details and grading rubrics will be posted to the course website.

Course Participation: Students are expected to participate in lecture through insightful discussion. Rubrics highlighting expectations will be discussed at the beginning of the semester, and assessments will be conducted three times throughout the semester.

Grading Scale

A : 93 – 100%	B+ : 88 – 89.9%	C+ : 78 – 79.9%	D+ : 68 – 69.9%	F : <60%
A- : 90 – 92.9%	B: 83 – 87.9%	C: 73 – 77.9%	D: 63 – 67.9%	
	B- : 80 – 82.9%	C- : 70 – 72.9%	D- : 60 – 62.9%	

Grade Points: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/.

Academic Integrity: As a UF student, you have committed to 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*." Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. Violations of the Honor Code will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.

Students with Disabilities: The Disability Resource Center coordinates the needed accommodations of students with disabilities. 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.

Attendance: Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.

Software Use: All faculty, staff and students 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.

Campus Helping Resources: 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:
- Residential Course: **https://sccr.dso.ufl.edu/**
- Online Course: **http://www.distance.ufl.edu/student-complaint-process**

Course Schedule

WEEK #	*TOPIC*	*ASSIGNMENT*	*DUE DATE*
1 M	UF Resources		
1 W	Developing a CV	**CV Draft**	**9/2 (2W)**
2 M	Proposal Writing	**Budget Draft**	**9/21 (5M)**
2 W	Guest Visit (UF Research)		
3 M	*NO CLASS: Labor Day*		
3 W	Ethics/ Guest Visit (UF Div. of Student Affairs)		
4 M	Quality Teaching		
4 W	Guest Visit (UF Cen. for Teaching Excellence)	Participation Survey	
5 M	Poster Presentations		
5 W	Guest Visit (Professional Organization Rep.)		
6 M	Oral Presentations	**3-Slide Presentation**	**10/19 (9M)**
6 W	Guest Visit (UF AEC Department)		
7 M	Navigating a Conference		
7 W	Guest Visit (Professional Organization Rep.)		
8 M	Academia Employment	**Cover Letter**	**11/9 (12M)**
8 W	Guest Visit (External Professor)	Participation Survey	
9 M	Industry Employment		
9 W	Guest Visit (External Manager)		
10 M	Government Employment		
10 W	Guest Visit (External Gov't Employee)		
11 M	Extension Employment		
11 W	Guest Visit (UF IFAS Extension)		
12 M	Time Management		
12 W	*NO CLASS: Veterans' Day*	Participation Survey	
13 M	Science Communication		
13 W	Guest Visit ("SciComm" Rep.)		
14 M	Social Media/ Guest Visit (Recognized User)	**Topic Summary**	**12/9 (16W)**
14 W	*NO CLASS: Thanksgiving*		
15 M	Networking		
15 W	Guest Visit (Professional Org. Rep.)		
16 M	Work-Life Balance		
16 W	Guest Visit (UF Mindfulness)		

Reading List

Donelan, H. (2016). Social media for professional development and networking opportunities in academia. Journal of Further and Higher Education, 40(5), 706-729.

Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. Nature biotechnology, 36(3), 282.

McNeal, K. S., & Petcovic, H. L. (2017). Sparking conversations about graduate programs in geoscience education research. Journal of Geoscience Education, 65(4), 399-406.

Muindi, F., & Keller, J. B. (2015). Emerging network of resources for exploring paths beyond academia. Nature biotechnology, 33(7), 775.

Zarnetske, J. P., & Zarnetske, P. L. (2015). Strategies for creating a conspicuous, effective, and memorable poster presentation. GSA Today, 25(5), 66-68.

UF UNIVERSITY of FLORIDA

UCC: Syllabus Checklist

All UCC1 forms and each UCC2 form that proposes a change in the course description or credit hours must include this checklist in addition to a complete syllabus. Check the box if the attached syllabus includes the indicated information.

Syllabus MUST contain the following information:

- ☑ Instructor contact information (and TA if applicable)
- ☑ Course objectives and/or goals
- ☑ A weekly course schedule of topics and assignments
- ☑ Required and recommended textbooks
- ☑ Methods by which students will be evaluated and their grades determined
- ☑ A statement related to class attendance, make-up exams and other work such as: "Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx."
- ☑ A statement related to accommodations for students with disabilities such as: "Students requesting classroom accommodation must first register with the Dean of Student Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation."
- ☑ Information on current UF grading policies for assigning grade points. This may be achieved by including a link to the appropriate undergraduate catalog web page: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx
- ☑ A statement informing students of the online course evaluation process such as: "Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu.

It is recommended that syllabi contain the following information:

1. Critical dates for exams and other work
2. Class demeanor expected by the professor (e.g., tardiness, cell phone usage)
3. UF's honesty policy regarding cheating, plagiarism, etc. Suggested wording: 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-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of TAs in this class.
4. Phone number and contact site for university counseling services and mental health services: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx
   University Police Department: 392-1111 or 9-1-1 for emergencies.

The University's complete Syllabus Policy can be found at: http://www.aa.ufl.edu/Data/Sites/18/media/policies/syllabi_policy.pdf

Cover Sheet: Request 14898

SWS 6932 - Topics in Soils

Info

Process	Course|Modify|Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Michael Sisk mjsisk@ufl.edu
Created	4/13/2020 3:25:27 PM
Updated	7/22/2020 3:17:52 PM
Description of request	SWS Request To Change SWS 6932 - Topics in Soils From "Headcount Hours" to "Base Hours"

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Soil and Water Science 514921000	Matthew Whiles		4/14/2020
SWS_6932_Topics_in_Soils_4_3_20.pdf					4/13/2020
College	Pending	CALS - College of Agricultural and Life Sciences			4/14/2020
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|Modify for request 14898

Info

Request: SWS 6932 - Topics in Soils
Description of request: SWS Request To Change SWS 6932 - Topics in Soils From "Headcount Hours" to "Base Hours"
Submitter: Michael Sisk mjsisk@ufl.edu
Created: 1/9/2020 4:28:06 PM
Form version: 1

Responses

Current Prefix SWS
Course Level 6
Number 932
Lab Code None
Course Title Topics in Soils
Effective Term Earliest Available
Effective Year Earliest Available
Requested Action Other (selecting this option opens additional form fields below)
Change Course Prefix? No

Change Course Level? No

Change Course Number? No

Change Lab Code? No

Change Course Title? No

Change Transcript Title? No

Change Credit Hours? No

Change Variable Credit? No

Change S/U Only? No

Change Contact Type? Yes
Current Contact Type Directed Individual Studies
Proposed Contact Type Regularly Scheduled
Change Rotating Topic Designation? No

Change Repeatable Credit? No

Maximum Repeatable Credits 8
Change Course Description? No

Change Prerequisites? No

Change Co-requisites? No

Rationale SWS is putting forth a request to change SWS 6932 – Special Topics in Soil and Water Sciences from “headcount hours” to “base hours”. It’s undergraduate counterpart (SWS 4932 – Special Topics in Soil and Water Sciences) is “base hours” already, but for some reason SWS 6932 – Special Topics in Soil
and Water Sciences has always been “headcount hours”. We use SWS 6932 – Special Topics in Soil and Water Sciences as a placeholder for courses that we teach that will be going through the approval system for real course number. Any course under this particular course prefix and course number is not covered by state of florida agency tuition fee waiver program or UF employee education program, b/c it is headcount hours course, thus we have to petition on course by course basis to have covered by the program. We spoke to Dr. Brendemuhl and this is the route we need to go to make this change, through approval system. Thanks. Mike S.

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.

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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.

Done 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.

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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.

Topics in Soils

SWS 6932 Section: TBD
Class Periods: TBD
Location: TBD
Credits: TBD
Academic Term: TBD

Instructor:
Name: TBD
Email Address: TBD
Office Phone Number: TBD
Office Hours: TBD

Teaching Assistants:
Please contact through the Canvas website

- Name of TA, email address, office location, office hours: TBD
- Name of TA, email address, office location, office hours: TBD

Course Description
Variable Topics Designed to Meet Student's Needs and Interests. Also Offered as A Distance Education Course.

Course Pre-Requisites / Co-Requisites
SWS 5050 – Soils for Environmental Professionals

Course Objectives
Course learning objectives. Course objectives should indicate what the student will be able to do when they have completed the course. See the guidance documents at: https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf and https://cals.ufl.edu/content/PDF/Faculty_Staff/how-to-write-course-objectives.pdf.

Materials and Supply Fees
N/A

Required Textbooks and Software

- Title: TBD
- Author: TBD
- Publication date and edition: TBD
- ISBN number: TBD

(if course notes derived from various published sources are used, provide information above for each source)
(if course notes are developed by the instructor, so state)

Recommended Materials

- Title: TBD
- Author: TBD
- Publication date and edition: TBD
- ISBN number: TBD

Course Schedule
Week 1: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 2: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 3: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 4: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 5: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams

Week 6: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 7: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 8: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 9: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 10: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 11: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 12: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 13: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 14: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 15: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams
Week 16: Topic / Lecturer / Corresponding Book Chapters / Quizzes / Exams

Attendance Policy, Class Expectations, and Make-Up Policy: TBD
State whether attendance is required and if so, how will it be monitored? What are the penalties for absence, tardiness, cell phone policy, laptop policy, etc. What are the arrangements for missed homework, missed quizzes, and missed exams?

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/.

Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade
TBD	TBD	TBD
TBD	TBD	TBD
TBD	TBD	TBD
TBD	TBD	TBD
TBD	TBD	TBD
		100%

Grading Policy
The following is given as an example only.

Percent	Grade	Grade Points
TBD	A	4.00
TBD	A-	3.67
TBD	B+	3.33
TBD	B	3.00
TBD	B-	2.67
TBD	C+	2.33
TBD	C	2.00
TBD	C-	1.67
TBD	D+	1.33
TBD	D	1.00
TBD	D-	0.67
TBD	E	0.00

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/.

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/.

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.

Software Use

All faculty, staff and students 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.

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/.

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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

Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/.

Online Course: http://www.distance.ufl.edu/student-complaint-process

Additional information 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 15191

ANS4XXX - GENETIC ANALYSES OF COMPLEX TRAITS IN LIVESTOCK

Info

Process	Course|New|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Raluca Mateescu RALUCA@UFL.EDU
Created	7/22/2020 1:00:46 PM
Updated	8/18/2020 3:02:04 PM
Description of request	Create an undergraduate section for the existing ANS6387 Genetic Analyses of Complex Traits in Livestock course. With the new advances we have witness in the last few years relative to DNA technology and its use in animal agriculture it is imperative for our students to be exposed to these topics.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 514909000	Saundra Tenbroeck		8/3/2020
ANSI 4XXX Genetic Analyses Complex Traits Syllabus .docx ANSI 6387 Syllabus_Spring 2021.docx					7/31/2020 7/31/2020
College	Pending	CALS - College of Agricultural and Life Sciences			8/3/2020
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 15191

Info

Request: ANS4XXX - GENETIC ANALYSES OF COMPLEX TRAITS IN LIVESTOCK
Description of request: Create an undergraduate section for the existing ANS6387 Genetic Analyses of Complex Traits in Livestock course. With the new advances we have witness in the last few years relative to DNA technology and its use in animal agriculture it is imperative for our students to be exposed to these topics.
Submitter: Raluca Mateescu RALUCA@UFL.EDU
Created: 7/31/2020 7:06:30 PM
Form version: 2

Responses

Recommended Prefix ANS
Course Level 4
Course Number XXX
Category of Instruction Joint (Ugrad/Grad)
Lab Code None
Course Title Genetic analyses of complex traits in livestock
Transcript Title Quant Genet Analyses
Degree Type Baccalaureate

Delivery Method(s) On-Campus, Online
Co-Listing Yes
Co-Listing Explanation Different exams will be prepared for undergraduate and graduate students. Undergraduate exams will have more general questions about the content presented in the lectures and will be worth 50 points each. Graduate exams will have additional/different questions which will require answers with greater detail and will be worth 100 points each.

Undergraduate students will not be required to present an article, each graduate student will be required to present an article.

Undergraduate students will be required to write a summary for each article, 20 points each. This will require the undergraduate student to reflect on each reading and to generate short, meaningful summaries.
Effective Term Earliest Available
Effective Year 2020
Rotating Topic? No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 3
Course Description Comprehensive examination of principles of livestock inheritance, QTL mapping strategies and functional genomic approaches used for genomic selection and improvement programs in farm animals.
Prerequisites ANS3384C or equivalent
Co-requisites N/A
Rationale and Placement in Curriculum Analysis of complex traits including marker assisted selection and QTL mapping are important topics in animal and plant breeding. This course will expose students to recent DNA based technologies and their use in selection programs.
Course Objectives 1. Describe and illustrate different molecular methods of genotyping and gene characterization;
2. Present and analyze the components of the basic genetic model for quantitative traits;
3. Define and apply various statistics used in quantitative animal breeding: mean, variance, covariance, heritability, repeatability, selection, selection response, selection intensity;

4. Classify the various factors that affect the rate of genetic change in animal breeding improvement;
5. Describe and analyze different methods of gene mapping including linkage association analyses;
6. Analyze various functional genomic approaches and discuss strategies to find genes responsible for genetic variation in complex traits.

Course Textbook(s) and/or Other Assigned Reading Text
No formal text is required. Students will be provided handouts, which are current and relevant to topics discussed in class. Optional references include:
- Lynch and Walsh, Genetics and Analysis of Quantitative Traits, Sinauer, 1998
- Cockett and Kole, Genome Mapping and Genomics in Domestic Animal, Springer, 2010

Students will be expected to read and discuss several journals articles from the following:
- Benefits and limitations of genome-wide association studies. Nature Reviews Genetics. 20(8):467-484. 2019
- Applied Animal Genomics: Results from the Field. Annual Review of Animal Biosciences 2:105-139. 2014
- Accelerating Improvement of Livestock with Genomic Selection. Annual Review of Animal Biosciences 1:221-237. 2013
- Genomics to systems biology in animal and veterinary sciences: Progress, lessons and opportunities. Livestock Science 166:232-248. 2014
- Understanding and predicting complex traits: knowledge from cattle. Human Molecular Genetics, 21:45-51. 2012
- Genetics of complex traits: prediction of phenotype, identification of causal polymorphisms and genetic architecture. Proceedings Biological Sciences, 27:283(1835). 2016
- Towards sequence-based genomic selection of cattle. Nature Genetics, 46(8):807-809. 2014
- Harnessing genomic information for livestock improvement. Nature Reviews Genetics. 20(3):135-156. 2019
- Integration of summary data from GWAS and eQTL studies predicts complex trait gene targets. Nature Genetics. 48(5):481-487. 2016
- Genome-wide association studies for complex traits: consensus, uncertainty and challenges. Nature Reviews. Genetics, 9(5):356–69. 2008
- Invited review: quantitative trait nucleotide determination in the era of genomic selection. Journal of Dairy Science, 94(3):1082–90. 2011
- Mapping, fine mapping, and molecular dissection of quantitative trait loci in domestic animals. Annual Review of Genomics and Human Genetics, 8:131–62. 2007
- Turning science on robust cattle into improved genetic selection decisions. Animal: An International Journal of Animal Bioscience, 6(4):551–6. 2012
- Symposium review: How to implement genomic selection. Journal of Dairy Science. 103(6):5291-5301. 2020
- Livestock 2.0 – genome editing for fitter, healthier, and more productive farmed animals. Genome Biology, 26;19(1):204. 2018
- Genome editing approaches to augment livestock breeding programs. Journal of Experimental Biology. 7:223. 2020

Weekly Schedule of Topics Monday Wednesday Friday
Week 1 Introduction, overview animal breeding; Overview of Population Genetics
Week 2 Basic statistics; Heritability; Genetic evaluation
Week 3 Genetic evaluation, cont.; Predicting response to selection
Week 4 Factors influencing rate of genetic change; Comparing Selection Programs; Adding genomic information in selection
Week 5 Exam 1; Principles of Marker-based Analysis; Marker-based Analysis
Week 6 Molecular Markers; Genotyping methods
Week 7 Linkage Disequilibrium; Genetic maps; Mapping QTL
Week 8 Experimental populations; Experimental populations: backcross or F2; Article 1 Presentation/Discussion
Week 9

Spring Break
Week 10 Article 2 Presentation/Discussion; Exam 2; QTL detection Strategies: Candidate gene

approach
Week 11 Linkage Mapping; Article 3 Presentation/Discussion; Article 4 Presentation/Discussion
Week 12 Association mapping; Article 5 Presentation/Discussion
Week 13 Exam 3; Marker Assisted Selection
Week 14 Article 6 Presentation/Discussion; Article 7 Presentation/Discussion
Week 15 Genomic Selection; Article 8 Presentation/Discussion
Week 16 Genetical Genomics; Article 9 Presentation/Discussion
Week 17 Final Exam

Grading Scheme Exams (403%)
There will be 3 exams worth 100 points each. The final exam is not comprehensive. The material covered in the exam will be detailed prior to each exam. (see important dates)

Problem Sets (16.4%)
There will be 4 problem sets worth 25 points each. Instructions and due dates will be provided in class.

Article Summaries (29.5%)
There will be 9 assignments to demonstrate understanding of articles. Each summary will be worth 20 points. Each summary should be a clear, concise (25 words or less), and coherently organized statement of the main ideas in the article. Summaries will be graded on a specific rubric.

Article Discussion (29.5%)
There will be 9 lecture times assigned to article discussions worth 20 points each. Students will be graded on their participation in the discussion. Presentations will be conducted by graduate students. Students are expected to read the article carefully and highlight sections which are either not clear or interesting and making important points. Students should be prepared to discuss these in class. In addition, students will have to formulate 2 questions to be discussed during class - please pay attention when you formulate these questions as you will be graded on their accuracy and clarity. To receive full credit, post your questions before midnight the day before the article is presented. Participation will be evaluated on a specific rubric provided in class.

Scoring Rubric for Article Discussion

Student: _____
Article: _____
Date:_____

o Questions posted on time on CANVAS (5 pts)
o Questions are relevant, clearly formulated (5 pts)
o Participation in class discussion and demonstration of a basic understanding of the concept presented. (10 pts)

Scoring Rubric for Article Summary

1. Structural Format (5 pts)
- Is the summary 25 words or less?
- Is the summary a coherent sentence, or sentences?
2. Clarity of Thought and Expression (10 pts)
- Are the ideas expressed well, well thought out, and integrated?
- Are correct grammar and syntax used?
3. Delineation of Core Message (5 pts)
- Does the summary accurately reflect the reading's essential message(s)?

Instructor(s) Raluca Mateescu
Attendance & Make-up Yes
Accomodations Yes

UF Grading Policies for assigning Grade Points Yes
Course Evaluation Policy Yes

ANS 4XXX – SPRING 2021
GENETIC ANALYSES OF COMPLEX TRAITS IN LIVESTOCK
3 CREDIT HOURS

Lecture times **Mondays** and **Wednesdays** 11:45am - 1:00pm

Instructor Dr. Raluca Mateescu
Office: 106 ANS; Phone: 392-2367; e-mail: raluca@ufl.edu

Office Hours: M & W, 1:00pm – 2:00pm or by appointment (contact Dr. Mateescu)

Course Description

Comprehensive examination of principles of livestock inheritance, QTL mapping strategies and functional genomic approaches used for genomic selection and improvement programs in farm animals.

Course Objectives

By the end of the semester, the student should be able to:

1. Describe and illustrate different molecular methods of genotyping and gene characterization.
2. Present and analyze the components of the basic genetic model for quantitative traits.
3. Define and apply various statistics used in quantitative animal breeding: mean, variance, covariance, heritability, repeatability, selection, selection response, selection intensity.
4. Classify various factors that affect the rate of genetic change in animal breeding improvement.
5. Describe and analyze different methods of gene mapping including linkage association analyses.
6. Analyze various functional genomic approaches and discuss strategies to find genes responsible for genetic variation in complex traits.

Attendance Policy

All exam information will be covered during the course of the lectures. **Attendance is strongly encouraged, and students are responsible for all material covered in lecture**. It is highly recommended that you attend class if you expect to obtain a satisfactory grade.

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

Contacting the Instructor

The instructor will be available for students. Please make arrangements to visit at your convenience. If you call and I am not available, leave your name and telephone number or e-mail address and you will be contacted as soon as the message is received. **The best method to reach me is through e-mail. DO NOT WAIT UNTIL EXAMINATION TIME!**

Please ask questions in class and do not be apprehensive about concepts that might not be clear. It is important to keep up and not fall behind. Get started on the first day of class – do your homework on time – attend class – get help when you need it – and remember there is no substitute for **DAILY PREPARATION. It is much easier on all of us if you get answers to questions one or two days after class rather than one or two days before an exam.**

Text

No formal text is required. Students will be provided handouts, which are current and relevant to topics discussed in class. Optional references include:

- Lynch and Walsh, Genetics and Analysis of Quantitative Traits, Sinauer, 1998
- Cockett and Kole, Genome Mapping and Genomics in Domestic Animal, Springer, 2010

Students will be expected to read and discuss several journals articles from the following:

- Benefits and limitations of genome-wide association studies. *Nature Reviews Genetics.* 20(8):467-484. 2019
- Applied Animal Genomics: Results from the Field. *Annual Review of Animal Biosciences* 2:105-139. 2014
- Accelerating Improvement of Livestock with Genomic Selection. *Annual Review of Animal Biosciences* 1:221-237. 2013
- Genomics to systems biology in animal and veterinary sciences: Progress, lessons and opportunities. *Livestock Science* 166:232-248. 2014
- Understanding and predicting complex traits: knowledge from cattle. *Human Molecular Genetics*, 21:45-51. 2012
- Genetics of complex traits: prediction of phenotype, identification of causal polymorphisms and genetic architecture. *Proceedings Biological Sciences*, 27:283(1835). 2016
- Towards sequence-based genomic selection of cattle. Nature Genetics, 46(8):807-809. 2014
- Harnessing genomic information for livestock improvement. *Nature Reviews Genetics.* 20(3):135-156. 2019
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- Genome-wide association studies for complex traits: consensus, uncertainty and challenges. *Nature Reviews. Genetics*, *9*(5):356–69. 2008
- Invited review: quantitative trait nucleotide determination in the era of genomic selection. *Journal of Dairy Science*, *94*(3):1082–90. 2011
- Mapping, fine mapping, and molecular dissection of quantitative trait loci in domestic animals. *Annual Review of Genomics and Human Genetics*, *8*:131–62. 2007
- Turning science on robust cattle into improved genetic selection decisions. *Animal: An International Journal of Animal Bioscience*, *6*(4):551–6. 2012
- Symposium review: How to implement genomic selection. *Journal of Dairy Science*. 103(6):5291-5301. 2020
- Livestock 2.0 – genome editing for fitter, healthier, and more productive farmed animals. *Genome Biology*, 26;19(1):204. 2018
- Genome editing approaches to augment livestock breeding programs. *Journal of Experimental Biology*. 7:223. 2020

Exams

There will be 3 exams worth 50 points each. The final exam is not comprehensive. The material covered in the exam will be detailed prior to each exam. (*see important dates*)

Problem Sets

There will be 4 problem sets worth 25 points each. Instructions and due dates will be provided in class.

Article Discussion

There will be 9 lecture times assigned to article discussions worth 20 points each. Students will be graded on their participation in the discussion. Presentations will be conducted by graduate students. Students are expected to read the article carefully and highlight sections which are either not clear or interesting and making important points. Students should be prepared to discuss these in class. In addition, students will have to formulate 2 questions to be discussed during class - please pay attention when you formulate these questions as you will be graded on their accuracy and clarity. To receive full credit, post your questions before midnight the day before the article is presented. Participation will be evaluated on a specific rubric provided in class.

Article Summary

Students will be required to reflect on each reading and to generate short, meaningful summaries. Each summary will be worth 20 points. Each summary should be a clear, concise (25 words or less), and coherently organized statement of the main ideas in the article. Summaries will be graded on a specific rubric.

Grade Distribution

3 Exams	150 points	24.6%
4 Problem Sets	100 points	16.4%
9 Article Discussions	180 points	29.5%
9 Article Summaries	180 points	29.5%
Total	610 points	100%

Letter grades will be assigned based upon the following scale:

A 93-100%	**B- 80-82.9%**	**D+ 67-69.9%**
A- 90-92.9%	**C+ 77-79.9%**	**D 63-66.9%-**
B+ 87-89.9%	**C 73-76.9%**	**D- 60-62.9%-**
B 83-86.9%	**C- 70-72.9%**	**E 60% and Below**

The scale may be lowered but it will not be raised.

Important Dates

No classes on:
January 18: MLK Day
March 6 – March 13: Spring Break

Exams
Exam 1: Feb. 8
Exam 2: March 22
Exam 3: April 19

Tentative Outline

(Note: This schedule is subject to revision as the course.) progresses

	Monday	Wednesday
Week 1	Intro/overview animal breeding	Overview of Population Genetics
Week 2	Basic statistics	Heritability
Week 3	*MLK (no class)*	Genetic evaluation
Week 4	Predicting response to selection	Comparing Selection Programs
Week 5	**Exam 1**	Principles of Marker-based Analysis
Week 6	Molecular Markers	Linkage Disequilibrium
Week 7	Genetic maps	Experimental populations: backcross or F2
Week 8	Article 1 Presentation/Discussion	QTL detection Strategies: Candidate gene approach
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Week 10	Article 2 Presentation/Discussion	**Exam 2**
Week 11	Linkage Mapping	Article 3 Presentation/Discussion
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Week 13	**Exam 3**	Article 5 Presentation/Discussion
Week 14	Article 6 Presentation/Discussion	Article 7 Presentation/Discussion
Week 15	Genomic Selection	Article 8 Presentation/Discussion
Week 16	Genetical Genomics	Article 9 Presentation/Discussion
Week 17	**Final Exam**	

The instructor reserves the right to modify the syllabus during the semester with verbal or written announcements in class. It is the student's responsibility to stay informed of such announcements.

General information

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  www.counseling.ufl.edu/cwc/
  Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

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Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code
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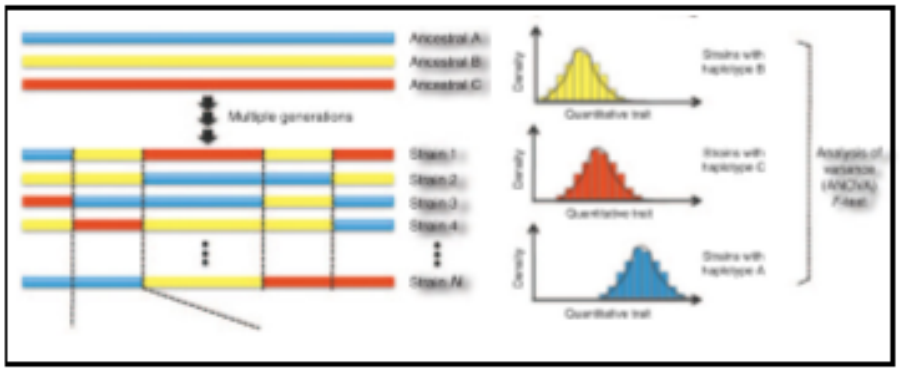
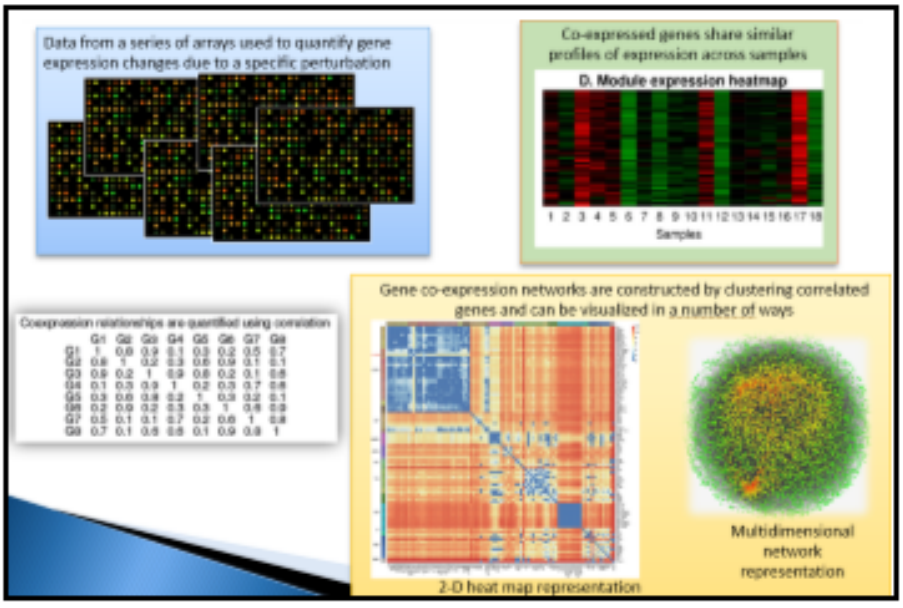
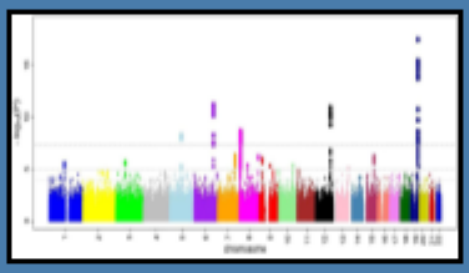
Spring 2020



GENETIC ANALYSES OF COMPLEX TRAITS IN LIVESTOCK





Course

ANS 6387
Spring 2020— 3 Credits

Lecture

Mon, Wed

11:45am—1:00pm

201 Dairy Science

Instructor

Dr. Raluca Mateescu

Office: Room 100B, Animal Science Phone: (352) 392-2367

e-mail: raluca@ufl.edu

Course Objective

Comprehensive examination of principles of livestock inheritance, QTL mapping strategies and functional genomic approaches used for genomic selection and improvement programs in farm animals.

Lecture times **Mon. & Wed.** 11:45am – 1:00pm, Room: **ANS 201 (Larson Bld)**

Instructor Dr. Raluca Mateescu
Office: 100B ANS; Phone: 392-2367; e-mail: raluca@ufl.edu

Office Hours: M, W 1:00pm - 2:00pm or by appointment (contact Dr. Mateescu)

Course Description

Comprehensive examination of principles of livestock inheritance, QTL mapping strategies and functional genomic approaches used for genomic selection and improvement programs in farm animals.

Course Objectives

By the end of the semester, the student should be able to:

1. Describe and illustrate different molecular methods of genotyping and gene characterization.
2. Present and analyze the components of the basic genetic model for quantitative traits.
3. Define and apply various statistics used in quantitative animal breeding: mean, variance, covariance, heritability, repeatability, selection, selection response, selection intensity.
4. Classify various factors that affect the rate of genetic change in animal breeding improvement.
5. Support different methods of gene mapping including linkage association analyses.
6. Analyze various functional genomic approaches and develop strategies to find genes responsible for genetic variation in complex traits.
7. Discuss potential application of marker-assisted selection and genomics in the future of animal breeding.

Attendance Policy

All exam information will be covered during the course of the lectures. **Attendance is strongly encouraged and students are responsible for all material covered in lecture**. It is highly recommended that you attend class if you expect to obtain a satisfactory grade.

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/ugrad/current/regulations/info/attendance.aspx

Contacting the Instructor

The instructor will be available for students. Please make arrangements to visit at your convenience. If you call and I am not available, leave your name and telephone number or e-mail address and you will be contacted as soon as the message is received. **The best method to reach me is through e-mail. DO NOT WAIT UNTIL EXAMINATION TIME!**

Please ask questions in class and do not be apprehensive about concepts that might not be clear. It is important to keep up and not fall behind. Get started on the first day of class – do your homework on time – attend class – get help when you need it – and remember there is no substitute for **DAILY PREPARATION. It is much easier on all of us if you get answers to questions one or two days after class rather than one or two days before an exam.**

Text

No formal text is required. Students will be provided handouts, which are current and relevant to topics discussed in class. Optional references include:

- Lynch and Walsh, Genetics and Analysis of Quantitative Traits, Sinauer, 1998
- Cockett and Kole, Genome Mapping and Genomics in Domestic Animal, Springer, 2010

Students will be expected to read and discuss several journals articles from the following:

- Benefits and limitations of genome-wide association studies. *Nature Reviews Genetics.* 20(8):467-484. 2019
- Applied Animal Genomics: Results from the Field. *Annual Review of Animal Biosciences* 2:105-139. 2014
- Accelerating Improvement of Livestock with Genomic Selection. *Annual Review of Animal Biosciences* 1:221-237. 2013
- Genomics to systems biology in animal and veterinary sciences: Progress, lessons and opportunities. *Livestock Science* 166:232-248. 2014
- Understanding and predicting complex traits: knowledge from cattle. *Human Molecular Genetics*, 21:45-51. 2012
- Genetics of complex traits: prediction of phenotype, identification of causal polymorphisms and genetic architecture. *Proceedings Biological Sciences*, 27:283(1835). 2016
- Towards sequence-based genomic selection of cattle. Nature Genetics, 46(8):807-809. 2014
- Harnessing genomic information for livestock improvement. *Nature Reviews Genetics.* 20(3):135-156. 2019
- Integration of summary data from GWAS and eQTL studies predicts complex trait gene targets. Nature Genetics. 48(5):481-487. 2016
- Genome-wide association studies for complex traits: consensus, uncertainty and challenges. *Nature Reviews. Genetics*, *9*(5):356–69. 2008
- Invited review: quantitative trait nucleotide determination in the era of genomic selection. *Journal of Dairy Science*, *94*(3):1082–90. 2011
- Mapping, fine mapping, and molecular dissection of quantitative trait loci in domestic animals. *Annual Review of Genomics and Human Genetics*, *8*:131–62. 2007
- Turning science on robust cattle into improved genetic selection decisions. *Animal: An International Journal of Animal Bioscience*, *6*(4):551–6. 2012
- Symposium review: How to implement genomic selection. *Journal of Dairy Science*. 103(6):5291-5301. 2020
- Livestock 2.0 – genome editing for fitter, healthier, and more productive farmed animals. *Genome Biology*, 26;19(1):204. 2018
- Genome editing approaches to augment livestock breeding programs. *Journal of Experimental Biology*. 7:223. 2020

Exams

There will be 3 exams worth 100 points each. The final exam is not comprehensive. The material covered in the exam will be detailed prior to each exam. (*see important dates*)

Problem Sets

There will be 4 problem sets worth 25 points each. Instructions and due dates will be provided in class.

Article Discussion

There will be 9 lecture times assigned to article discussions worth 30 points each. Students will be graded on their presentation as well as participation in the discussion. Each student will be required to present at least one journal article and lead the discussion following the presentation.

Powerpoint presentations should be utilized for paper discussions. Student presenters will be expected to present and discuss the following aspects of the article:

- Brief background and objectives of the work
- Explanation of specific studies (i.e. explaining individual figures and tables) which includes a discussion of the methods utilized
- Interpretation of results
- General discussion of outcomes and future perspectives

Presentations will be graded on the following criteria (specific rubric will be provided in class and feedback will be provided following the student presentation):

- Comprehension of scientific basis for research
- Ability to describe and discuss the scientific methods utilized
- Capacity to discuss and interpret results of experiments and their implications
- Ability to lead class discussion

When not presenting, students are expected to participate in paper discussions. Students are expected to read the article carefully and highlight sections which are either not clear or interesting and making important points. Students should be prepared to discuss these in class. In addition, students will have to formulate 2 questions to be discussed during class - please pay attention when you formulate these questions as you will be graded on their accuracy and clarity. To receive full credit, post your questions before midnight the day before the article is presented.
Participation will be evaluated on a specific rubric provided in class.

Grade Distribution

3 Exams	300 points	39.5%
4 Problem Sets	100 points	13.2%
9 Article questions	90 points	11.8%
9 Article Discussions	270 points	35.5%
Total	760 points	100%

Letter grades will be assigned based upon the following scale:

A 93-100%	**B- 80-82.9%**	**D+ 67-69.9%**
A- 90-92.9%	**C+ 77-79.9%**	**D 63-66.9%-**
B+ 87-89.9%	**C 73-76.9%**	**D- 60-62.9%-**
B 83-86.9%	**C- 70-72.9%**	**E 60% and Below**

The scale may be lowered but it will not be raised.

Important Dates

No classes on:
January 20: MLK Day
February 29 – March 7: Spring Break

Exams
Exam 1: Feb. 5
Exam 2: March 22
Exam 3: April 20

Tentative Outline

(Note: This schedule is subject to revision as the course progresses.)

	Monday	Wednesday
Week 1	Intro/overview animal breeding	Overview of Population Genetics
Week 2	Basic statistics	Heritability
Week 3	*MLK (no class)*	Genetic evaluation
Week 4	Predicting response to selection	Comparing Selection Programs
Week 5	**Exam 1**	Principles of Marker-based Analysis
Week 6	Molecular Markers	Linkage Disequilibrium
Week 7	Genetic maps	Experimental populations: backcross or F2
Week 8	Article 1 Presentation/Discussion	QTL detection Strategies: Candidate gene approach
Week 9	Spring Break	
Week 10	Article 2 Presentation/Discussion	**Exam 2**
Week 11	Linkage Mapping	Article 3 Presentation/Discussion
Week 12	Association mapping	Article 4 Presentation/Discussion
Week 13	**Exam 3**	Article 5 Presentation/Discussion
Week 14	Article 6 Presentation/Discussion	Article 7 Presentation/Discussion
Week 15	Genomic Selection	Article 8 Presentation/Discussion
Week 16	Genetical Genomics	Article 9 Presentation/Discussion
Week 17	**Final Exam**	

The instructor reserves the right to modify the syllabus during the semester with verbal or written announcements in class. It is the student's responsibility to stay informed of such announcements.

General information

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/

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 .

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

Software Use

All faculty, staff and students 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.

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 .

Campus Helping Resources

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/cwc/
  Counseling Services, Groups and Workshops, Outreach and Consultation, Self-Help Library, Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/
- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

Student Complaint Process

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

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

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Cover Sheet: Request 15061

Children: Trauma and Resiliency

Info

Process	Course|New|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Kathryn Ivey kbeaty@ufl.edu
Created	6/10/2020 3:41:15 PM
Updated	8/19/2020 7:53:56 AM
Description of request	The department sees this as an area of deficit within the curriculum. This subject matter has been successfully taught as a special topics course twice (Spring 2019 and Spring 2020) with high evaluation ratings. The department feels this would be a beneficial course for our students going into the human services field.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Family, Youth and Community Sciences 514932000	Tracy Irani		6/10/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			6/10/2020
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 15061

Info

Request: Children: Trauma and Resiliency
Description of request: The department sees this as an area of deficit within the curriculum. This subject matter has been successfully taught as a special topics course twice (Spring 2019 and Spring 2020) with high evaluation ratings. The department feels this would be a beneficial course for our students going into the human services field.
Submitter: Kathryn Ivey kbeaty@ufl.edu
Created: 6/10/2020 3:07:59 PM
Form version: 1

Responses

Recommended Prefix FYC
Course Level 4
Course Number XXX
Category of Instruction Advanced
Lab Code None
Course Title Children: Trauma and Resiliency
Transcript Title Children: Trauma & Resiliency
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 48
Course Description Evolving research on the developing child and the neurobiology of trauma has dramatically changed our understanding of adverse childhood experiences and its impact on the growing child. This course focuses on both areas: the nature of childhood trauma and intervention in an ecological context.
Prerequisites FYC 3001 (C) & FYC 3101 (C)

Co-requisites N/A
Rationale and Placement in Curriculum This course gives students the opportunity to expand foundational core course materials and apply advanced application serving at-risk youth and families. This courses would serve as a department elective of which our students are required to complete a minimum of 12 credits and will better prepare students working in the helping professions.
Course Objectives 1. Explain the term child trauma.
a. Identify the three types of adverse childhood experiences (ACEs).
2. Explain the term toxic stress.
3. Explain the seven risk factors that may contribute to experiencing trauma.
4. Explain how trauma may affect the psychosocial, neurobiological, and developmental processes of children including:
a. Brain development and memory.
b. Child development.
c. Ability to learn and function in school.
5. Analyze the role that the child, family, and community ecology play in mitigating the effects of

traumatic experiences.
6. Analyze the role of culture and ethnicity in defining traumatic experiences and shaping a child's and family's response to trauma.
7. Explain the concepts of vulnerability and resilience as they relate to trauma, including:
a. Coping responses.
b. Strengths.
c. Protective factors.
8. Apply trust-based relational intervention (TBRI) principles.
9. Differentiate among the parent-child attachment styles including implications and parenting techniques.
10. Explain secondary traumatic stress and the impacts on helping professionals.
11. Apply techniques for self-care that are effective in preventing and limiting secondary traumatic stress.

Course Textbook(s) and/or Other Assigned Reading • Rhodes-Courter, A. (2008). Three Little Words. New York: Atheneum
• Trust-Based Relational Intervention (TBRI) – Four workbooks – available as pdf documents on Canvas.
• Journal articles, documents, and websites posted on the reading list by class date.
• New readings such as current events and/or recent research will be added throughout the semester as opportunities arise.

Weekly Schedule of Topics Adverse Childhood Experiences and Intergenerational Trauma (week 1 & 2)
Trust-Based Relational Intervention (TBRI) Introduction, Attachment and Trauma and the Brain (week 3)
TBRI (weeks 4-13)
Trauma Informed Classrooms (week 13 & 14)
Trauma in the Court System (week 15)
Course summary and reflection (week 16)

Grading Scheme Methods of Evaluation: 1045 points total
Please note all out of class assignments are due on Canvas by 11:59 PM on Saturday for each week.

A. Case studies (75 points each x 5 = 375 points) – Students will complete five case studies throughout the semester by analyzing the provided family information, evaluating precipitating factors, and recommending steps to move the family forward.
B. Book reflection (100 points) – Students will summarize the main points of the book, explain insights gained about the family and individual problems presented in the book in relation to the course material, and provide a reason why the student liked or disliked the book as well as explaining whether or not the student would recommend the book and why.
C. Reflection/discussion papers (Weekly reactions to course materials 25 points x 15 papers = 375 points) - The purpose of the reflection paper is to help students process what they have read as well as any documentaries that we have watched and what we have discussed during the week. It also provides students an opportunity to include any unanswered questions.
D. Literature review (90 points) – The literature review provides students an opportunity to further examine the current research on a topic related to the course material. The instructor will approve your topic in advance.
E. Class attendance and participation (21 classes x 5 points each = 105 points) – Students should expect a mix of participation activities and attendance throughout the semester. The goal is to help students focus in on important content, apply course concepts, develop awareness, and make connections between course material and your professional development. In-class participation and attendance assignments may include worksheets, small-group discussions and reports, written and verbal questions for speakers, class discussions, or other activities designed to understand and apply key concepts or issues. Collaboration is a key skill in today's workforce, so be sure to use discussions as an opportunity to practice leading, putting your ideas together, speaking, and interacting in a positive manner.
Instructor(s) Martie Gillen, Ph.D.
Attendance & Make-up Yes
Accomodations Yes
UF Grading Policies for assigning Grade Points Yes

Course Evaluation Policy Yes

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Children – Trauma and Resiliency
Course Schedule[1]
Reading[2] and Documentary List

Week 1 – Adverse Childhood Experiences

- **Readings**
  - Adverse Childhood Experiences https://www.cdc.gov/violenceprevention/acestudy/index.html
  - Review Adverse Childhood Experiences - Protective Factors https://www.kidcentraltn.com/support/crisis-services-for-children/adverse-childhood-experience--protective-factors.html
  - Keeping the Family Strong – document posted in Canvas.
- **Due**
  - Reflection 1

Week 2 – Adverse Childhood Experiences

- **Readings**
  - Florida Health. (2017). *Florida life course indicator report – Childhood experiences*. Retrieved from http://www.floridahealth.gov/programs-and-services/womens-health/florida-life-course-indicator-report/childhood-experiences-jan%202017.pdf
  - Bright, M., Alford, S., Yu., B., & Jiang, J. (2012). *Adverse childhood experiences among adult Floridians - Findings from the 2010 Behavioral Risk Factor Surveillance System.* Retrieved from https://www.acesconnection.com/g/state-aces-action-group/fileSendAction/fcType/0/fcOid/402120533756356605/filePointer/459409328083868644/fodoid/459409328083868637/FL%20ACE_Adult_Report_DRAFT6_SCREEN.pdf
  - Child Trends. (2018). *The prevalence of adverse childhood experiences, nationally, by state, and by race or ethnicity.* Retrieved from https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity
- **Documentaries**
  - Resilience: The Biology of Stress & The Science of Hope (watch in class)
  - Broken Places (watch in class)
- **Due**
  - Reflection 2

Week 3 – Adverse Childhood Experiences, Attachment, and Trauma and the Brain

- **Readings**
  - Purvis, K. B., Cross, D. R., Dansereau, D. F., & Parris, S. R. (2013). Trust-Based Relational Intervention (TBRI): A systemic approach to complex developmental trauma. *Child & Youth Services*, *34*(4), 360–386. https://doi.org/10.1080/0145935X.2013.859906
  - TBRI Introduction and Overview Workbook
    - Pages 1 – 17
  - Brain in the Palm of the Hand – Document posted in Canvas.
  - Attachment 101 – Document posted in Canvas.
- **Due**
  - Reflection 3

[1] Please note all assignments are due on Canvas by 11:59 PM on Saturday for each week.
[2] The TBRI workbooks are available as pdf documents on Canvas.

Week 4 – Trust-Based Relational Intervention (TBRI)

- **Readings**
  - TBRI Introduction and Overview Workbook
    - Pages 18 – 28
- **Due**
  - Reflection 4

Week 5 - TBRI

- **Readings**
  - TBRI Connecting Principles Workbook
    - Pages 1 - 10
- **Due**
  - Reflection 5

Week 6- TBRI

- **Readings**
  - TBRI Connecting Principles Workbook
    - Pages 11 - 16
- **Due**
  - Reflection 6
  - Case Study 1

Week 7- TBRI

- **Readings**
  - TBRI Connecting Principles Workbook
    - Pages 17 – 27
- **Due**
  - Reflection 7

Week 8- TBRI

- **Readings**
  - TBRI Empowering Principles Workbook
    - Page 1 - 11
- **Due**
  - Reflection 8
  - Case Study 2

Week 9

SPRING BREAK

Week 10- TBRI

- **Readings**
  - TBRI Empowering Principles Workbook
    - Page 12 - 17
- **Due**
  - Reflection 9

Week 11 - TBRI

- **Readings**
  - TBRI Empowering Principles Workbook
    - Page 18 - 24
  - TBRI Correcting Principles Workbook
    - Page 1 - 14
- **Due**
  - Reflection 10
  - Case Study 3

Week 12- TBRI

- **Readings**
  - TBRI Correcting Principles Workbook
    - Page 15 - 23
- **Due**
  - Reflection 11

Week 13- TBRI and Trauma Informed Classrooms

- **Readings**
  - TBRI Correcting Principles Workbook
    - Page 24 - 28
  - Call, C., Purvis, K., Parris, S., & Cross., D. (2014). Creating trauma - Informed classrooms. Retrieved from http://www.adoptioncouncil.org/files/large/4b9294d4e0fc351
  - Gagnon, S. (2018). The trauma informed teacher – Silent front line. Retrieved from http://www.ransomforisrael.com/the-trauma-informed-teacher-silent-front-line/
- **Due**
  - Reflection 12
  - Case Study 4

Week 14 – Trauma Informed Classrooms

- **Readings**
  - Foli KJ, Woodcox S, Kersey S, Zhang L. (2018). Addressing the wicked problem of childhood trauma through a nursing and cooperative extension system collaboration. *Public Health Nursing, 35*(1):56-63. doi:10.1111/phn.12375
- **Documentaries:**
  - The Kids We Lose (watch in class)
  - Paper Tigers (watch in class)
- **Due**
  - Reflection 13
  - Book Reflection

Week 15 – Trauma and the Court System

Documentary:

- All Rise for the Good of the Children (watch in class)

- **Due**
  - Reflection 14
  - Case Study 5

Week 16 – Course Summary and Reflection

- **Due**
  - Reflection 15
  - Literature Review

FYC 4XXX – Children: Trauma and Resiliency
3 Credit Hours
Spring 2021

Instructor: Dr. Martie Gillen

Meeting Time: TR, time TBD
Office: 3025A McCarty Hall D

Class Location: TBD

Telephone: 352-392-0404

Email: mgillen@ufl.edu
Office Hours: Thursdays 11:55 AM – 1:55 PM
and By Appointment

Course Description:
Evolving research on the developing child and the neurobiology of trauma has dramatically changed our understanding of adverse childhood experiences and its impact on the growing child. This research is accompanied by expanding knowledge of effective interventions. This course focuses on both areas: the nature of childhood trauma and trust-based relational intervention (TBRI). The overarching perspective of the course is the consideration of the child's traumatic experience in an ecological context. Child trauma reverberates not only through the family but also across the larger systems in which the child lives: neighborhoods, schools, and health institutions. Conversely, these systems shape the child's adaptation to traumatic experiences. The family's culture is an important determinant of how the child makes meaning of the experience and how the child/family seeks help. The first portion of the course explores the consequences of traumatic experiences in the context of psychosocial, neurobiological, and developmental processes. We will focus on both the short-term responses and the longer-term consequences of trauma. The second portion of the course considers TBRI. What do we know about effective interventions? How can educational systems be responsive to children affected by trauma? The third portion of the course addresses questions of change at the macro level: What current policy initiatives promote trauma-informed interventions or systems? What about prevention? Woven throughout the course, we will consider secondary traumatic stress and the impacts on helping professionals.

Prerequisites: FYC3001 & FYC3101 or instructor discretion

Course Objectives:
1. Explain the term child trauma.
    a. Identify the three types of adverse childhood experiences (ACEs).
2. Explain the term toxic stress.
3. Explain the seven risk factors that may contribute to experiencing trauma.
4. Explain how trauma may affect the psychosocial, neurobiological, and developmental processes of children including:
    a. Brain development and memory.
    b. Child development.
    c. Ability to learn and function in school.
5. Analyze the role that the child, family, and community ecology play in mitigating the effects of traumatic experiences.
6. Analyze the role of culture and ethnicity in defining traumatic experiences and shaping a child's and family's response to trauma.
7. Explain the concepts of vulnerability and resilience as they relate to trauma, including:
    Cumi

a. Coping responses.

b. Strengths.

c. Protective factors.

8. Use trust-based relational intervention (TBRI) principles.
9. Differentiate among the parent-child attachment styles including implications and parenting techniques.
10. Define secondary traumatic stress and explain the impacts on helping professionals.
11. Identify techniques for self-care that are effective in preventing and limiting secondary traumatic stress.

Readings:

- Rhodes-Courter, A. (2008). *Three Little Words.* New York: Atheneum
- Trust-Based Relational Intervention (TBRI) – Four workbooks – available as pdf documents on Canvas.
- Journal articles, documents, and websites posted on the reading list by class date.
- New readings such as current events and/or recent research will be added throughout the semester as opportunities arise.

Methods of Evaluation: 1045 points total

Please note all out of class assignments are due on Canvas by 11:59 PM on Saturday for each week.

A. Case studies (75 points each x 5 = 375 points) – Students will complete five case studies throughout the semester by analyzing the provided family information, evaluating precipitating factors, and recommending steps to move the family forward.

B. Book reflection (100 points) – Students will summarize the main points of the book, explain insights gained about the family and individual problems presented in the book in relation to the course material, and provide a reason why the student liked or disliked the book as well as explaining whether or not the student would recommend the book and why.

C. **Reflection/discussion papers** (Weekly reactions to course materials 25 points x 15 papers = 375 points) - The purpose of the reflection paper is to help students process what they have read as well as any documentaries that we have watched and what we have discussed during the week. It also provides students an opportunity to include any unanswered questions.

D. **Literature review** (90 points) – The literature review provides students an opportunity to further examine the current research on a topic related to the course material. The instructor will approve your topic in advance.

E. **Class attendance and participation** (21 classes x 5 points each = 105 points) – Students should e xpect a mix of participation activities and attendance throughout the semester. The goal is to help students focus in on important content, apply course concepts, develop awareness, and make connections between course material and your professional development. In-class participation and attendance assignments may include worksheets, small-group discussions and reports, written and verbal questions for speakers, class discussions, or other activities designed to understand and apply key concepts or issues. Collaboration is a key skill in today's workforce, so be sure to use discussions as an opportunity to practice leading, putting your ideas together, speaking, and interacting in a positive manner.

Grading Summary : Grades in this class will be based on the following scale:

Letter Grade		Percentage	Points
A	=	93.50% and above	978 and above
A-	=	90.00-93.49%	941 - 977
B+	=	86.50-89.99%	904 - 940
B	=	83.50-86.49%	873 - 903
B-	=	80.00-83.49%	836 - 872
C+	=	76.50-79.99%	799 - 835
C	=	73.50-76.49%	768 - 798
C-	=	70.00-73.49%	732 - 767
D+	=	66.50-69.99%	695 - 731
D	=	63.50-66.49%	664 - 694
D-	=	60.00-63.49%	627 - 663
E	=	59.99% and below	626 and below

All of the following *must be true for the student to be eligible to receive a grade of "I." The student has completed a major portion of the course work with a passing grade (D or better), the student is unable to complete course requirements because of documented circumstances beyond their control, and the student and instructor have discussed the situation prior to the final exam (except under emergency conditions).*

Information on current UF grading policies for assigning grade points

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Guest Speakers and Videos:
Guest Speakers will be invited to class and provide an exceptional opportunity for students to learn about the field. Take advantage of learning from them—come to class, take notes, ask questions, and speak to them after class. A word of advice: Speakers may or may not use PowerPoint slides, so it will be important for you (and your responsibility) to take notes and read any additional material they provide because this important class content will help with assignments. We also will be viewing several videos. Missed video assignments that are not available online can be made up during office hours only when the student has an excused absence.

Attendance and Make-Up Work:
Points can only be made up if the student has documentation for their absence, as per UF policy.
Requirements for class attendance and make-up assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

NOTE: This course covers topics that may be difficult because of your personal background and experiences. Please take advantage of the services at UF for counseling to support you on your personal journey and in your career decisions. Feel free to speak to the instructor about any concerns. If you elect not to attend class on a day that you feel will be especially difficult for you (honor system), follow the two guidelines for being excused and keeping up with work: (1) Inform the instructor before you miss class. (2) Make up in-class work within the week. If you want to receive credit for in-class assignments, you will need to make up the missed work.

Course Policies Classroom Demeanor:
Respect for your peers and the instructor is most important. Everything else falls into place from there. Nevertheless, to spell this out more specifically, please…

- Please be on time and ready to work; this shows punctuality and reliability, which are great work force skills and important for job recommendations! Please do not walk out of the classroom early unless absolutely necessary and preferably let me know in advance; otherwise it can be construed as rude and disruptive.
- Please keep the dialogue respectful of your peers and of the instructor. Talking about families is not easy. Be sure to be objective, nonjudgmental, and non-confrontational. Show you care, understand, accept, and respect. These are essential skills for working in helping professions.
- Please put aside distractions and be ready to participate in class. Keep conversations with others at a minimum during class time. Multitasking actually works against deep learning.
- Use a computer or tablet for note taking but not for emailing, posting/reading social media, listening to music, checking game scores, shopping, or anything else. I will ask students who are using devices for other purposes to put them away completely. Continuing to ignore this instruction will result in loss of points for in-class participation.

NOTE: Poor classroom behavior has several possible results: a warning; a meeting with the instructor; the loss of participation points; referral to the Dean; or removal from class if necessary, per UF policy.

Course Communication:

1. Check your UF (ufl) email and the Canvas announcements page every day for notices about class.
2. When emailing, please use the Canvas website or your ufl email account. If you have not received a reply within two business days, please email again or see me after class.
3. Please schedule an appointment to discuss concerns, resolve questions about grades, or talk about course material.

Questions about Grades Received on Assignments:
Please let me know via email or in-person within one week of the grade submission date if you have questions about a grade received on an assignment.

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/.

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 .

Software Use:
All faculty, staff and students 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.

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/

Campus Helping Resources :
Students experiencing crises or personal problems that interfere with their general wellbeing 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:

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

COVID Response Statements:
We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
- Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (Click here for guidance from the CDC on symptoms of coronavirus), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms .
  - Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information in the university attendance policies .

Cover Sheet: Request 14784

new undergraduate course

Info

Process	Course|New|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Kevin Padilla kbegcy.padilla@ufl.edu
Created	3/2/2020 5:08:32 PM
Updated	4/15/2020 10:36:08 AM
Description of request	Proposal of a new undergraduate course

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Environmental Horticulture 514918000	Dean Kopsell		4/15/2020
Syllabus_IntroPlantBiotechnology.docx CALS-CC-Checklist.docx					3/2/2020 3/3/2020
College	Pending	CALS - College of Agricultural and Life Sciences			4/15/2020
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 14784

Info

Request: new undergraduate course
Description of request: Proposal of a new undergraduate course
Submitter: Kevin Padilla kbegcy.padilla@ufl.edu
Created: 3/2/2020 10:56:04 AM
Form version: 1

Responses

Recommended Prefix ORH
Course Level 4
Course Number XXX
Category of Instruction Advanced
Lab Code None
Course Title Introduction to Plant Biotechnology
Transcript Title Intro to Plant Biotechnology
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 Plant biotechnology is one of the most prolific and influential areas of the plant sciences. This upper level undergraduate course will be focused on modern biotechnological tools and applications that have resulted in great advances for agriculture and society.
Prerequisites (PLS3004C & AGR3303)
Co-requisites N/A
Rationale and Placement in Curriculum Plant biotechnology has promptly developed into one of the most prolific, expanding and influential areas of the plant sciences. It is highly interdisciplinary and involves numerous plant science specialties, including cell biology, genetics, physiology, bioinformatics, biochemistry and tissue biology. This course aims to prepare students with solid basis and sound knowledge to face their next steps of their career, in different areas of the industry as well as the public sector or in academia. In addition, this course will help to integrate and show applications of key concepts learned in the previous Genetics and Plant science courses.

Course Objectives The overall objective of this course is to provide an environment for students to develop critical thinking on plant biotechnological tools for plant improvement. Principles and applications of plant biotechnology from the cellular to whole-plant levels will be covered.

Upon completion of this course students will be able to:
- Describe regulation of gene expression and implications for plant transformation.
- Distinguish plant culture techniques and culture types.
- Evaluate several methods for stable and transient plant transformation.
- Design strategies for plant genetic manipulation against biotic and abiotic stressors.
- Hypothesize on strategies to increase plant yield and fruit/seed quality.

Course Textbook(s) and/or Other Assigned Reading Plant Biotechnology: The genetic manipulation of plants (Second Edition) by A. Slater, N Scott and M, Fowler.

Weekly Schedule of Topics Date Topics

Aug.	24	(M)	Introduction to the Class
Aug.	26	(W)	History of Plant Biotechnology
Aug.	28	(F)	DNA, Chromatin and Chromosome structure
Aug.	31	(M)	Regulation of Gene Expression
Sept.	2	(W)	Fundamental skills in DNA sequence analysis - Hands on activity
Sept.	4	(F)	Holiday - No UF Classes
Sept.	7	(M)	Plant Tissue Culture
Sept.	9	(W)	Plant Growth regulators
Sept.	11	(F)	Plant regeneration
Sept.	14	(M)	Primer Design - Hands-on Activity
Sept.	16	(W)	Agrobacterium-mediated gene transfer
Sept.	18	(F)	Direct gene-transfer methods
Sept.	21	(M)	Selectable markers and markers for screening
Sept.	23	(W)	Principles of cloning, vectors, restriction enzymes
Sept.	25	(F)	Gateway and GoldenGate strategies
Sept.	28	(M)	Vector design - Hands on activity
Sept.	30	(W)	Midterm I
Oct.	2	(F)	Homecoming - No Classes
Oct.	5	(M)	Overexpression
Oct.	7	(W)	Gene stacking
Oct.	9	(F)	RNAi
Oct.	12	(M)	CRISPR
Oct.	14	(W)	CRISPR design - Hands on activity
Oct.	16	(F)	TALEN
Oct.	19	(M)	Strategies for engineering herbicide tolerance: Glyphosate
Oct.	21	(W)	Strategies for engineering herbicide tolerance: Imidazolinone
Oct.	23	(F)	GM strategies for insect resistance
Oct.	26	(M)	natural disease resistance pathway
Oct.	28	(W)	Biotechnological approaches to disease resistance
Oct.	30	(F)	VIGS - Virus Induced Gene Silencing
Nov.	2	(M)	Type of plant viruses
Nov.	4	(W)	Midterm II
Nov.	6	(F)	The nature of abiotic stresses
Nov.	9	(M)	Stresses during reproductive development
Nov.	11	(W)	Veterans Day - No UF Classes
Nov.	13	(F)	Targeted approaches to manipulating tolerance to stresses
Nov.	16	(M)	Fruit ripening
Nov.	18	(W)	Golden rice
Nov.	20	(F)	Carbohydrates and lipids
Nov.	23	(M)	Molecular farming of proteins
Nov.	25	(W)	Thanksgiving - No UF Classes
Nov.	27	(F)	Thanksgiving - No UF Classes
Nov.	30	(M)	Edible vaccines
Dec.	2	(W)	Public concerns and GMO regulation
Dec.	4	(F)	Review and Final Activities
Dec.	7	(M)	Review and Final Activities

Grading Scheme GRADING

Course grades will be based on 1000 points. There will be two partial midterms and a final exam. Quizzes will be given at the end of each week and require no more than 15 minutes to complete. Missed exams/quizzes will count as a zero unless an arrangement to take a make-up is made PRIOR to the test date.

Total: 1000 points
Midterm 1: 200 points (September 30th)
Midterm 2: 200 points (November 4th)
Final Exam: 350 points (December 16th – 5:30pm to 7:30pm)
Weekly Quizzes (every Friday): 15 points each / 150 points total
Homework: 50 points
Class participation (active interaction in class) and discussions: 50 points

The grading scale WILL NOT be adjusted or curved.

GRADE DISTRIBUTION

A	100.0 - 93.1%	A-	93.0 - 90.1%		
B+	90.0 - 86.1%	B	86.0 - 83.1%	B-	83.0 - 80.1%
C+	80.0 - 74.1%	C	74.0 - 72.1%	C-	72.0 - 70.1%
D+	70.0 - 64.1%	D	64.0 - 62.1%	D-	62.0 - 59.1%
E	59.0% or below				

Instructor(s) Dr. Kevin Begcy Padilla
Environmental Horticulture Department
Office: 1535 Fifield Hall
University of Florida, Gainesville, FL 32611
Email: kbegcy.padilla@ufl.edu
Phone: (352) 273 4528

Attendance & Make-up Yes
Accomodations Yes
UF Grading Policies for assigning Grade Points Yes
Course Evaluation Policy Yes

ORH4932
INTRODUCTION TO PLANT BIOTECHNOLOGY
(3 credits)

INSTRUCTOR

Dr. Kevin Begcy
Environmental Horticulture Department
Office: 1535 Fifield Hall
University of Florida, Gainesville, FL 32611
Email: kbegcy.padilla@ufl.edu
Phone: (352) 273 4528
Office Hours:
Every Monday from 8:00am – 11:00am or by appointment. Please send me an e-mail.

MEETING DAYS, TIMES AND LOCATION:

M-W-F, 8th Period (3:00pm – 3:50pm). Room: 2318 Fifield Hall

PREREQUISITES: PLS3004C & AGR3303

COURSE DESCRIPTION

Plant biotechnology is one of the most prolific and influential areas of the plant sciences. This upper level undergraduate course will be focused on modern biotechnological tools and applications that have resulted in great advances for agriculture and society.

COURSE LEARNING OBJECTIVES

The overall objective of this course is to provide an environment for students to develop critical thinking on plant biotechnological tools for plant improvement. Principles and applications of plant biotechnology from the cellular to whole-plant levels will be covered.

Upon completion of this course students will be able to:

- Describe regulation of gene expression and implications for plant transformation.
- Distinguish plant culture techniques and culture types.
- Evaluate several methods for stable and transient plant transformation.
- Design strategies for plant genetic manipulation against biotic and abiotic stressors.
- Hypothesize on strategies to increase plant yield and fruit/seed quality.

COURSE STRATEGY

- This course will focus on offering students the opportunity to learn biotechnological tools for plant improvement. A strong emphasis will be given to develop critical

thinking ability to design experiments using biotechnological tools for plant improvement.

- Teaching lessons will include discussions of state-of-the-art literature on plant biotechnology, hands-on activities and problem sets.
- Active student participation in the class (questions and discussions) is highly encouraged and rewarded.

TEXT AND MATERIALS

Textbook:

Plant Biotechnology: The genetic manipulation of plants (Second Edition) by A. Slater, N Scott and M, Fowler.

Class material and additional reading material will be posted on Canvas weekly.

STUDENTS WITH DISABILITIES

Students with disabilities are encouraged to contact Dr. Begcy for a confidential discussion of individual needs for academic accommodation. I will make every attempt to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in the course activities or meet course requirements. Students requesting classroom accommodation should also register with the Dean of Students Office. Phone number: 352-294-2273; email: DSOCares@dso.ufl.edu

ACADEMIC HONESTY

Students should value honesty and personal integrity.

The University of Florida requires all members of its community to be honest in all endeavors. Cheating, plagiarism, and any other form of academic dishonesty will not be tolerated. Students in violation of this policy will earn a zero for the assignment, be subject to disciplinary action, and may receive a failing grade for the course.

When students enroll at UF they commit themselves to honesty and integrity. As a result of completing the registration form at the University of Florida, every student has signed the following statement:

"I understand the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that failure to comply with this commitment may result in disciplinary action up to and including expulsion from the university." Furthermore, on work submitted for credit by UF students, 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 to be assumed that all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course.

GRADING

Course grades will be based on 1000 points. There will be two partial midterms and a final exam. Quizzes will be given at the end of each week and require no more than 15 minutes to complete.
Missed exams/quizzes will count as a zero unless an arrangement to take a make-up is made **PRIOR** to the test date.

Total: 1000 points
Midterm 1: 200 points **(September 30th)**
Midterm 2: 200 points **(November 4th)**
Final Exam: 350 points **(December 16th – 5:30pm to 7:30pm)**
Weekly Quizzes (every Friday): 15 points each / 150 points total
Homework: 50 points
Class participation (active interaction in class) and discussions: 50 points
The grading scale WILL NOT be adjusted or curved.

GRADE DISTRIBUTION

A	100.0 - 93.1%	A-	93.0 - 90.1%		
B+	90.0 - 86.1%	B	86.0 - 83.1%	B-	83.0 - 80.1%
C+	80.0 - 74.1%	C	74.0 - 72.1%	C-	72.0 - 70.1%
D+	70.0 - 64.1%	D	64.0 - 62.1%	D-	62.0 - 59.1%
E	59.0% or below				

PROGRAM

Modules	Learning Topic
1	Plant genomes: the organization and expression of plant genes
2	Plant tissue culture
3	Techniques for plant transformation
4	Vectors for plant transformation
5	Strategies for plant improvement (CRISPR, RNAi, TALEN, OX)
6	Genetic manipulation of herbicide tolerance
7	Plant disease resistance
8	Reducing the effect of viral disease
9	Strategies for engineering stress tolerance
10	Improvement of crop yield and quality
11	Molecular farming
12	Science and society

SCHEDULE

Date			Topics	Learning Modules
Aug.	24	(M)	Introduction to the Class	Plant Genomes: The organization and expression of plant genes
Aug.	26	(W)	History of Plant Biotechnology	
Aug.	28	(F)	DNA, Chromatin and Chromosome structure	
Aug.	31	(M)	Regulation of Gene Expression	
Sept.	2	(W)	Fundamental skills in DNA sequence analysis - Hands on activity	
Sept.	4	(F)	Holiday - No UF Classes	
Sept.	7	(M)	Plant Tissue Culture	Plant Tissue Culture
Sept.	9	(W)	Plant Growth regulators	
Sept.	11	(F)	Plant regeneration	
Sept.	14	(M)	Primer Design - Hands-on Activity	Techniques for Plant transformation
Sept.	16	(W)	Agrobacterium-mediated gene transfer	
Sept.	18	(F)	Direct gene-transfer methods	
Sept.	21	(M)	Selectable markers and markers for screening	
Sept.	23	(W)	Principles of cloning, vectors, restriction enzymes	Vectors for Plant Transformation
Sept.	25	(F)	Gateway and GoldenGate strategies	
Sept.	28	(M)	Vector design - Hands on activity	
Sept.	30	(W)	Midterm I	
Oct.	2	(F)	Homecoming - No Classes	Strategies for plant improvement
Oct.	5	(M)	Overexpression	
Oct.	7	(W)	Gene stacking	
Oct.	9	(F)	RNAi	
Oct.	12	(M)	CRISPR	
Oct.	14	(W)	CRISPR design - Hands on activity	
Oct.	16	(F)	TALEN	
Oct.	19	(M)	Strategies for engineering herbicide tolerance: Glyphosate	The genetic Manipulation of Herbicide tolerance
Oct.	21	(W)	Strategies for engineering herbicide tolerance: Imidazolinone	
Oct.	23	(F)	GM strategies for insect resistance	Plant Disease Resistance
Oct.	26	(M)	natural disease resistance pathway	
Oct.	28	(W)	Biotechnological approaches to disease resistance	
Oct.	30	(F)	VIGS - Virus Induced Gene Silencing	Reducing the effect of Viral disease
Nov.	2	(M)	Type of plant viruses	
Nov.	4	(W)	Midterm II	
Nov.	6	(F)	The nature of abiotic stresses	Strategies for Engineering stress tolerance
Nov.	9	(M)	Stresses during reproductive development	
Nov.	11	(W)	Veterans Day - No UF Classes	
Nov.	13	(F)	Targeted approaches to manipulating tolerance to stresses	
Nov.	16	(M)	Fruit ripening	The improvement of crop yield and quality
Nov.	18	(W)	Golden rice	

Nov.	20	(F)	Carbohydrates and lipids	
Nov.	23	(M)	Molecular farming of proteins	Molecular Farming
Nov.	25	(W)	Thanksgiving - No UF Classes	
Nov.	27	(F)	Thanksgiving - No UF Classes	
Nov.	30	(M)	Edible vaccines	
Dec.	2	(W)	Public concerns and GMO regulation	Science and Society
Dec.	4	(F)	Review and Final Activities	
Dec.	7	(M)	Review and Final Activities	

EXPECTATIONS

Students are expected to spend 2-3 hours on the course material for EVERY hour spent in the classroom. The reading assignment list will be posted during the first week of the class. It is subject to change as the course progresses. Students are expected to be courteous and respectful to their fellow students and not interfere with their learning. You are expected to be on time. Students are asked to stow their cell phones before entering the classroom.

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/.

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/.

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.

SOFTWARE USE

All faculty, staff and students 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.

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/

CAMPUS HELPING RESOURCES

Students experiencing crises or personal problems that interfere with their general wellbeing 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:

• Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/.

• Online Course: http://www.distance.ufl.edu/student-complaint-process

CALS Curriculum Committee
Submission Checklist

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

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

_ KB _ 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/ .

_KB___ 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.

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

__KB__ 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.

__KB__ 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 .

__KB__ 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.

_KB___ 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.

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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 15072

Add ORH 4804C option for existing ORH 4804 course

Info

Process	Course|New|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Sandra Wilson sbwilson@ufl.edu
Created	6/15/2020 8:56:42 AM
Updated	7/23/2020 1:59:14 PM
Description of request	ORH 4804 (annual and perennial gardening) is currently taught at ORH 4804 (2 credit lecture) and ORH 4804L (1 credit lab). We would like to add another option of having a combined ORH4804C course for when it is taught live in Gainesville.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Environmental Horticulture 514918000	Dean Kopsell		6/15/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			6/15/2020
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 15072

Info

Request: Add ORH 4804C option for existing ORH 4804 course
Description of request: ORH 4804 (annual and perennial gardening) is currently taught at ORH 4804 (2 credit lecture) and ORH 4804L (1 credit lab). We would like to add another option of having a combined ORH4804C course for when it is taught live in Gainesville.
Submitter: Sandra Wilson sbwilson@ufl.edu
Created: 6/13/2020 12:46:11 PM
Form version: 1

Responses

Recommended Prefix ORH
Course Level 4
Course Number 804
Category of Instruction Advanced
Lab Code C
Course Title Annual and Perennial Gardening
Transcript Title Annual and Perennial Gardening
Degree Type Baccalaureate

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

Effective Term Spring
Effective Year 2021
Rotating Topic? No
Repeatable Credit? Yes
If repeatable, # total repeatable credit allowed 1
Amount of Credit 3

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 4
Course Description Identification, selection, use and management of annuals, perennials, vines, ornamental grasses and ground covers in the landscape. Hands-on care for plants in the outdoor laboratory. Learn the irrigation, fertilization, pruning and cultural needs of these popular plants. Laboratory complements lecture.
Prerequisites junior standing
Co-requisites N/A
Rationale and Placement in Curriculum Request is for existing Annual and Perennial Gardening (ORH 4804-2 credits and ORH 4804L-1 credit) to be additionally offered as ORH 4804C (3 credits). This will allow for a single canvas page, a single grade per student , and a single combined syllabus when taught live in Gainesville.

This is consistent with Environmental Plant Identification, with all 3 options (ORH3513C, ORH 3513L, ORH 3513).
Course Objectives Learning Objectives: At the conclusion of this course, the student will be able to:
Lecture
- Recognize and evaluate major annual and perennial plant categories and choose annual and perennial plants suited to diverse regional climates.
- Identify, compare and contrast retail availability of annual and perennial plants across geographic regions and growth zones.
- Explain the importance of annual and perennial plant growth characteristics in assessing the potential use of problematic (invasive) annuals and perennials.
- Identify, describe and evaluate various types of specialty gardens and the key concepts, designs, and plants that are particular to each.
- Assess annual and perennial plant performance in existing landscapes, develop maintenance

and installation design recommendations and compile lists of recommended plants based on application of basic landscape design principles related to specialty annual and perennial gardens.

Lab
- Identify and differentiate 50+ annual and perennial plant species by common and scientific name
- Manage annual and perennial plant propagation and production via crop management activities, evaluation of crop performance and interpretation of plant growth performance across geographic regions and growth zones.
- Critique annual and perennial plant use and practice implementation of garden design concepts through the development of specialty garden designs, compiling lists of recommended plants, and participating in critiques of specialty garden designs.

Course Textbook(s) and/or Other Assigned Reading The formerly used course textbooks are outdated and in need of revision. Therefore, we are no longer requiring these be purchased. Instead, we provide material in PP lectures, accompanied by reading assignments as outlined in the attached syllabus.
LECTURE
Module 1. Identification, production, installation & management
1 Course Overview, Important Terms and Concepts –
Classification, Taxonomy, Nomenclature –

Read: North FL Gardening https://edis.ifas.ufl.edu/ep451

2 Key Plant Families –
Plant group - Cool Season Annuals – Part 1 Quiz 1 (weeks 0-2) (20 min)
Plant Availability Assignment

3 Basic Principles of Landscape Design - Hansen
Propagation and Production systems for Annuals and Perennials –
Cool Season Annuals – Part II Read: Basic Principles of Landscape Design
https://edis.ifas.ufl.edu/mg086

4 Installation and Maintenance of Bedding Plants-
Plant group - Asteraceae Family – Part I Quiz 2 (weeks 3-4)
Landscape Assessment Assignment – Part 1

5 Cool & Warm Season Annuals; Designing with Color -
Plant group - Euphorbiaceae and Verbenaceae

Read: Gardening with Annuals in Florida https://edis.ifas.ufl.edu/mg319
Read Gardening with Perennials in Florida
https://edis.ifas.ufl.edu/mg035

6 Geophytes (Tropical Bulbs, Corms and Tubers) –
Plant group – Geophytes - “Bulbs” Due: Landscape Assessment Assignment - Part 1
Read: Bulbs for Florida https://edis.ifas.ufl.edu/topic_bulbous_flowers

7 Tropical Perennials and Vertical Gardening (Flowering Vines) –
Plant group - Crassulaceae Quiz 3 (weeks 5-7)
Due: Plant Availability Assignment

8 Ornamental Grasses -
Plant group - Asteraceae – Part II Considerations for Selection and Use of Ornamental Grasses
https://edis.ifas.ufl.edu/ep233

9 Spring Break

10 Mid-Term Exam Landscape Assessment Assignment - Part 2
MODULE 2. – Specialty Gardens, Invasive Species, and Current Topics

11 Container Gardening
Plant group - Acanthaceae Read: Container Gardens for Outdoor Spaces
https://edis.ifas.ufl.edu/ep326

12 Rain Gardens
Wildflower Gardening
Plant group - Warm Season Annuals Quiz 4 (Weeks 11-12)
Landscape Design Exercise Assignments

13 Water Gardening - Plant group - Lamiaceae Due: Landscape Assessment Assignment - Part 2

14 Butterfly Gardening - Jaret Daniels
Plant group - Perennials Quiz 5 (Weeks 13-14)
Read Butterfly Gardening in FL https://edis.ifas.ufl.edu/uw057

15 Problematic (Invasive) Annuals and Perennials Due: Landscape Design Exercise Assignment

16 Current topic in annual or perennial gardening - guest lecture or assigned reading
Current Topic Online Discussion

17 Final Exam

Weekly Schedule of Topics Weekly schedule of topics are outlined in attached syllabus.
LECTURE
Module 1. Identification, production, installation & management
1 Course Overview, Important Terms and Concepts –
Classification, Taxonomy, Nomenclature –

Read: North FL Gardening https://edis.ifas.ufl.edu/ep451

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5 Cool & Warm Season Annuals; Designing with Color -
Plant group - Euphorbiaceae and Verbenaceae

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Plant group – Geophytes - “Bulbs” Due: Landscape Assessment Assignment - Part 1
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Read Butterfly Gardening in FL https://edis.ifas.ufl.edu/uw057

15 Problematic (Invasive) Annuals and Perennials Due: Landscape Design Exercise Assignment

16 Current topic in annual or perennial gardening - guest lecture or assigned reading
Current Topic Online Discussion

17 Final Exam

ORH 4804C - Annual and Perennial Gardening
Week Lab Topic Lab Activity and Assignments
1 Lab organization; Introduction of students/faculty; Tour of greenhouses and Teaching Garden. Lab safety; Planting of plugs for statewide production projects.
Assess greenhouse for Production Assignment 1

2 Vegetative propagation
Seed germination Due: Production Assignment 1 - Site Information and Production Protocol
Seed Germination
3 Plant Nomenclature and Plant Groups
Plant ID review Due: Lab Workbook Exercise #1 Taxonomy & nomenclature
4 Morphology review
Plant ID review Due: Lab Workbook Exercise #2 Leaf terminology
5 Crop management
Plant ID review Evaluate plants for Production Assignment 2
Due: Lab Workbook Exercise #3 Flower anatomy

6 Field Trip Due: Production Assignment 2 - Plant Report 1
7 Plant ID review Plant ID Quiz 1
Due: Field Trip Report
8 Plant ID review Evaluate plants for Production Assignment 3
Container planting
9 Spring Break
10 Site and Soil Analysis
Plant ID review Landscape project discussion and planning
Due: Production Assignment 3 - Plant Report 2
11 Plant ID review Plant ID Quiz 2
Due: Lab Manual Exercise #4 – Site and Soil Analysis
12 Plant Selection, Garden Layout and Cost Analysis Student presentations (Container and germination projects)
13 Plant ID review Due: Lab Manual Exercise #5 – Plant Selection, Garden Layout and Cost Analysis
14 Student Presentations
Plant ID review Student Presentations Due
15 Landscape Project Assessment and discussion Cumulative ID Exam
Greenhouse clean-up

Grading Scheme Course Assignments and point values- You will be graded on the accuracy, conciseness, and grammar of your work. Any questions regarding your performance on any test are welcome. Grading follows University standards and will based on the following:

Distribution of Points
Lecture Assignments
5 Quizzes (10 points each) 50
4 Gardening Assignments
1. Plant availability assessment 30
2. Landscape assessment (part 1) 35
3. Landscape assessment (part 2) 35
4. Annual and perennial garden design exercises (3@ 30 pts each) 90
Online discussion of current topic in Annual and Perennial Gardening 10
Mid-term exam 100
Final exam 100
Lab Assignments
Lab Workbook Exercises 75
Exercise #1 – Taxonomy, Nomenclature, Terms (10)
Exercise #2 – Leaf Terminology (10)
Exercise #3 – Flower Anatomy (10)
Exercise #4 – Site and Soil Analysis (15)
Exercise #5 – Plant Selection, Garden Layout and Cost Analysis (30)
Statewide Production and Assessments 30
Production Assignment 1 - Site Information and Production Protocol (10)
Production Assignment 2 - Plant Report 1 (10)
Production Assignment 3 - Plant Report 2 (10)
Plant Lecture Project

10
Plant identification quizzes 80
Annual and Perennial Planting Projects 20
Germination of annual/perennial seed (10)
Container design and presentation (10)
Field Trip Report 5
Landscape Project Assessment and discussion 5

Total Course Points 675

TOTAL POINTS		PERCENTAGES	ASSIGNED GRADE
635 - 675		94-100	A
600 - 634		90-93	A-
579 - 599		87-89	B+
549 - 578		83-86	B
527 - 548		80-82	B-
506 - 526		77-79	C+
476- 505		73-76	C
454 - 475		70-72	C-
432 - 453		67-69	D+
403 - 431		63-66	D
384 - 402		60-62	D-
<383	<60		E

Instructor(s) Sandra Wilson and Mack Thetford
Attendance & Make-up Yes
Accomodations Yes
UF Grading Policies for assigning Grade Points Yes
Course Evaluation Policy Yes

CALS Curriculum Committee
Submission Checklist

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Syllabus
Annual and Perennial Gardening
ORH 4804C – Spring, odd years
3 Credits

Dr. Sandra B. Wilson Professor Gainesville 772-834-7619 sbwilson@ufl.edu Office hours Thursdays 12:00-1:00pm in person or by zoom Office: 108 Mehrhof Hall	Dr. Mack Thetford Associate Professor Milton 850-983-7130 thetford@ufl.edu Office: Milton Rm 4921

Course Description
Credits: 3: Prereq: Junior Standing

Identification, selection, use and management of annuals, perennials, vines, ornamental grasses and ground covers in the landscape. Hands-on care for plants in the outdoor laboratory. Learn the irrigation, fertilization, pruning and cultural needs of these popular plants.

Meeting Location: PSF 5, Greenhouse Complex, Thursdays 2:00-6:00 pm. Hybrid course will offer designated lectures online to complement live learning experiences.

Learning Objectives: At the conclusion of this course, the student will be able to:

Lecture

- Recognize and evaluate major annual and perennial plant categories and choose annual and perennial plants suited to diverse regional climates.
- Identify, compare and contrast retail availability of annual and perennial plants across geographic regions and growth zones.
- Explain the importance of annual and perennial plant growth characteristics in assessing the potential use of problematic (invasive) annuals and perennials.
- Identify, describe and evaluate various types of specialty gardens and the key concepts, designs, and plants that are particular to each.
- Assess annual and perennial plant performance in existing landscapes, develop maintenance and installation design recommendations and compile lists of recommended plants based on application of basic landscape design principles related to specialty annual and perennial gardens.

Lab

- Identify and differentiate 50+ annual and perennial plant species by common and scientific name
- Manage annual and perennial plant propagation and production via crop management activities, evaluation of crop performance and interpretation of plant growth performance across geographic regions and growth zones.
- Critique annual and perennial plant use and practice implementation of garden design concepts through the development of specialty garden designs, compiling lists of recommended plants, and participating in critiques of specialty garden designs.

Required Textbook
Florida Gardener's Handbook: All you Need to Know to Plan, Plant & Maintain a Florida Garden. 2012.
T. MacCubbin and G. Tasker
(ISBN: 1591865425)

*Additional readings are listed by week.

Useful Optional Textbooks

Your Florida Guide to Bedding Plants. 1997 R. Black and E. Gilman. UF/IFAS. (ISBN: 0916287173).

Your Florida Guide to Perennials. 2006. S. Park Brown & R. Schoellhorn, University Press of Florida (ISBN: 0813029279)

Website

CANVAS (for lectures, print-outs, additional readings, assignments, discussions, etc.) https://lss.at.ufl.edu/

Student Responsibilities

- *Attendance:* You are expected to attend and participate in scheduled classes, https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.
- *Preparation:* You are responsible for retrieving PP lecture notes and handouts through e-learning.
- *Plant ID Quizzes:* In order to do well in this lab, students will need to spend considerable time studying living samples and power points, and practicing rote memorization of the scientific, common and family names.
- *Submitting assignments:* Unless otherwise stated, all assignments must be turned in through e-learning.
- *Extra credit assignments:* The course requirements are clearly outlined in the syllabus. There is no option for Extra Credit Assignments.

- Plant Identification: Students will be exposed to almost 200 different plant species during the semester in both lecture and lab. A core set of plants representing several key groups of annual and perennial species are presented each week in CANVAS beginning in week 2.

- Written Assignments: Four written Garden Assignments are outlined below. These projects require you to visit local commercial landscapes and businesses that offer annual and perennial plants for sale. The dates these assignments are available in Canvas and the dates the assignments are due are listed on the course calendar and in the written instructions available to you in CANVAS. These assignments will require you to visit locations outside the classroom and also require you to collect specific data over several weeks. A full statewide summary of data will be prepared and provided to all students as part of discussion questions that will appear on your exams or interactive online discussions via CANVAS or ZOOM.

Student Evaluation (ORH4026C)

Lecture will consist of 5 quizzes, 4 assignments, an online discussion, and two exams (a mid-term and a cumulative final exam) comprised of multiple choice, short answer, true/false, matching and short essay questions. Any questions regarding your performance on any test are welcome. Please arrange an appointment whenever you need help.

Lab will primarily consist of 5 exercises, 3 production assignments, 3 projects, and 3 live plant quizzes. The use of tools and some outdoor, physical work can be expected. You will be notified when these outdoor activities are scheduled so that you can dress appropriately. A field trip will also be scheduled. The assignments are outlined below:

- Plant Production: Each lab site will be assigned a group of plants to produce from a liner stage to a marketable plant. You will be asked to measure growth parameters, evaluate the growth and visual quality of these plants and to keep a photo log of your plants. There are three production assignments associated with this group of plants as outlined below. Students will collect data and information as a group but individual and independent lab reports will be prepared. For individual, independent lab reports there shall be no collaboration on synthesis, interpretation or presentation of results. Data collected for these assignments is not optional and must be turned in as scheduled to allow for statewide coordination and comparison of results.

- Plant Identification: Students will be exposed to almost 200 different plant species between the lecture and lab components of the class but only quizzed on 50 plants. A core set of plants representing several key groups of annual and perennial species will be presented in addition to other species. On exam days, plan on taking a 20-minute quiz followed by other scheduled lab activities. The exams are cumulative, meaning that by the end of the semester the identification exams will cover all 50 plants.

- Written Assignments: Five written exercises are described within the Lab Workbook. The Lab Workbook Exercises will be due one week after they are assigned. The Lab Workbook is provided in an electronic format and may be accessed in the WEEK 0 module in CANVAS. The written assignments may be completed on the pages of the lab workbook during lab but the answers must be submitted as a written assignment via CANVAS.

- **Annual and Perennial Planting Projects:**

Germination of Annual/Perennial Seed: Each student will germinate one or more flats of seed provided in lab and monitor the four stages of plug development. You will be responsible for the care of the seeded trays and present the seedling performance orally and in written format. This assignment is worth 10 points and will be graded using a rubric.

Individual Container Project: Each student will be given a container for greenhouse plants to be transplanted into (you will choose the design and plants for your individual container). You will be responsible for caring for your container garden. This includes watering, fertilizing, weeding, protecting from unusual cold temperatures, etc. This assignment is worth 10 points and will be graded using a rubric.

Plant Lecture Project: Students will choose plants from the list of plants that we are growing or have in the landscape and complete a detailed species report that will be submitted in CANVAS. (Plant selection should avoid plants presented in the plant group presentations from the lecture course). Your student lecture should include: scientific name, common name, botanical description, growth form, size, flower description, culture, tolerances, and use. Information on hybrid parentage, closely related species, or other available cultivars is encouraged. Presentations may use PowerPoint, video, photography, or other digital presentation methods that can be submitted via CANVAS. This assignment is worth 10 points and will be graded using a rubric.

Field Trip: During a scheduled lab day we will take a field trip to a commercial plug producer. Students will summarize the operation in a one page or less report and submit the report the following week. Field Trip reports will be submitted via CANVAS. This assignment is worth 5 points.

Landscape Project Assessment and Discussion: As a group, students will design, install and maintain one or more garden projects using the plants grown and studied in class. These may include container and landscape gardens on campus. This activity is worth 5 points for participation.

Course Assignments and Point Values- You will be graded on the accuracy, conciseness, and grammar of your work. Any questions regarding your performance on any test are welcome. Grading follows University standards and will based on the following:

	Distribution of Points
Lecture Assignments	
5 Quizzes (10 points each)	50
4 Gardening Assignments	
1. Plant availability assessment	30
2. Landscape assessment (part 1)	35

3. Landscape assessment (part 2)	35
4. Annual and perennial garden design exercises (3@ 30 pts each)	90
Online discussion of current topic in Annual and Perennial Gardening	10
Mid-term exam	100
Final exam	100
Lab Assignments	
Lab Workbook Exercises	75
Exercise #1 – Taxonomy, Nomenclature, Terms (10)	
Exercise #2 – Leaf Terminology (10)	
Exercise #3 – Flower Anatomy (10)	
Exercise #4 – Site and Soil Analysis (15)	
Exercise #5 – Plant Selection, Garden Layout and Cost Analysis (30)	
Statewide Production and Assessments	30
Production Assignment 1 - Site Information and Production Protocol (10)	
Production Assignment 2 - Plant Report 1 (10)	
Production Assignment 3 - Plant Report 2 (10)	
Plant Lecture Project	10
Plant identification quizzes	80
Annual and Perennial Planting Projects	20
Germination of annual/perennial seed (10)	
Container design and presentation (10)	
Field Trip Report	5
Landscape Project Assessment and discussion	5
Total Course Points	**675**

TOTAL POINTS	PERCENTAGES	ASSIGNED GRADE
635.5 – 675.0	**94-100**	**A**
599.5 – 635.4	**90-93**	**A-**
578.5 – 599.4	**87-89**	**B+**
548.5 – 578.4	**83-86**	**B**
526.5 – 548.4	**80-82**	**B-**
505.5 – 526.4	**77-79**	**C+**
475.5- 505.4	**73-76**	**C**
453.5 – 475.4	**70-72**	**C-**
431.5 – 453.4	**67-69**	**D+**
402.5 – 431.4	**63-66**	**D**
383.5 – 402.4	**60-62**	**D-**
<383.4	**<60**	**E**

ORH 4804C Annual and Perennial Gardening Lecture and Lab Schedules

Week	Lecture Topics	Lecture quizzes/Assignments/Reading	Point Value
Module 1. Identification, production, installation & management			
1	Course Overview, Important Terms and Concepts – Classification, Taxonomy, Nomenclature –	Read: North FL Gardening https://edis.ifas.ufl.edu/ep451	
2	Key Plant Families – Plant group - Cool Season Annuals – Part 1	Quiz 1 (weeks 0-2) (20 min) Plant Availability Assignment	10
3	Basic Principles of Landscape Design - Hansen Propagation and Production systems for Annuals and Perennials – Cool Season Annuals – Part II	Read: Basic Principles of Landscape Design https://edis.ifas.ufl.edu/mg086	
4	Installation and Maintenance of Bedding Plants- Plant group - Asteraceae Family – Part I	Quiz 2 (weeks 3-4) Landscape Assessment Assignment – Part 1	10
5	Cool & Warm Season Annuals; Designing with Color - Plant group - Euphorbiaceae and Verbenaceae	Read: Gardening with Annuals in Florida https://edis.ifas.ufl.edu/mg319 Read Gardening with Perennials in Florida https://edis.ifas.ufl.edu/mg035	
6	Geophytes (Tropical Bulbs, Corms and Tubers) – Plant group – Geophytes - “Bulbs”	Due: Landscape Assessment Assignment - Part 1 Read: Bulbs for Florida https://edis.ifas.ufl.edu/topic_bulbous_flowers	35
7	Tropical Perennials and Vertical Gardening (Flowering Vines) – Plant group - Crassulaceae	Quiz 3 (weeks 5-7) Due: Plant Availability Assignment	40
8	Ornamental Grasses - Plant group - Asteraceae – Part II	Considerations for Selection and Use of Ornamental Grasses https://edis.ifas.ufl.edu/ep233	
9	Spring Break		
10	Mid-Term Exam	Landscape Assessment Assignment - Part 2	100
MODULE 2. – Specialty Gardens, Invasive Species, and Current Topics			
11	Container Gardening Plant group - Acanthaceae	Read: Container Gardens for Outdoor Spaces https://edis.ifas.ufl.edu/ep326	
12	Rain Gardens Wildflower Gardening Plant group - Warm Season Annuals	Quiz 4 (Weeks 11-12) Landscape Design Exercise Assignments	10
13	Water Gardening - Plant group - Lamiaceae	Due: Landscape Assessment Assignment - Part 2	35
14	Butterfly Gardening - Jaret Daniels Plant group - Perennials	Quiz 5 (Weeks 13-14) Read Butterfly Gardening in FL https://edis.ifas.ufl.edu/uw057	10
15	Problematic (Invasive) Annuals and Perennials	Due: Landscape Design Exercise Assignment	90
16	Current topic in annual or perennial gardening - guest lecture or assigned reading		10

	Current Topic Online Discussion		
17	Final Exam		100
		Total Lecture Points	450

ORH 4804C - Annual and Perennial Gardening			
Week	**Lab Topic**	**Lab Activity and Assignments**	**Points**
1	Lab organization; Introduction of students/faculty; Tour of greenhouses and Teaching Garden.	Lab safety; Planting of plugs for statewide production projects. Assess greenhouse for Production Assignment 1	
2	Vegetative propagation Seed germination	Due: Production Assignment 1 - Site Information and Production Protocol Seed Germination	10
3	Plant Nomenclature and Plant Groups Plant ID review	Due: Lab Workbook Exercise #1 Taxonomy & nomenclature	10
4	Morphology review Plant ID review	Due: Lab Workbook Exercise #2 Leaf terminology	10
5	Crop management Plant ID review	Evaluate plants for Production Assignment 2 Due: Lab Workbook Exercise #3 Flower anatomy	10
6	Field Trip	Due: Production Assignment 2 - Plant Report 1	10
7	Plant ID review	Plant ID Quiz 1 Due: Field Trip Report	25 5
8	Plant ID review	Evaluate plants for Production Assignment 3 Container planting	10
9	**Spring Break**		
10	Site and Soil Analysis Plant ID review	Landscape project discussion and planning Due: Production Assignment 3 - Plant Report 2	5 10
11	Plant ID review	Plant ID Quiz 2 Due: Lab Manual Exercise #4 – Site and Soil Analysis	25 15
12	Plant Selection, Garden Layout and Cost Analysis	Student presentations (Container and germination projects)	20
13	Plant ID review	Due: Lab Manual Exercise #5 – Plant Selection, Garden Layout and Cost Analysis	25
14	Student Presentations Plant ID review	Student Presentations Due	10
15	Landscape Project Assessment and discussion	Cumulative ID Exam Greenhouse clean-up	25

		Total Lab Points	225

Course Policies and Campus Resources

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

Fees: Materials and Supplies, $50.00

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/.

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/.

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.

Software Use
All faculty, staff and students 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.

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/

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

Cover Sheet: Request 15224

ENY4210 prerequisite modilfication

Info

Process	Course|Modify|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Estelle Martin estellemartin@ufl.edu
Created	8/20/2020 5:12:01 PM
Updated	8/20/2020 5:26:01 PM
Description of request	Insects and Wildlife is an upper division course for science majors. The course meets the elective requirement as an invertebrate biology course. Students should have completed a General Education Biology Lab prior to course registration, so we would like to add BSC2010L as a prerequisite option for this course. The prerequisite is currently ENY3005L or equivalent entomology laboratory course. The options requested would be BSC2010L or ENY3005L.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Entomology and Nematology 514914000	Heather Mcauslane		8/20/2020
INSECTS AND WILDLIFE_SYLLABUS_2020_EM_08192020.docx CALS CC Checklist (1).pdf					8/20/2020 8/20/2020
College	Pending	CALS - College of Agricultural and Life Sciences			8/20/2020
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|Modify for request 15224

Info

Request: ENY4210 prerequisite modilfication
Description of request: Insects and Wildlife is an upper division course for science majors. The course meets the elective requirement as an invertebrate biology course. Students should have completed a General Education Biology Lab prior to course registration, so we would like to add BSC2010L as a prerequisite option for this course. The prerequisite is currently ENY3005L or equivalent entomology laboratory course. The options requested would be BSC2010L or ENY3005L.

Submitter: Estelle Martin estellemartin@ufl.edu
Created: 8/20/2020 5:00:00 PM
Form version: 1

Responses

Current Prefix ENY
Course Level 4
Number 210
Lab Code None
Course Title Insects and Wildlife
Effective Term Earliest Available
Effective Year Earliest Available
Requested Action Other (selecting this option opens additional form fields below)
Change Course Prefix? No

Change Course Level? No

Change Course Number? No

Change Lab Code? No

Change Course Title? No

Change Transcript Title? No

Change Credit Hours? No

Change Variable Credit? No

Change S/U Only? No

Change Contact Type? No

Change Rotating Topic Designation? No

Change Repeatable Credit? No

Change Course Description? No

Change Prerequisites? Yes
Current Prerequisites ENY3005L or equivalent entomology laboratory course
Proposed Prerequisites Students should have completed a General Education Biology Lab prior to course registration. We would like to add BSC2010L in addition to the current ENY3005L or equivalent entomology laboratory course as a prerequisite option for this course.
Change Co-requisites? No

Rationale Insects and Wildlife is an upper division course for science majors. The course meets the elective requirement as an invertebrate biology course. Students should have completed a General Education Biology Lab prior to course registration, so we would like to add BSC2010L as a prerequisite option for this course. The prerequisite is currently ENY3005L or equivalent entomology laboratory course. The options requested would be BSC2010L or ENY3005L.

INSECTS AND WILDLIFE

ENY 4210 (UNDERGRADUATE LEVEL)
ENY 5212 (GRADUATE LEVEL)
SEMESTER: Fall, 3 CREDIT HOURS
ONLINE ONLY

INSTRUCTOR:
Dr. Estelle Martin
Office: 3206, Steinmetz Hall
1881 Natural Area Drive Box 110620
Gainesville, FL 32611
Phone: 352-294-6935
E-mail: estellemartin@ufl.edu

OFFICE HOURS:
Email estellemartin@ufl.edu to arrange a time with subject line: **FALL 2020 - ENY4210 or ENY 5212 meeting request**. All meetings will occur via Zoom. Please allow for a 48h response time.

COURSE WEBSITE: https://ufl.instructure.com/courses/396353

COURSE DESCRIPTION: Insects and other arthropods and their relationships with wild vertebrate animals.

PREREQUISITE KNOWLEDGE AND SKILLS: This is an introduction to entomology that focuses on the interrelationships of insects and vertebrate animals. If you have not taken an entomology course, you must enroll in ENY3005L or BSC2010L, prior to enroll in 'Insects & Wildlife'. This will give you hands-on experience with insects, and will enhance your diagnostic abilities.

PURPOSE OF COURSE: This course has several purposes: (1) to introduce students who are mostly interested in vertebrate animals (wildlife) to the importance of smaller, often overlooked, but ecologically important invertebrates, mostly insects; (2) to introduce students to vertebrate animals that interact with arthropods (mostly insects); (3) to learn how insects are managed, and how vertebrate animals can be positively or negatively affected by the various practices.

COURSE GOALS AND/OR OBJECTIVES: By the end of this course, students will develop an understanding of the ecological relationships of arthropods and pesticides with natural

resources, particularly the roles of arthropods as food, nuisance pests, vectors of animal disease, and in natural resource and wildlife conservation. Students will be able to identify the groups of insects (and other arthropods) that are most important as food, nuisance pests, and vectors of animal disease. They will learn methods of arthropod diet assessment and know how different methodologies affect the outcomes of research. They will learn how arthropod populations can be manipulated to favor wildlife, and will create a wildlife management plan that applies the principals and practices provided in the course.

LEARNING OUTCOMES:

1. To describe the major insect orders
2. To discuss insects external and internal structure
3. To appreciate the nutritional value of insect
4. To identify insect orders that are important to wildlife diet
5. To distinguish the different impact insects have on animal and environmental health
6. To compare and contrast the different type of disease transmission
7. To discuss strategies for pest control, animal disease control and wildlife management

LECTURE OUTLINE:

Module	Course topic	Assessment	Due dates
0	Course introduction	Syllabus quiz (30pt) Discussion board (30 pts) Assess your knowledge quiz (6 pts)	Sept 4
1	Insects and their relatives	Quiz 1 (30 pts) Discussion board 1(30 pts) Assignment 1***** (20 pts)	Sept 7
2	Insect structure and function	Quiz 2 (30 pts) Discussion board 2(30 pts) No assignment	Sept 14
3	Food resources for wildlife	Quiz 3 (10 pts) Discussion board 3 (30 pts) No assignment	Sept 21
4	Wildlife diets	Quiz 4 (30 pts) Discussion board 4 (30 pts) Assignment 4* **due next week**	Sept 28 **except for assignment 4 due Oct 5**
5	Insects important as food for wildlife	Quiz 5 (30 pts) Discussion board 5 (30 pts) Assignment 4* due (50) Insect Identification Quiz (30 pts)	Oct 5

6	Insects and ecosystems	Quiz 6 (10 pts) Discussion board 6 (30 pts) Group Quiz (3 pts)	Oct 12
7	Transmission of disease agents to wildlife by arthropods	Quiz 7 (10 pts) Discussion board 7 (30 pts) Mid-course assessment (5 pts) No assignment	Oct 19
8	Infectious disease agents transmitted to wildlife by arthropods	Quiz 8 (10 pts) Discussion board 8 (30 pts) Assignment 8* (26 pts)	Oct 26
9	Parasitic disease agents transmitted to wildlife by arthropods	Quiz 9 (20 pts) Discussion board 9 (30 pts) Assignment 9* (25 pts)	Nov 2
10	Arthropods as parasites of wildlife	Quiz 10 (30 pts) Discussion board 10 (30 pts) Assignment 10* (25 pts)	Nov 9
11	Pesticides and their effects on wildlife	Quiz 11 (30 pts) Discussion board 11 (30 pts) Assignment 11 (25pts)	Nov 16
12	Alternatives to insecticides	Quiz 12 (10 pts) Discussion board 12 (30 pts) No assignment	Nov 23
13	Insect-wildlife relationships	Quiz 13 (10 pts) Discussion board 13 (30 pts) Assignment 13* (25 pts) End-of course evaluation (5 pts)	Nov 30
14	Insect and wildlife conservation	Quiz 14 (10 pts) Discussion board 14 (30 pts) No assignment Assess your knowledge quiz (5 points)	Dec 7

*assignment for Undergraduate and Graduate student is different

COURSE FORMAT AND REQUIREMENTS:

This course is offered as narrated Powerpoints, delivered by the eLearning course management system Canvas. Notes in Powerpoint format are available should you care to print them.

There are 18 quizzes, 15 discussions and 9 assignments for this course.

Quizzes are multiple choice tests and must be taken via Canvas unless other arrangements are made in advance.

Also, there are 14 “practice quizzes”. These are not graded and it is for your use only as a study aid. If you can answer these questions successfully you are acquiring adequate knowledge about the relationship of insects and their relatives that will allow you to be successful for each of the 14 “end of the module quizzes”

In addition, there is a ‘insect identification quiz’ which will assess your ability for identification of insect orders and insect relatives that are of particular importance to wildlife. This quiz can be taken up to 3 times and the best score will be kept. At the end of each attempt the explanations as to how identification of the images is determined.

There also is one “syllabus quiz”, two “course assessment quizzes” (midway and end of course) as well as 2 “assess your knowledge quizzes” (beginning and end of the course). For these, full grade will be given just for complete the quiz.

There are 6 assignments in total and some are design as presentation of journal articles (1-2 page summary that may be accompanied by the production of a short video). The list of the journal articles is listed below:

Chapter - Journal article
6 - Insect herbivory and nutrients
6 - Salmon flies and nutrients
6 - Termites and elephants
6 - Ticks and global warming
8 - Plague and mountain plover
8 - Plague and prairie dogs
8 - Scavenging and plague
8 - Trout disease and stoneflies
9 - Chagas disease in Brazil
10 - Fire ants and wildlife
11 - Pesticides and intoxication
13 - Bats limit arthropods
13 - Bats limit insects
13 - Beehive-elephants
14 - Plague and vector control
14 - Tick control

COURSE COMMUNICATIONS: Please post course related question on the discussion board and send private question related to the course or grades to Estellemartin@ufl.edu

NETIQUETTE: COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

REQUIRED TEXT: Capinera, J.L. 2010. Insects and Wildlife. Arthropods and their Relationships with Wild Vertebrate Animals. Wiley-Blackwell, Oxford, UK.

ADDITIONAL RESOURCES: All other materials are provided via the eLearning site.

HOW THIS COURSE RELATES TO THE STUDENT LEARNING OUTCOMES:

Biology students – will develop competence in the basic terminology, concepts, methodologies and theories used within the biological sciences; and will develop ability to analyze biological information and develop reasoned solutions to problems.

Wildlife biology students – will develop knowledge of scientific, social and ethical arenas of wildlife ecology and conservation; skills for critical reasoning in conservation management; knowledge of Florida wildlife species and their biology, ecology, natural history and behavior; principles and applications of wildlife management practices, population dynamics and habitat management; and application of biological principles to solve problems in wildlife conservation and preserve biological diversity.

Entomology students - will allow students to demonstrate knowledge of insects, other arthropods and/or nematodes, including their relationship with the environment and humans

TEACHING PHILOSOPHY: Students learn best when they are interested in the subject. Although this is an introductory entomology course, it has as its focus the elements of entomology that are most important to students who are interested in wildlife biology and management, ecology, and conservation. Thus, students will be presented with why certain insects are important, and how human actions can enhance or diminish vertebrate animal populations via insect manipulation.

INSTRUCTIONAL METHODS: The class is entirely online, but you also are responsible for the material in the textbook. You should view the lectures and read the text in the order shown in the class outline. You should also view the video clips, which serve to illustrate the items discussed.

COURSE POLICIES:

ATTENDANCE POLICY: There is no attendance policy, but it will be difficult to pass the course unless you read the book carefully, and listen to the lectures. Students are encouraged to work on this class weekly since **All writing assignments are due by the date posted and must be submitted using Canvas.**

QUIZ/EXAM POLICY: You have only one chance to take each test, so prepare in advance. Please take tests using a reliable computer and connections. All assignments are due on the Monday of the following week and the whole content of the course will be available to student as they start the course. To earn points, quizzes, discussion posts and assignments, must be completed and submitted before the Monday of the following course week. All late submissions will be docked 10% on the individual component grade for each 24 hrs after each deadline. Contact me

in advance (minimum of two weeks) if there will be a problem with the dates of the scheduled tests. The insect identification quiz you will be allowed three attempts and the highest score will be recorded.

COURSE TECHNOLOGY: You will need computer access to the UF Canvas eLearning site to see the course contents and take the tests.

COURSE GRADING: Students are responsible for the content of the lectures and textbook. The quizzes, discussion board and assignments are weighted equally. The final grade, based on accumulation of points, will be assigned as:

A=>90 (900-1000 points)
B=80-89 (800- 899 points)
C=70-79 (700 -799points)
D=60-69 (600-699 points)
E=<60 (0- 599 points)

Grade point equivalencies for grades are found at: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

UF POLICIES:

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/.

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/.

COVID Response Statements
For face to face courses a statement informing students of COVID related practices such as: We will have face-to-face instructional sessions to accomplish the student learning objectives of this course. In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.
• You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
• This course has been assigned a physical classroom with enough capacity to maintain physical distancing (6 feet between individuals) requirements. Please utilize designated seats and maintain appropriate spacing between students. Please do not move desks or stations.
• Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class. • Follow your instructor's guidance on how to enter and

exit the classroom. Practice physical distancing to the extent possible when entering and exiting the classroom.
• If you are experiencing COVID-19 symptoms (Click here for guidance from the CDC on symptoms of coronavirus), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.
• Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information in the university attendance policies.

For online course with recorded materials a statement informing students of privacy related issues such as: 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. 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/.

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.

Software Use
All faculty, staff and students 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.

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/

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

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.

EM 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/.

EM 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.

EM 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.

EM 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.

EM 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.

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

EM 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.

EM 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.

EM 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.

EM 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.

EM 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.

EM 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 13844

Biological Systems Modeling

Info

Process	Certificate|Close/Modify|Grad|Revised
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Gregory Kiker gkiker@ufl.edu
Created	4/11/2019 10:56:03 AM
Updated	8/20/2020 11:55:26 AM
Description of request	Modifying Biological Systems Modeling Certificate

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Agricultural and Biological Engineering 514907000	Kati Migliaccio		5/7/2020
Proposed Changes to the ABE Biological Systems Modeling Certificate March 18 2019.pdf					4/11/2019
College	Pending	CALS - College of Agricultural and Life Sciences			5/7/2020
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					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Certificate|Close-Modify for request 13844

Info

Request: Biological Systems Modeling
Description of request: Modifying Biological Systems Modeling Certificate
Submitter: Gregory Kiker gkiker@ufl.edu
Created: 8/20/2020 11:50:16 AM
Form version: 5

Responses

Current Certificate Name Biological Systems Modeling
Effective Term Earliest Available
Effective Year Earliest Available
Requested Action Other (selecting this option will open additional form fields below)
Change Certificate Name? No
Proposed Certificate Name no changes
Change Certificate Name on Transcript? No
Current Transcript Name no changes
Proposed Transcript Name (21 char. max) no changes
Change Credit Hours? No
Current Credit Hours 12
Proposed Credit Hours 12
Change Certificate Description? No
Current Certificate Description No changes proposed.
Proposed Certificate Description (50 word max) No changes proposed.
Change Certificate Prerequisites? No
Current Prerequisites No Changes
Proposed Prerequisites No Changes
Change Certificate Requirements? Yes
Current Requirements Tier 1:
ABE5643c- Biological Systems Modeling
Tier 2:
ABE5646- Agricultural and Biological Systems Simulation
Tier 3:
Choose 2 courses:
ABE5015-Empirical Models of Crop Growth & Yield Response
ABE5663-Applied Microbial Biotechnology
ABE6035-Advanced Remote Sensing: Science & Sensors
ABE6037C-Remote Sensing in Hydrology (Judge)
ABE6254-Simulation of Agricultural Watershed Systems
ABE6265-Vadose zone water and solute transport modeling
ABE6644-Agricultural Decision Systems
CWR6536-Stochastic Subsurface Hydrology
PKG6100-Advanced Computer Tools for Packaging
ABE6645c -Computer Simulation of Crop Growth and Management
ABE6933-Math & Statistical Characteristics of Nonlinear Regression Models

Proposed Requirements Tier 1:
ABE5643c - Biological Systems Modeling

Tier 2:
ABE6933 – Advanced Biological Systems Modeling

Tier 3:
Choose 2 courses:
ABE5646- Agricultural and Biological Systems Simulation
ABE5663-Applied Microbial Biotechnology
ABE6035-Advanced Remote Sensing: Science & Sensors
ABE6037C-Remote Sensing in Hydrology

ABE6254-Simulation of Agricultural Watershed Systems
ABE6265-Vadose zone water and solute transport modeling
ABE6645c -Computer Simulation of Crop Growth and Management
ABE 6933 - Data Diagnostics
ABE 6933 - Modeling Coupled Natural-Human Systems
ABE6933 – Statistical Machine Learning
ANS6637 - Quantitative Microbial Risk Assessment of Pathogens in Food Systems
CWR6536-Stochastic Subsurface Hydrology
FOR6156 - Simulation of Forest Ecosystems
MAP 5489: Mathematical Modeling in Biology
PKG6100-Advanced Computer Tools for Packaging
SWS 6932 - Modeling Land Biogeochemistry
Impact on Program The proposed changes allow closer alignment with current learning objectives/outcomes. Also, as new courses have been created by UF faculty and requested by graduate students, we wanted the certificate to capitalize and synergize with these new course offerings. With more courses added to Tier 3, students and professors from more disciplines can participate in the certificate program.

Rationale for Proposed Change(s) When the original group of professors (James Jones, Rafael Munoz-Carpena and Greg Kiker) designed the certificate, it was with the idea that ABE5646 would serve as an intermediate to advanced modeling skills class. When Dr Jones retired the professor who inherited the class preferred to keep a strong crop model focus instead of altering the content towards more general biological systems modeling. We agreed to create a new class (ABE6649C) that would serve in the Tier 2 position (as an intermediate to advanced modeling skills class) and move the ABE5646 to a Tier 3 (specialized course) for students wanting a strong crop modeling focus.

Thus, these proposed changes reflect a closer alignment with both the original and current learning objectives/outcomes.
Assessment Data Review Review of student comments and committee review showed a lack on continuity of courses. Additionally, new and retiring faculty necessitated the change in courses offered.
Academic Assessment Plan Changes None proposed.

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/.

n/a 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.

__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.

n/a 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.

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

n/a 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.

n/a 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.

n/a 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.

n/a 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.

Proposed Changes to the Biological Systems Modeling Certificate

Current Biological Certificate Requirements

Tier 1:
ABE5643c- Biological Systems Modeling (Kiker, Huffaker and Carpena)
Tier 2:
ABE5646- Agricultural and Biological Systems Simulation (Asseng)
Tier 3:
Choose 2 courses:
ABE5015-Empirical Models of Crop Growth & Yield Response (Overman)
ABE5663-Applied Microbial Biotechnology (Pratap)
ABE6035-Advanced Remote Sensing: Science & Sensors (Judge)
ABE6037C-Remote Sensing in Hydrology (Judge)
ABE6254-Simulation of Agricultural Watershed Systems (Carpena and Kiker)
ABE6265-Vadose zone water and solute transport modeling (Carpena)
ABE6644-Agricultural Decision Systems (Beck)
CWR6536-Stochastic Subsurface Hydrology (Graham)
PKG6100-Advanced Computer Tools for Packaging (Welt?)
ABE6645c -Computer Simulation of Crop Growth and Management (Hoogenboom/Boote)
ABE6933-Math & Statistical Characteristics of Nonlinear Regression Models (Overman)

Here are the current items that will be changed:

1. ABE5646 - Agricultural and Biological Systems Simulation (Asseng) should be moved from the Tier 2 course list to the Tier 3 course list
2. ABE6933 - Advanced Biological Systems Modeling (Kiker, Huffaker and Carpena) should be added to the Tier 2 list
3. Add the following courses to the Tier 3 list as they are recently created courses that apply
    a. ANS6637 - Quantitative Microbial Risk Assessment of Pathogens in Food Systems
    b. ABE 6933 - Data Diagnostics
    c. ABE 6933 - Modeling Coupled Natural-Human Systems
    d. FOR6156 - Simulation of Forest Ecosystems
    e. MAP 5489: Mathematical Modeling in Biology
    f. SWS 6932 - Modeling Land Biogeochemistry (Gerber)
    g. ABE6933 – Statistical Machine Learning (Bliznyuk)

4. Remove the following courses from the list as they are not taught anymore (instructors have retired)
    a. ABE5015-Empirical Models of Crop Growth & Yield Response
    b. ABE6644-Agricultural Decision Systems

c. ABE6933-Math & Statistical Characteristics of Nonlinear Regression Models

Proposed Biological Certificate Requirements

Tier 1:
ABE5643c - Biological Systems Modeling (Kiker, Huffaker and Carpena)

Tier 2:
ABE6933 – Advanced Biological Systems Modeling (Kiker, Huffaker and Carpena)

Tier 3:
Choose 2 courses:
ABE5646- Agricultural and Biological Systems Simulation (Asseng)
ABE5663-Applied Microbial Biotechnology (Pratap)
ABE6035-Advanced Remote Sensing: Science & Sensors (Judge)
ABE6037C-Remote Sensing in Hydrology (Judge)
ABE6254-Simulation of Agricultural Watershed Systems (Carpena and Kiker)
ABE6265-Vadose zone water and solute transport modeling (Carpena)
ABE6645c -Computer Simulation of Crop Growth and Management (Hoogenboom/Boote)
ABE 6933 - Data Diagnostics
ABE 6933 - Modeling Coupled Natural-Human Systems
ABE6933 – Statistical Machine Learning (Bliznyuk)
ANS6637 - Quantitative Microbial Risk Assessment of Pathogens in Food Systems
CWR6536-Stochastic Subsurface Hydrology (Graham)
FOR6156 - Simulation of Forest Ecosystems
MAP 5489: Mathematical Modeling in Biology
PKG6100-Advanced Computer Tools for Packaging (Welt)
SWS 6932 - Modeling Land Biogeochemistry (Gerber)

Cover Sheet: Request 14870

Closure of M.S. degree in Plant Molecular and Cellular Biology (PMCB)

Info

Process	Degree|Close|Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Eliana Kampf elianak@ufl.edu
Created	4/10/2020 3:58:10 PM
Updated	8/17/2020 4:25:14 PM
Description of request	To Whom It may Concern, The PMCB Master's degree program has been flagged as a "low productivity" program by the College of Agricultural and Life Sciences (CALS) because of its low graduation rate. We hereby submit the documentation requested for the closure of this degree. Should you have any questions or concerns, please contact Dr. Gilles Basset (PMCB Director, gbasset@ufl.edu), Wilfred Vermerris (PMCB Graduate Coordinator, wev@ufl.edu) or Eliana Kampf (PMCB program coordinator, elianak@ufl.edu). Sincerely, Eliana Kampf

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Plant Molecular and Cellular Biology	Eliana Kampf		8/17/2020
PMCB_MS_degree_BOG-Program-Termination_April_10_2020.docx					4/10/2020
College	Pending	CALS - College of Agricultural and Life Sciences			8/17/2020
No document changes					
AP for Academic and Faculty Affairs					
No document changes					
Graduate Council					
No document changes					
University Curriculum Committee Notified					
No document changes					
SACS Director Notified					
No document changes					
Faculty Senate Steering Committee					
No document changes					
Faculty Senate					
No document changes					

Step	Status	Group	User	Comment	Updated
SACS Director					
No document changes					
Academic Affairs					
No document changes					
Board of Trustees					
No document changes					
Board of Governors					
No document changes					
Academic Affairs Notified					
No document changes					
Graduate School Notified					
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					
No document changes					
Academic Assessment Committee Notified					
No document changes					
College Notified					
No document changes					

Board of Governors, State University System of Florida

ACADEMIC DEGREE PROGRAM TERMINATION FORM

In Accordance with BOG Regulation 8.012

UNIVERSITY: University of Florida

PROGRAM NAME: Plant Molecular and Cellular Biology (PMCB) Program

DEGREE LEVEL(S): M.S. **CIP CODE** : 26.0308
(B., M., Ph.D., Ed.D., etc.) (Classification of Instructional Programs)

ANTICIPATED TERMINATION TERM: SUMMER 2020
(First term when no new students will be accepted into the program)

ANTICIPATED PHASE-OUT TERM: SPRING 2020
(First term when no student data will be reported for this program)

Please use this form for academic program termination. The form should be approved by the University Board of Trustees (UBOT) prior to submission to the Board of Governors, State University System of Florida for consideration. Please fill out this form completely for each program to be terminated in order for your request to be processed as quickly as possible. Attach additional pages as necessary to provide a complete response. In the case of baccalaureate or master's degree programs, the UBOT may approve termination in accordance with BOG Regulation 8.012, with notification sent to the Board of Governors, Office of Academic and Student Affairs. For doctoral level programs please submit this form with all the appropriate signatures for Board of Governors' consideration. The issues outlined below should be examined by the UBOT when approving program terminations.

1. **Provide a narrative rationale for the request to terminate the program.**
   The PMCB Master's degree program has been flagged as a "low productivity" program by the College of Agricultural and Life Sciences (CALS) because it has graduated only 3 students in the last 5 years. The reason for this low score is that the Plant Molecular and Cellular Biology program is intended to focus on awarding Ph.D. degrees. Our M.S. degree offering was only intended as a fallback option for graduate students who failed to complete their Ph.D. degree (in other words, our marginal enrollment in the M.S. degree is an indicator of the success of our Ph.D. students). Henceforth, we believe that the occasional student, who is unsuccessful in the PMCB Ph.D. program, could transfer to a Master's program in the home department of their supervisory chair.

2. **Indicate on which campus(es) the program is being offered and the extent to which the proposed termination has had or will have an impact on enrollment, enrollment planning, and/or the reallocation of resources.**

   The program is currently offered on main campus in Gainesville. No impact is anticipated; no student is enrolled in the program.

3. **Explain how the university intends to accommodate any students or faculty who are currently active in the program scheduled to be terminated. State what steps have been taken to inform students and faculty of the intent to terminate the program. Please provide the date when the teach-out plan was submitted to SACSCOC, if applicable.**

   PMCB is an interdisciplinary program with currently 50 faculty members housed in three Colleges (College of Agricultural and Life Sciences, College of Liberal Arts and Sciences and College of Medicine) across eight different UF departments: Agronomy, Biology, Environmental Horticulture, Forest Resources and Conservation, Horticultural Sciences, Microbiology and Cell Science, Molecular Genetics and Microbiology, and Plant Pathology. Faculty will continue to

participate in the program and mentor Ph.D. students in PMCB and will not be impacted by the M.S. closure. A survey of all faculty was conducted in December 2019 where 74% of the faculty approved the closure of the M.S. degree [37 for; 2 against; 1 abstain; 10 no response]. As mentioned before, no students nor faculty will be impacted by the closure of this degree since there are no students currently enrolled in the M.S. degree.

4.

Provide data (and cite sources) on the gender and racial distribution of

students in and faculty affiliated with the program. For faculty, also list the

rank and tenure status of all affected individuals.

Not applicable since there are no students currently enrolled in the program.

5. Identify any potential negative impact of the proposed action on the current

representation of females, minorities, faculty, and students in the program.

No negative impact is anticipated since there are no students enrolled in the

program and the program does not actively recruit students into its M.S. degree.

6. If this is a baccalaureate program, please explain how and when the Florida College System (FCS) institutions have been notified of its termination so that students can be notified accordingly.

Not applicable.

-----04/09/2020-----

Signature of Requestor/Initiator

Date

Signature of Campus EO Officer

Date

Signature of College Dean

Date

Signature of President or Vice President for

Date

Academic Affairs

Date Approved by the

Date

Board of Trustees

Signature of the Chair of the
Board of Trustees

Date

Cover Sheet: Request 13496 14

WIS 4XXX, Wetland Management Techniques

Info

Process	Course|New|Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Peter Frederick pfred@ufl.edu
Created	1/9/2019 4:13:12 PM
Updated	8/19/2020 8:05:24 AM
Description of request	This is a request for a new graduate/undergraduate course in Wetlands Management.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Wildlife Ecology and Conservation 514947000	Eric Hellgren	Consult demonstrates articulation on wetlands course with 2 other departments	4/30/2019
UCC consult Peter Frederick2.pdf					3/15/2019
College	Recycled	CALS - College of Agricultural and Life Sciences	Joel H Brendemuhl	Recycled by the CALS CC. Comments have been provided to submitter.	9/20/2019
No document changes					
Department	Approved	CALS - Wildlife Ecology and Conservation 514947000	Eric Hellgren		2/3/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			2/3/2020
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 13496

Info

Request: WIS 4XXX, Wetland Management Techniques
Description of request: This is a request for a new graduate/undergraduate course in Wetlands Management.
Submitter: Peter Frederick pfred@ufl.edu
Created: 6/26/2020 1:29:30 PM
Form version: 8

Responses

Recommended Prefix WIS
Course Level 4
Number XXX
Category of Instruction Joint (Ugrad/Grad)
Lab Code C
Course Title Wetland Management
Transcript Title Wetland Management
Degree Type Baccalaureate

Delivery Method(s) On-Campus
Co-Listing Yes
Co-Listing Explanation This course is for a) undergraduate students interested in pursuing careers in wetland management and restoration, and b) graduate students interested in applying wetland management and restoration techniques in their research. Undergrads are graded on a combination of in class tests and exams, lab reports and practical quizzes. In addition to these, grads must work on a project with a management agency that involves production of a management or monitoring plan to the satisfaction of the agency.
Effective Term Fall
Effective Year 2020
Rotating Topic? No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 5
Course Description This course will prepare students for basic monitoring, field research, and management of wetlands, using ecological principles and knowledge of community variation in relation to stressors. Identification, monitoring techniques, and management and restoration techniques will be taught through a combination of class lectures and hands-on field exercises and labs.

Prerequisites none
Co-requisites none
Rationale and Placement in Curriculum This course fills an important gap for students interested in wetland ecology and management. Wetlands (SOS 4244) gives undergraduates a basic background in wetland ecology, but does not offer a lot of specifics in wetland management. The proposed course is designed in part as a next step, offering specific management techniques and restoration examples for undergraduates. This course fits an important gap for undergrads interested in professional experience with wetland management.
Course Objectives By the end of this course, students will be able to:

- Identify important plants, animals and biotic communities in southeastern wetlands
- Assess wetland soil types and what they tell about wetland history
- Contrast components of hydrological budgets and how to measure them
- Employ standard wetland delineation techniques

Evaluate appropriate sampling techniques for tracking spatial and temporal biotic parameters in

wetlands

Design different wetland management and restoration techniques for specific goals.

Course Textbook(s) and/or Other Assigned Reading Anderson, J.T. and C.T. Davis (eds). 2014. Wetland Techniques, Volumes 2 – 3. Springer Science Press, Dortrecht. Note this book is available free to UF students. Emphasis on Vol 2, Chapter 7 Wetland Wildlife Monitoring and Assessment, and Vol 3 Chapter 4, Management of Wetlands for Wildlife.
Tobe, J. et al. 1998. Florida Wetland Plants: an identification manual. Florida Department of Environmental Protection.
Johnson, S. A. and M.E. McGarrity. Identification Guide to the Frogs of Florida. University of Florida. SP 468, available from from the University of Florida/The Institute of Food and Agricultural Sciences (UF/IFAS) Publications
Florida Wetlands Delineation Manual:
http://www.dep.state.fl.us/water/wetlands/delineation/manual.htm
Wetland habitat classification: Florida Natural Areas Inventory:
http://fnai.org/naturalcommguide.cfm

Weekly Schedule of Topics Wetland Management
WIS 4XXX section 1630
Lecture and Lab schedule Fall 2020

Unit I. Wetland ecology, communities, and indicators for management.

Week 1. Wetland Ecology basics and Wetland Plants
8/25/2020 Course introduction, wetland ecology overview
8/27/2020 Wetland Plants identification- (meet at NATL, see map at Canvas under Files>Reference Material)

Week 2. Hydric Soils
9/1/2020 Wetland ecology, Hydric Soils - Dr. Mark Clark
9/4/2020 Hydric soils identification lab – (Meet at NATL)

Week 3. Wetland Communities I
9/8/2020 FNAI community types I, typical and impaired
9/10/2020 Soils and plants quiz, FNAI Community types, Herp and fish id

Week 4. Wetland Communities II
9/15/2020

Wetland communities quiz, Herps as indicators
9/17/2020

Wetland Community types field trip – (meet NZ breezeway)

Unit II. Monitoring Wetlands

Week 5. Herp and fish monitoring
9/22/2020

Herp and fish monitoring techniques
9/24//2020 Wetland fish and herp field monitoring exercise – (meet in NZ breezeway)

Week 6. Wetland Classification and Delineation
9/29/2020 Fish and Herp ID quiz, Wetland Classification and delineation
10/1/2020 Wetland delineation field exercise – (meet in NZ breezeway)

Week 7. Agriculture and wetlands
10/6/2020 Test I
10/8/2020 Agriculture and wetland management, Bird ID lab

Week 8. Quantifying wetland vegetation

10/13/2020 Wetland Delineation quiz. Monitoring vegetation
10/15/2020 Field exercise- quantifying wetland vegetation – (meet at NATL)

Week 9. Aquatic birds and wetlands
10/20/2020 Avian monitoring techniques. Wetland Vegetation exercise due
10/22/2020 Field trip to Sweetwater Wetlands Park (Meet in NZ breezeway)

Week 10. Measuring hydrology
10/27/2020 Monitoring wetland hydrology – Dr. David Kaplan

10/29/2020 Cedar Key and coastal areas (meet in NZ breezeway)

Unit III. Managing and restoring wetlands

Week 11. Wetland fire ecology, field logistics
11/3/2020 Wetland fire ecology
11/5/2020 Field safety & logistics

Week 12. Hydrological management
11/10/2020 Managing Hydrology. Reports from logistics exercise due
11/12/2020 Field Logistics quiz, Waterfowl and wetland management
Week 13. Mosquito management, wetland restoration
11/17/2020 Vector control
11/19/2020 Shellfish and Seagrass restoration, Aquatic bird ID quiz

Week 14. Wetland restoration
11/24/2020 Wetland hydrology quiz. Chesapeake restoration
11/26/2020 Thanksgiving Break, no class

Week 15. Graduate project presentations
12/1/2020 Kissimmee and Everglades restoration, review
12/3/2020 Graduate Presentations, graduate projects due

Week 16. 12/8/2020 Test II

Links and Policies 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/.

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/.

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/.

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.
Software Use:
All faculty, staff and students 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.

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/

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

Cultural Accommodation: Because our students represent a myriad of cultures and many faiths, the University of Florida is not able to assure that scheduled academic activities do not conflict with the holy days of all religious groups. We therefore rely on individual students to make their need for an excused absence known in advance of the scheduled activities. As you look through the course syllabus, if you have a religious or cultural observance conflict, contact me at the beginning of the semester or as soon as you can, and we will make appropriate arrangements. Here is UF's policy on cultural accommodation: https://administrativememo.ufl.edu/2018/10/uf-religious-observances-policy-

Safe Space & Mutual Respect: My classroom and my office are safe spaces. What that means for you, as a student, is that while in class or in my office you have the right to express yourself freely and openly (and appropriately), and have me, your TA and your classmates respect your expression. In these safe spaces, mutual respect is expected; this means that both parties have respect for one

another (note: this does not mean we always agree). In order to foster this environment conducive of learning and growth experiences, please join me in treating your classmates with respect.

Grading Scheme Contributions to final grade for WIS 4xxx:

Participation and attendance: 10%

Lab quizzes

15%

Field trips and exercises

10%

Mid Term

30%

Final exam

35%

Total

100%

Grading: A (94% or greater), A- (90%-93%), B+ (87%-89%), B (84%-86%), B- (80%-83%), C+ (77%-79%), C (74%-76%), C- (70%-73%), D+ (67%-69%), D (64%-66%), D- (60%-63%) E (<60). See https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx for UF grading policy.

Instructor(s) Dr. Peter Frederick, Research Professor, Department of Wildlife Ecology and Conservation.

Syllabus

Wetland Management

WIS 4934 Fall 2020
Online synchronous course
3 credits

Instructor: Dr. Peter Frederick, Department of Wildlife Ecology and Conservation
pfred@ufl.edu, Ofc 352-846-0565
Office: Building 87, next to Florida Cooperative Wildlife Research Unit
(knock on entrance door, someone will open it).

Office hours: Dr. Frederick T Period 8, TH Period 9 – please arrange with me ahead of time for an appointment on Zoom

Class Time and location: Tuesday Period 7 1:55 – 2:45pm, Zoom meetings
Thursdays periods 6-8 12:50 – 3:50 pm Zoom, self guided trips, or experiences at UF Natural Area Teaching Lab.

Course Description

This course will prepare students for basic monitoring, field research, and management of wetlands, using ecological principles and knowledge of community variation in relation to stressors. Identification, monitoring techniques, and management and restoration techniques will be taught through a combination of class lectures and hands-on field exercises and labs.

Course Learning Objectives:

By the end of this course, students will be able to:

Identify important plants, animals and biotic communities in southeastern wetlands
Assess wetland soil types and what they tell about wetland history
Contrast components of hydrological budgets and how to measure them
Employ standard wetland delineation techniques
Evaluate appropriate sampling techniques for tracking spatial and temporal biotic parameters in wetlands
Design different wetland management and restoration techniques for specific goals.

Course Schedule: See schedule at end of this document for lectures and dates.

Critical dates: see schedule at the end of this document for dates of quizzes, tests, and Canvas site for due dates of assignments.

Prerequisites or concurrency: none

Course requirements: Class attendance, field trip attendance, lab practical quizzes, lab practical exercises, and two written exams. Participation (below) is graded on evidence of active engagement in the class and lab, such as questions asked, evidence of evolving thinking, and interactions with students and faculty in the class and on assignments.

Contributions to final grade for undergraduate section, WIS 4934:

Participation and attendance:	10%
Lab quizzes	30%
Field trips and exercises	15%
Mid Term	20%
Final exam	25%
Total	100%

**Participation is based on both attendance and on evidence of engagement in classes and labs – asking questions in or out of class times, and evidence of preparation. See UF attendance policy at https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/*

Grading: A (94% or greater), A- (90%-93%), B+ (87%-89%), B (84%-86%), B- (80%-83%), C+ (77%-79%), C (74%-76%), C- (70%-73%), D+ (67%-69%), D (64%-66%), D- (60%-63%), E (<60). See https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx for UF grading policy.

Course Materials and Readings.

This course is heavily based on identification and hands on field experience, which will be supplemented with readings, and a combination of field guides and online material. This course relies considerably on material presented in class and encountered in the field – **this is definitely not a class where you can miss classes and catchup by reading the materials on the Canvas site.**

Required Materials:

General: Anderson, J.T. and C.T. Davis (eds). 2014. Wetland Techniques, Volumes 2 – 3. Springer Science Press, Dortrecht. ***Note this book is available free to UF students***, see the Canvas site (under Files>Reference Materials) for downloads. The two chapters (below) must be finished BEFORE the lectures that they pertain to. The goal is to supplement information from

lectures and build general knowledge about commonly accepted techniques for monitoring and assessing wetland biota and condition.

Material in these chapters will be on Mid-term and Final exams, and we will discuss much of the reading and situations in which different methodologies are used, and the ability to name and identify what is generally involved in each technique. For example, I might ask an exam question about the situation in which a funnel net might be used to capture turtles, or the most likely method to sample amphibians emerging from a pond postbreeding. These readings will also build your knowledge for more synthetic questions that involve designing a monitoring study for a particular purpose, that involves multiple forms of biota and wetland response. These are also likely to be on the tests.

Reading schedule:

Date due	**Assignment**	**Folder (Canvas>Files…)**
August 22, field trip	Lightning Safety (be prepared to answer questions)	>Unit I>Wetland Plant ID lab
September 17, class	Chapter 7 in Wetland Wildlife Monitoring and Assessment (vol 2)	>Reference material>Wetland Techniques
September 17, class	Chapter 7 in Wetland Wildlife Monitoring and Assessment (vol 2)	>Reference material>Wetland Techniques
September 26, field trip	Methods section in the Florida Wetland Delineation Manual	>Unit II>Wetland classification and delineation lab
October 10, lab	Updated Wetland Plant Sampling Protocol	>Unit II > Wetland Plant quantification Lab
October 31, class	Chapter 2 in Management of Wetlands for Wildlife (vol 3)	>Reference material>Wetland Techniques
October 29, class	Chapter 2 in Management of Wetlands for Wildlife (vol 3)	>Reference material>Wetland Techniques
October 17, field trip	Payne's Prairie Sheetflow project pdf	
November 14, class	Kellogg paper (Kellog et al 2013) Mann and Powell paper (2007) Plus one other paper of your choice	>Unit III >Shellfish restoration
November 20, class	Chapter 2 in Management of Wetlands for Wildlife (vol 3)	Reference material>Wetland Techniques
November 19, class	Sklar paper (Sklar et al 2005) Smith paper (Smith et al 2011)	>Unit III>Everglades and Chesapeake

Other required material for this course:

Bird identification: Sibley Field Guide to Birds –book or the eguide app (recommended). https://play.google.com/store/apps/details?id=com.coolideas.eproducts.sibleybirds&feature=search_result. Other field guides such as Audubon guides or National Geographic guides are also acceptable, but you will need to find a source for calls (which are in the app).

Wetland Soil identification: Field Indicators of Hydric Soils in the United States. A Guide for Identifying and Delineating Hydric Soils, Version 7.0, 2010. Available on the Canvas site under Files>Unit 1>Labs>Hydric Soils Lab materials.

Wetland Plant identification: Tobe, J. et al. 1998. *Florida Wetland Plants: an identification manual*. Florida Department of Environmental Protection and UF/IFAS Publications.The manual is no longer available in print, but the pdf is available on the Canvas site under Files>Unit 1>Labs>Wetland Plant Identification Lab. **Download to your phone or tablet ahead of the first lab**!

Frog calls: Use the Florida Frog Calls lookup https://www.pwrc.usgs.gov/Frogquiz/index.cfm?fuseaction=main.lookup&CFID=6366850&CFTOKEN=288034ba03db9883-0B5283B7-D5D5-4EA0-BD3B20F30FA9B4A6

Wetlands Delineation: Florida Wetlands Delineation Manual: on the Canvas site Files>Unit II.Labs>Weltnad delineation lab materials.

Wetland habitat classification: Florida Natural Areas Inventory: below, or on the Canvas site Files>Unit I>Lectures>FNAI Wetland Communities.
http://fnai.org/naturalcommguide.cfm http://fnai.org/natcom_accounts.cfm

Other nonrequired resources:

Wetland Plants:

Godfrey, R.K. and J.W.Wooten 1981. Aquatic and Wetland Plants of Southeastern United States: Vol. 1. Monocots, Vol 2. Dicotyledons. University of Georgia Press. This is the authoritative book for wetland flora complete with keys and detailed descriptions.

Tiner, R. 1993. Field guide to coastal wetland plants of the southeastern United States. U niversity of Massachusetts Press.

Aquatic and Wetland Plants in Florida – Plant management
http://plants.ifas.ufl.edu/manage/why-manage-plants/aquatic-and-wetland-plants-in-florida/

Links to information and research on frogs and toads:
http://ufwildlife.ifas.ufl.edu/frogs/links.shtml

Waterfowl Management: Baldassare G.A. and E. G. Bolen. 2006. Waterfowl ecology and management. Krieger Publishing. Second edition.

Important - Coronavirus safety procedures: Because of coronavirus risks, this course will be taught as a synchronous online course during fall 2020, with all lectures, tests, quizzes and office hours accomplished online through Canvas and Zoom. However, this course has always had a strong field component, and we have several face to face labs outside. Most exercises will be at the Natural Areas Teaching Lab on the UF campus, others will be at locations that can be accessed by bus or bicycle. Students are required to travel to labs on their own, and to wear face coverings, use hand sanitizer frequently and maintain six-foot distances at all times. The Coronavirus Safety Plan for this course can be found on the course Canvas under Files.

In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- Sanitizing supplies are available at labs if you wish to wipe down your immediate area or belongings prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the lab area. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (Click here for guidance from the CDC on symptoms of coronavirus), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.
- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information in the university attendance policies.

Grades and Grade Points
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Self-Help Library
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• Residential Course: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/.
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Wetland Management

WIS 4934/6934

Lecture and Lab schedule Fall 2020

See Canvas site for dates for assignments, tests and quizzes

Unit I. Wetland ecology, communities, and indicators for management.

Week 1. Wetland Ecology basics and Wetland Plants

9/1/2020 Course introduction, wetland ecology overview

9/3/2020 Wetland Plants identification- (**meet at NATL, see map at Canvas under Files>Reference Material)**

Week 2. Hydric Soils

9/8/2020 Wetland ecology, Hydric Soils - Dr. Mark Clark

9/10/2020 Hydric soils identification lab – **(Meet at NATL)**

Week 3. Wetland Communities I

9/15/2020 FNAI community types I, typical and impaired

9/17/2020 FNAI Community types, Herp and fish id

Week 4. Wetland Communities II

9/22/2020 Herps as indicators

9/24/2020 Wetland Community types field trip (self guided trips)

Unit II. Monitoring Wetlands

Week 5. Herp and fish monitoring

9/29/2020 Herp and fish monitoring techniques

10/1/2020 Wetland fish and herp field monitoring exercise – (**meet at NATL**)

Week 6. Wetland Classification and Delineation

10/6/2020 Wetland Classification and delineation

10/8/2020 Wetland delineation field exercise – (**meet at NATL**)

Week 7. Agriculture and wetlands

10/13/2020 Agriculture and wetland management

10/15/2020 **Test I** and Avian Identification lab

Week 8. Quantifying wetland vegetation

10/20/2020 Monitoring vegetation

10/22/2020 Field exercise- quantifying wetland vegetation – (**meet at NATL**)

Week 9. Aquatic birds and wetlands

10/27/2020 Avian monitoring techniques.

10/29/2020 Field trip to Sweetwater Wetlands Park (**Meet at SWP**)

Week 10. Measuring hydrology

11/3/2020 Monitoring wetland hydrology – Dr. David Kaplan

11/5/020 Wetland hydrology lab exercise

Unit III. Managing and restoring wetlands

Week 11. Wetland fire ecology, field logistics

11/10/2020 Wetland fire ecology

11/12/2020 Field safety & logistics

Week 12. Hydrological management

11/17/2020 Managing Hydrology.

11/19/2020 Waterfowl and wetland management

Week 13. Mosquito management, wetland restoration

11/24/2020 Vector control

11/26/2020 Thanksgiving Break, no class

Week 14. Wetland restoration

12/1/2020 Chesapeake restoration

12/3/2020 Kissimmee and Everglades Restoration

Week 15. Coastal restoration

12/8/2020 **Test II**

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.

The Curriculum Committee asked me to obtain concurrence from the Chair of Department of Soil and Water Science for the creation of the Wetlands Management Course. Below is the email from Dr. Matt Whiles indicating concurrence.

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

Department	Name and Title
Soil and Water Sciences	Mark Clark, Associate Professor
Phone Number	**E-mail**
352-294-3115	clarkmw@ufl.edu

Comments

The proposed undergraduate and graduate Wetlands Management Techniques course will be highly complementary to both SWS4244 and SWS5248, which are classroom based introductory wetlands courses. The proposed techniques course would provides a more field and management focused opportunity for students. This course will fill a present gap in wetland related course offerings at UF specifically hands on learning opportunities related to measurement and monitoring techniques, identification of biota and soils as well as a focus on wetland restoration techniques.

Department	Name and Title
ESSIE	David Kaplan, Associate Professor
Phone Number	**E-mail**
352-392-8439	dkaplan@ufl.edu

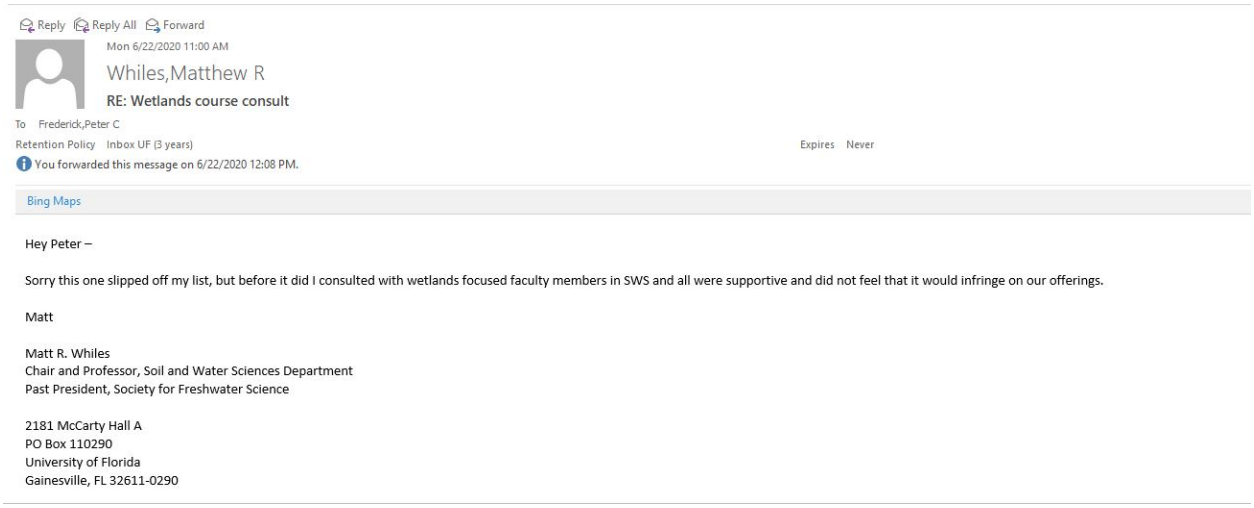
Comments

The proposed course will be of great interest and applicability at the graduate and undergraduate levels. It will serve as a good addition to the Wetlands Certificate and Concentration offered by Center for Wetlands. The material is complementary to, but not duplicative of, SWS 5248, EES 6309, and ENV 6508. Major differences from existing courses include this new course's focus on identifying plants, animals, biotic communities, and soils; wetland delineation techniques; and sampling methods and techniques.

Department	Name and Title
Phone Number	**E-mail**

Comments

The Curriculum Committee asked me to obtain concurrence from the Chair of Department of Soil and Water Science for the creation of the Wetlands Management Course. Below is the email from Dr. Matt Whiles indicating concurrence.



Reply Reply All Forward

Mon 6/22/2020 11:00 AM

Whiles,Matthew R

RE: Wetlands course consult

To Frederick,Peter C

Retention Policy Inbox UF (3 years) Expires Never

You forwarded this message on 6/22/2020 12:08 PM.

Bing Maps

Hey Peter –

Sorry this one slipped off my list, but before it did I consulted with wetlands focused faculty members in SWS and all were supportive and did not feel that it would infringe on our offerings.

Matt

Matt R. Whiles
Chair and Professor, Soil and Water Sciences Department
Past President, Society for Freshwater Science

2181 McCarty Hall A
PO Box 110290
University of Florida
Gainesville, FL 32611-0290

Cover Sheet: Request 13763

WIS 6XXX Wetland Management

Info

Process	Course|New|Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Peter Frederick pfred@ufl.edu
Created	3/15/2019 4:44:11 PM
Updated	8/19/2020 8:03:59 AM
Description of request	Proposal for a new joint undergraduate/graduate course

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Wildlife Ecology and Conservation 514947000	Eric Hellgren	Consult indicate the complementary articulation among departments and colleges on wetland ecology and management	3/18/2019
UCC consult Peter Frederick2.pdf					3/15/2019
College	Recycled	CALS - College of Agricultural and Life Sciences	Joel H Brendemuhl	Recycled by the CALS CC.	9/20/2019
No document changes					
Department	Approved	CALS - Wildlife Ecology and Conservation 514947000	Eric Hellgren		2/3/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			2/3/2020
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					

Step	Status	Group	User	Comment	Updated
No document changes					

Course|New for request 13763

Info

Request: WIS 6XXX Wetland Management
Description of request: Proposal for a new joint undergraduate/graduate course
Submitter: Peter Frederick pfred@ufl.edu
Created: 6/26/2020 1:17:55 PM
Form version: 7

Responses

Recommended Prefix WIS
Course Level 6
Number XXX
Category of Instruction Joint (Ugrad/Grad)
Lab Code C
Course Title Wetlands Management
Transcript Title Wetlands Management
Degree Type Graduate

Delivery Method(s) On-Campus
Co-Listing Yes
Co-Listing Explanation in addition to the undergraduate work assigned (quizzes, exams, reading, lab reports), graduate students must complete a wetland management or monitoring plan. Graduate students must contact a management agency or NGO, consult with them about the creation of a management or monitoring plan, and produce a plan by the end of the semester that is written to the satisfaction of the agency. Grad students may work in pairs or threes to accomplish this goal. This project requires a lot of work, and accordingly makes up a large portion of the grade for grad students (15%) and make a presentation to the class about that plan (5%).
Effective Term Fall
Effective Year 2019
Rotating Topic? No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 5
Course Description This course will prepare students for basic monitoring, field research, and management of wetlands, using ecological principles and knowledge of community variation in relation to stressors. Identification, monitoring techniques, and management and restoration techniques will be taught through a combination of class lectures and hands-on field exercises and labs.
Prerequisites none
Co-requisites None
Rationale and Placement in Curriculum This course fills an important gap for graduate students interested in wetland ecology and management. Basic courses in wetland ecology exist at the undergrad level but they do not offer a lot of specifics in wetland management. The proposed course is designed in part as a next step, offering specific management techniques and restoration examples. This course also fills an important gap at the graduate level that is not currently bridged by existing graduate courses in Environmental Engineering.
Course Objectives By the end of this course, students will be able to:
Identify important plants, animals and biotic communities in southeastern wetlands
Identify wetland soil types and what they tell about wetland history
Understand components of hydrological budgets and how to measure them
Be familiar with standard wetland delineation techniques
Evaluate appropriate sampling techniques for tracking spatial and temporal biotic parameters in wetlands
Design different wetland management and restoration techniques for specific goals.

Construct a management or monitoring plan for a natural resource agency or NGO.

Course Textbook(s) and/or Other Assigned Reading Anderson, J.T. and C.T. Davis (eds). 2014. Wetland Techniques, Volumes 2 – 3. Springer Science Press, Dortrecht. Note this book is available free to UF students. Emphasis on Vol 2, Chapter 7 Wetland Wildlife Monitoring and Assessment, and Vol 3 Chapter 4, Management of Wetlands for Wildlife.
Tobe, J. et al. 1998. Florida Wetland Plants: an identification manual. Florida Department of Environmental Protection.
Johnson, S. A. and M.E. McGarrity. Identification Guide to the Frogs of Florida. University of Florida. SP 468, available from from the University of Florida/The Institute of Food and Agricultural Sciences (UF/IFAS) Publications
Florida Wetlands Delineation Manual:
http://www.dep.state.fl.us/water/wetlands/delineation/manual.htm
Wetland habitat classification: Florida Natural Areas Inventory:
http://fnai.org/naturalcommguide.cfm

Weekly Schedule of Topics Unit I. Wetland ecology, communities, and indicators for management.

Week 1. Wetland Ecology basics and Wetland Plants
8/25/2020 Course introduction, wetland ecology overview
8/27/2020 Wetland Plants identification- (meet at NATL, see map at Canvas under Files>Reference Material)

Week 2. Hydric Soils
9/1/2020 Wetland ecology, Hydric Soils - Dr. Mark Clark
9/4/2020 Hydric soils identification lab – (Meet at NATL)

Week 3. Wetland Communities I
9/8/2020 FNAI community types I, typical and impaired
9/10/2020 Soils and plants quiz, FNAI Community types, Herp and fish id

Week 4. Wetland Communities II
9/15/2020

Wetland communities quiz, Herps as indicators
9/17/2020

Wetland Community types field trip – (meet NZ breezeway)

Unit II. Monitoring Wetlands

Week 5. Herp and fish monitoring
9/22/2020

Herp and fish monitoring techniques
9/24//2020 Wetland fish and herp field monitoring exercise – (meet in NZ breezeway)

Week 6. Wetland Classification and Delineation
9/29/2020 Fish and Herp ID quiz, Wetland Classification and delineation
10/1/2020 Wetland delineation field exercise – (meet in NZ breezeway)

Week 7. Agriculture and wetlands
10/6/2020 Test I
10/8/2020 Agriculture and wetland management, Bird ID lab

Week 8. Quantifying wetland vegetation
10/13/2020 Wetland Delineation quiz. Monitoring vegetation
10/15/2020 Field exercise- quantifying wetland vegetation – (meet at NATL)

Week 9. Aquatic birds and wetlands
10/20/2020 Avian monitoring techniques. Wetland Vegetation exercise due
10/22/2020 Field trip to Sweetwater Wetlands Park (Meet in NZ breezeway)

Week 10. Measuring hydrology
10/27/2020 Monitoring wetland hydrology – Dr. David Kaplan

10/29/2020 Cedar Key and coastal areas (meet in NZ breezeway)

Unit III. Managing and restoring wetlands

Week 11. Wetland fire ecology, field logistics
11/3/2020 Wetland fire ecology
11/5/2020 Field safety & logistics

Week 12. Hydrological management
11/10/2020 Managing Hydrology. Reports from logistics exercise due
11/12/2020 Field Logistics quiz, Waterfowl and wetland management
Week 13. Mosquito management, wetland restoration
11/17/2020 Vector control
11/19/2020 Shellfish and Seagrass restoration, Aquatic bird ID quiz

Week 14. Wetland restoration
11/24/2020 Wetland hydrology quiz. Chesapeake restoration
11/26/2020 Thanksgiving Break, no class

Week 15. Graduate project presentations
12/1/2020 Kissimmee and Everglades restoration, review
12/3/2020 Graduate Presentations, graduate projects due

Week 16. 12/8/2020 Test II

Links and Policies 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/.

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/.

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/.

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.
Software Use:
All faculty, staff and students 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.

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/

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

Cultural Accommodation: Because our students represent a myriad of cultures and many faiths, the University of Florida is not able to assure that scheduled academic activities do not conflict with the holy days of all religious groups. We therefore rely on individual students to make their need for an excused absence known in advance of the scheduled activities. As you look through the course syllabus, if you have a religious or cultural observance conflict, contact me at the beginning of the semester or as soon as you can, and we will make appropriate arrangements. Here is UF's policy on cultural accommodation: https://administrativememo.ufl.edu/2018/10/uf-religious-observances-policy-

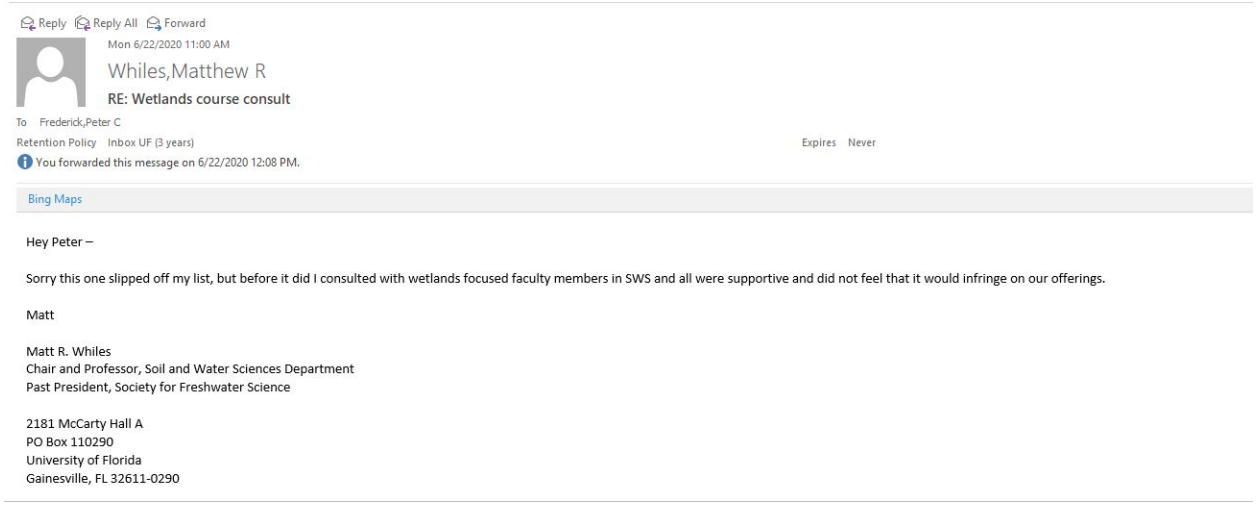
Safe Space & Mutual Respect: My classroom and my office are safe spaces. What that means for you, as a student, is that while in class or in my office you have the right to express yourself freely and openly (and appropriately), and have me, your TA and your classmates respect your expression. In these safe spaces, mutual respect is expected; this means that both parties have respect for one another (note: this does not mean we always agree). In order to foster this environment conducive of learning and growth experiences, please join me in treating your classmates with respect.

Grading Scheme Contributions to final grade for WIS 6934:

Attendance and participation*	10%
Lab quizzes	5%
Field trips and exercises	5%
Mid Term	30%
Final exam	30%
Written Management plan	15%
Presentation of plan	5%
Total	100%

Grading: A (94% or greater), A- (90%-93%), B+ (87%-89%), B (84%-86%), B- (80%-83%), C+ (77%-79%), C (74%-76%), C- (70%-73%), D+ (67%-69%), D (64%-66%), D- (60%-63%) E (<60). See https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx for UF grading policy.
Instructor(s) Dr. Peter Frederick

The Curriculum Committee asked me to obtain concurrence from the Chair of Department of Soil and Water Science for the creation of the Wetlands Management Course. Below is the email from Dr. Matt Whiles indicating concurrence.



Reply Reply All Forward

Mon 6/22/2020 11:00 AM

Whiles,Matthew R

RE: Wetlands course consult

To Frederick,Peter C

Retention Policy Inbox UF (3 years) Expires Never

You forwarded this message on 6/22/2020 12:08 PM.

Bing Maps

Hey Peter –

Sorry this one slipped off my list, but before it did I consulted with wetlands focused faculty members in SWS and all were supportive and did not feel that it would infringe on our offerings.

Matt

Matt R. Whiles
Chair and Professor, Soil and Water Sciences Department
Past President, Society for Freshwater Science

2181 McCarty Hall A
PO Box 110290
University of Florida
Gainesville, FL 32611-0290

Syllabus

Wetland Management

WIS 6934 Fall 2020
Online synchronous course
3 credits

Instructor: Dr. Peter Frederick, Department of Wildlife Ecology and Conservation
pfred@ufl.edu, Ofc 352-846-0565
Office: Building 87, next to Florida Cooperative Wildlife Research Unit
(knock on entrance door, someone will open it).

Office hours: Dr. Frederick T Period 8, TH Period 9 – please arrange with me ahead of time for an appointment on Zoom

Class Time and location: Tuesday Period 7 1:55 – 2:45pm, Zoom meetings
Thursdays periods 6-8 12:50 – 3:50 pm Zoom, self guided trips, or experiences at UF Natural Area Teaching Lab.

Course Description

This course will prepare students for basic monitoring, field research, and management of wetlands, using ecological principles and knowledge of community variation in relation to stressors. Identification, monitoring techniques, and management and restoration techniques will be taught through a combination of class lectures and hands-on field exercises and labs.

Course Learning Objectives:

By the end of this course, students will be able to:

Identify important plants, animals and biotic communities in southeastern wetlands
Assess wetland soil types and what they tell about wetland history
Contrast components of hydrological budgets and how to measure them
Employ standard wetland delineation techniques
Evaluate appropriate sampling techniques for tracking spatial and temporal biotic parameters in wetlands
Design different wetland management and restoration techniques for specific goals.

Course Schedule: See schedule at end of this document for lectures and dates.

Critical dates: see schedule at the end of this document for dates of quizzes, tests, and Canvas site for due dates of assignments.

Prerequisites or concurrency: none

Course requirements: Class attendance, field trip attendance, lab practical quizzes, lab practical exercises, and two written exams. Participation (below) is graded on evidence of active engagement in the class and lab, such as questions asked, evidence of evolving thinking, and interactions with students and faculty in the class and on assignments.

Course Requirements for Graduate Students that are different from undergraduate students. In addition to the requirements above, graduate students enrolled in this class will also research and write a management and monitoring plan or detailed section thereof, for a wetland in consultation with the manager. Graduate students will also be required to present their management or monitoring plan to the class as an assignment. See detailed description of this assignment on the Canvas site.

Contributions to final grade for graduate section, WIS 6934:

Attendance and participation*	10%
Lab quizzes	25%
Field trips and exercises	15%
Mid Term	15%
Final exam	20%
Written Management plan	15%
Presentation of management plan	5%
Total	100%

**Participation is based on both attendance and on evidence of engagement in classes and labs – asking questions in or out of class times, and evidence of preparation. See UF attendance policy at https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/*

Grading: A (94% or greater), A- (90%-93%), B+ (87%-89%), B (84%-86%), B- (80%-83%), C+ (77%-79%), C (74%-76%), C- (70%-73%), D+ (67%-69%), D (64%-66%), D- (60%-63%), E (<60). See https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx for UF grading policy.

Course Materials and Readings.

This course is heavily based on identification and hands on field experience, which will be supplemented with readings, and a combination of field guides and online material. This course relies considerably on material presented in class and encountered in the field – **this is definitely**

not a class where you can miss classes and catchup by reading the materials on the Canvas site.

Required Materials:

General: Anderson, J.T. and C.T. Davis (eds). 2014. Wetland Techniques, Volumes 2 – 3. Springer Science Press, Dortrecht. ***Note this book is available free to UF students***, see the Canvas site (under Files>Reference Materials) for downloads. The two chapters (below) must be finished BEFORE the lectures that they pertain to. The goal is to supplement information from lectures and build general knowledge about commonly accepted techniques for monitoring and assessing wetland biota and condition.

Material in these chapters will be on Mid-term and Final exams, and we will discuss much of the reading and situations in which different methodologies are used, and the ability to name and identify what is generally involved in each technique. For example, I might ask an exam question about the situation in which a funnel net might be used to capture turtles, or the most likely method to sample amphibians emerging from a pond postbreeding. These readings will also build your knowledge for more synthetic questions that involve designing a monitoring study for a particular purpose, that involves multiple forms of biota and wetland response. These are also likely to be on the tests.

Reading schedule:

Date due	Assignment	Folder (Canvas>Files…)
August 22, field trip	Lightning Safety (be prepared to answer questions)	>Unit I>Wetland Plant ID lab
September 17, class	Chapter 7 in Wetland Wildlife Monitoring and Assessment (vol 2)	>Reference material>Wetland Techniques
September 17, class	Chapter 7 in Wetland Wildlife Monitoring and Assessment (vol 2)	>Reference material>Wetland Techniques
September 26, field trip	Methods section in the Florida Wetland Delineation Manual	>Unit II>Wetland classification and delineation lab
October 10, lab	Updated Wetland Plant Sampling Protocol	>Unit II > Wetland Plant quantification Lab
October 31, class	Chapter 2 in Management of Wetlands for Wildlife (vol 3)	>Reference material>Wetland Techniques
October 29, class	Chapter 2 in Management of Wetlands for Wildlife (vol 3)	>Reference material>Wetland Techniques

October 17, field trip	Payne's Prairie Sheetflow project pdf	
November 14, class	Kellogg paper (Kellog et al 2013) Mann and Powell paper (2007) Plus one other paper of your choice	>Unit III >Shellfish restoration
November 20, class	Chapter 2 in Management of Wetlands for Wildlife (vol 3)	Reference material>Wetland Techniques
November 19, class	Sklar paper (Sklar et al 2005) Smith paper (Smith et al 2011)	>Unit III>Everglades and Chesapeake

Other required material for this course:

Bird identification: Sibley Field Guide to Birds –book or the eguide app (recommended). https://play.google.com/store/apps/details?id=com.coolideas.eproducts.sibleybirds&feature=search_result. Other field guides such as Audubon guides or National Geographic guides are also acceptable, but you will need to find a source for calls (which are in the app).

Wetland Soil identification: Field Indicators of Hydric Soils in the United States. A Guide for Identifying and Delineating Hydric Soils, Version 7.0, 2010. Available on the Canvas site under Files>Unit 1>Labs>Hydric Soils Lab materials.

Wetland Plant identification: Tobe, J. et al. 1998. *Florida Wetland Plants: an identification manual*. Florida Department of Environmental Protection and UF/IFAS Publications.The manual is no longer available in print, but the pdf is available on the Canvas site under Files>Unit 1>Labs>Wetland Plant Identification Lab. **Download to your phone or tablet ahead of the first lab**!

Frog calls: Use the Florida Frog Calls lookup https://www.pwrc.usgs.gov/Frogquiz/index.cfm?fuseaction=main.lookup&CFID=6366850&CFTOKEN=288034ba03db9883-0B5283B7-D5D5-4EA0-BD3B20F30FA9B4A6

Wetlands Delineation: Florida Wetlands Delineation Manual: on the Canvas site Files>Unit II.Labs>Weltnad delineation lab materials.

Wetland habitat classification: Florida Natural Areas Inventory: below, or on the Canvas site Files>Unit I>Lectures>FNAI Wetland Communities.
http://fnai.org/naturalcommguide.cfm http://fnai.org/natcom_accounts.cfm

Other nonrequired resources:

Wetland Plants:

Godfrey, R.K. and J.W.Wooten 1981. Aquatic and Wetland Plants of Southeastern United States: Vol. 1. Monocots, Vol 2. Dicotyledons. University of Georgia Press. This is the authoritative book for wetland flora complete with keys and detailed descriptions.

Tiner, R. 1993. Field guide to coastal wetland plants of the southeastern United States. U niversity of Massachusetts Press.

Aquatic and Wetland Plants in Florida – Plant management
http://plants.ifas.ufl.edu/manage/why-manage-plants/aquatic-and-wetland-plants-in-florida/

Links to information and research on frogs and toads:
http://ufwildlife.ifas.ufl.edu/frogs/links.shtml

Waterfowl Management: Baldassare G.A. and E. G. Bolen. 2006. Waterfowl ecology and management. Krieger Publishing. Second edition.

Important - Coronavirus safety procedures: Because of coronavirus risks, this course will be taught as a synchronous online course during fall 2020, with all lectures, tests, quizzes and office hours accomplished online through Canvas and Zoom. However, this course has always had a strong field component, and we have several face to face labs outside. Most exercises will be at the Natural Areas Teaching Lab on the UF campus, others will be at locations that can be accessed by bus or bicycle. Students are required to travel to labs on their own, and to wear face coverings, use hand sanitizer frequently and maintain six-foot distances at all times. The Coronavirus Safety Plan for this course can be found on the course Canvas under Files.

In response to COVID-19, the following policies and requirements are in place to maintain your learning environment and to enhance the safety of our in-classroom interactions.

- You are required to wear approved face coverings at all times during class and within buildings. Following and enforcing these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.
- Sanitizing supplies are available at labs if you wish to wipe down your immediate area or belongings prior to sitting down and at the end of the class.
- Follow your instructor's guidance on how to enter and exit the lab area. Practice physical distancing to the extent possible when entering and exiting the classroom.
- If you are experiencing COVID-19 symptoms (Click here for guidance from the CDC on symptoms of coronavirus), please use the UF Health screening system and follow the instructions on whether you are able to attend class. Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms.

- Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Find more information in the university attendance policies.

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/.

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/.

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/.

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.

Software Use:
All faculty, staff and students 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.

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/

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

Cultural Accommodation: Because our students represent a myriad of cultures and many faiths, the University of Florida is not able to assure that scheduled academic activities do not conflict with the holy days of all religious groups. We therefore rely on individual students to make their need for an excused absence known in advance of the scheduled activities. As you look through the course syllabus, if you have a religious or cultural observance conflict, contact me at the beginning of the semester or as soon as you can, and we will make appropriate arrangements. Here is UF's policy on cultural accommodation:
https://administrativememo.ufl.edu/2018/10/uf-religious-observances-policy-

Safe Space & Mutual Respect: My classroom and my office are safe spaces. What that means for you, as a student, is that while in class or in my office you have the right to express yourself freely and openly (and appropriately), and have me, your TA and your classmates respect your expression. In these safe spaces, mutual respect is expected; this means that both parties have respect for one another (note: this does not mean we always agree). In order to foster this environment conducive of learning and growth experiences, please join me in treating your classmates with respect.

Wetland Management

WIS 4934/6934

Lecture and Lab schedule Fall 2020

See Canvas site for dates for assignments, tests and quizzes

Unit I. Wetland ecology, communities, and indicators for management.

Week 1. Wetland Ecology basics and Wetland Plants

9/1/2020 Course introduction, wetland ecology overview

9/3/2020 Wetland Plants identification- (**meet at NATL, see map at Canvas under Files>Reference Material)**

Week 2. Hydric Soils

9/8/2020 Wetland ecology, Hydric Soils - Dr. Mark Clark

9/10/2020 Hydric soils identification lab – **(Meet at NATL)**

Week 3. Wetland Communities I

9/15/2020 FNAI community types I, typical and impaired

9/17/2020 FNAI Community types, Herp and fish id

Week 4. Wetland Communities II

9/22/2020 Herps as indicators

9/24/2020 Wetland Community types field trip (self guided trips)

Unit II. Monitoring Wetlands

Week 5. Herp and fish monitoring

9/29/2020 Herp and fish monitoring techniques

10/1/2020 Wetland fish and herp field monitoring exercise – (**meet at NATL**)

Week 6. Wetland Classification and Delineation

10/6/2020 Wetland Classification and delineation

10/8/2020 Wetland delineation field exercise – (**meet at NATL**)

Week 7. Agriculture and wetlands

10/13/2020 Agriculture and wetland management

10/15/2020 **Test I** and Avian Identification lab

Week 8. Quantifying wetland vegetation

10/20/2020 Monitoring vegetation

10/22/2020 Field exercise- quantifying wetland vegetation – (**meet at NATL**)

Week 9. Aquatic birds and wetlands

10/27/2020 Avian monitoring techniques.

10/29/2020 Field trip to Sweetwater Wetlands Park (**Meet at SWP**)

Week 10. Measuring hydrology

11/3/2020 Monitoring wetland hydrology – Dr. David Kaplan

11/5/020 Wetland hydrology lab exercise

Unit III. Managing and restoring wetlands

Week 11. Wetland fire ecology, field logistics

11/10/2020 Wetland fire ecology

11/12/2020 Field safety & logistics

Week 12. Hydrological management

11/17/2020 Managing Hydrology.

11/19/2020 Waterfowl and wetland management

Week 13. Mosquito management, wetland restoration

11/24/2020 Vector control

11/26/2020 Thanksgiving Break, no class

Week 14. Wetland restoration

12/1/2020 Chesapeake restoration

12/3/2020 Kissimmee and Everglades Restoration

Week 15. Coastal restoration

12/8/2020 **Test II**

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.

The Curriculum Committee asked me to obtain concurrence from the Chair of Department of Soil and Water Science for the creation of the Wetlands Management Course. Below is the email from Dr. Matt Whiles indicating concurrence.

Original file: Evidence of concurrence from Chair of Soil and Water Science.docx

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

Department	Name and Title
Soil and Water Sciences	Mark Clark, Associate Professor
Phone Number	**E-mail**
352-294-3115	clarkmw@ufl.edu

Comments

The proposed undergraduate and graduate Wetlands Management Techniques course will be highly complementary to both SWS4244 and SWS5248, which are classroom based introductory wetlands courses. The proposed techniques course would provides a more field and management focused opportunity for students. This course will fill a present gap in wetland related course offerings at UF specifically hands on learning opportunities related to measurement and monitoring techniques, identification of biota and soils as well as a focus on wetland restoration techniques.

Department	Name and Title
ESSIE	David Kaplan, Associate Professor
Phone Number	**E-mail**
352-392-8439	dkaplan@ufl.edu

Comments

The proposed course will be of great interest and applicability at the graduate and undergraduate levels. It will serve as a good addition to the Wetlands Certificate and Concentration offered by Center for Wetlands. The material is complementary to, but not duplicative of, SWS 5248, EES 6309, and ENV 6508. Major differences from existing courses include this new course's focus on identifying plants, animals, biotic communities, and soils; wetland delineation techniques; and sampling methods and techniques.

Department	Name and Title
Phone Number	**E-mail**

Comments