

CALS Curriculum Committee Meeting
October 23, 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 September 25, 2020 meeting

Dr. Brendemuhl: Update from UCC

Undergraduate Certificate Proposal

1. Proposed Agroecology and Sustainable Food Systems Undergraduate Certificate (req. #15292)

Curriculum

2. Proposed Soil and Water Sciences Research Concentration (req. #15272)
3. Proposed Soil and Water Sciences MS Professional Concentration (req. #15273)

Recycled item

4. FOR 6XXX – Bark and Ambrosia Beetles (req. #14650)

This item was recycled on 2/14/2020. Comments as follows: A motion was made by Dr. Coenen to recycle this item back to the department for required updates and resubmission. The Motion was approved. The contact hours on the UCC form need to be changed from 24 to two. Even though the course is only four days the form must be completed as if it was a full 16 week semester. All syllabuses are required to include available office hours. Scheduled appointments is not an acceptable option. The learning objectives need to include verbs more appropriate to the rigor of a graduate level course. Assistance with learning objectives can be found at:

https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf. There is concern that grades are determined by a single exam. Consider the addition of quizzes, daily journal entries or other assignments. The UCC form indicates there is a textbook required, but the syllabus shows no textbook is required. If the course-specific guide mentioned in the syllabus is the same as the text indicated on the form, make sure the descriptions match.

Finally, the committee had a question as to whether this course is worthy of graduate level credit. Therefore, the instructor is encouraged to attend the meeting of the CALS CC, at which his submission will be re-reviewed, in person or via zoom (link available at committee site: <https://cals.ufl.edu/faculty-staff/committees/>) to give a course background and field any questions.

Tabled item

5. Dr. Turner has asked that the committee to consider if a statement on diversity and equity should be added to the CALS Syllabus Statements.

Selection of Chair-Elect

All committee members who plan to serve during the 2021-2022 academic year are eligible. As chair you would be expected to serve from November 2021 through October 2022. Nominations or volunteers are appreciated.

CALS Curriculum Committee Meeting
September 25, 2020
Submitted by James Fant

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

Substitute: Gerardo Celis Azofeifa for Chris Wilson

Guests: Bobbi Henken, Graciela Lorca, Raluca Mateescu, Scott Sager, Eric Triplett

Call to Order: The College of Agricultural and Life Sciences Curriculum Committee met via Zoom on September 25, 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 August 28, 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 were **ALL APPROVED** at the **SEPTEMBER UCC** meeting; 1) **New Courses** – ENY 3XXX Spider Biology; MCB 4XXX Antimicrobial Resistance; MCB 4XXXL Antimicrobial Resistance Laboratory; MCB 5XXX Antimicrobial Resistance; and PCB Human Genomics. 2) **Changes to Courses** – ORH 4804 Annual and Perennial Gardening; ORH 4804L Annual and Perennial Gardening Lab; and DIE 6944 Dietetic Internship II. He also reiterated that this year all undergraduate degree programs would need to update their 8-semester plans to incorporate the UF Quest 2 requirement which becomes effective with the 2021-22 catalog. He provided statistics from the 2019-20 UCC cycle where the UCC entertained 509 total requests which included 114 program requests, 188 new course requests and 207 existing course requests. Of those 509 requests 488 were approved and several others were conditionally-approved and are awaiting updates. Other information included changes to the fall 2020 and spring 2021 academic calendars and changes for the BS_MS Combination degrees.

Graduate New Course Proposal

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

A motion was made by Dr. Sharp to approve this item with changes required. The motion was approved. **Be sure to make all requested changes to both the UCC form and syllabus if necessary.** The weekly contact hours need to be changed to three to match the credit hours. Demonstrate should not be used as a learning verb in the course objectives and needs to be replaced. For assistance please see: https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf. No class during the first week of the term is of great concern. There needs to be an explanation of what is expected from the students during this time or class meeting times need to be added. For submission purposes add the submitters name to the instructor section of the UCC form. On the syllabus, remove the information for the “to be determined” instructor. Other instructors can be added at a later date. The course coordinator must have specific office hours listed. The TA section can be left as is. The most recent version of the CALS Syllabus Statements boilerplate needs to replace the one currently on the syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

Undergraduate New Course Proposal

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

A motion was made by Dr. Gillen to approve this item with changes required. The motion was approved. **Be sure to make all requested changes to both the UCC form and syllabus if necessary.** The prerequisites need to be listed in the acceptable format (FYC3001(C) and FYC3201(C) and FYC4212(C). Do not use commas. The course objectives need to be re-done. Do not use understand as a learning verb. For assistance with learning objectives refer to: https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf. Change the course number on the syllabus to the proposed course number. Instructor office hours are required (proposed hours are acceptable). The most recent version of the CALS Syllabus Statements boilerplate needs to replace the one currently on the syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

Certificates

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

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

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

A motion was made by Dr. Porter to approve this item as submitted with a suggested change included. The motion was approved. The committee suggested changing required courses to foundation courses. **Be sure to make changes to both the UCC form and certificate plan if necessary.**

Curriculum

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

A motion was made by Dr. Porter to approve this item as submitted with a suggested addition included. The motion was approved. The committee suggested including background criteria for students with non-UF M.S. degrees.

Recycled items

6. HUN 6XXX – Macronutrients in Human Nutrition (req. #15206)

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

7. AEC 4XXX – Communication and Leadership Development Internship (req. #14649)

A motion was made by Dr. Porter to approve this item with changes required. The motion was approved. **Be sure to make changes on both the UCC form and syllabus if necessary.** The contact type on the UCC form needs to be changed to Head Count. The 2.4 or higher overall GPA statement needs to be removed from the prerequisite section. In the second learning objective think critically should be removed since this is difficult to measure. For assistance with learning objectives refer to: - https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf. The instructor listed on the UCC form needs to be added to the syllabus. All required instructor contact information, including office hours, needs to be listed. The most recent version of the CALS Syllabus Statements boilerplate needs to replace the one currently on the syllabus. This can be found at: https://cals.ufl.edu/content/PDF/Faculty_Staff/CALS-Syllabus-Policy.pdf.

Discussion

8. Proposed CALS CC Checklist edits

A motion was made by Dr. Porter to approve the edits. The motion was approved.

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

This discussion topic was tabled to allow committee members to consult with their departmental faculty.

The meeting was adjourned at **3:56** p.m.

Cover Sheet: Request 15292

Agroecology and Sustainable Food Systems certificate

Info

Process	Certificate New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Sukhwinder Bali sukhwinder.bali@ufl.edu
Created	9/28/2020 11:59:37 AM
Updated	10/19/2020 8:26:54 AM
Description of request	New Undergraduate Certificate request

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Agronomy 514908000	Diane Rowland		9/28/2020
Soils.pdf					9/28/2020
FRE Agroecology certificate letter.pdf					9/28/2020
Field and Fork.pdf					9/28/2020
Family Youth Community Science.pdf					9/28/2020
Entomology.pdf					9/28/2020
Agronomy.pdf					9/28/2020
Proposed curriculum.pdf					9/28/2020
Agroecology and Sustainable Food Systems .pdf					9/28/2020
College	Pending	CALS - College of Agricultural and Life Sciences			9/28/2020
No document changes					
Office of Institutional Planning and Research					
No document changes					
Associate Provost for Undergraduate Affairs					
No document changes					
University Curriculum Committee					
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					

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

Certificate|New for request 15292

Info

Request: Agroecology and Sustainable Food Systems certificate
Description of request: New Undergraduate Certificate request
Submitter: Sukhwinder Bali sukhwinder.bali@ufl.edu
Created: 10/16/2020 3:15:27 PM
Form version: 2

Responses

Certificate Name Agroecology and Sustainable Food Systems
Transcript Title Agroecology
Credits 12
Level Baccalaureate
CIP Code 01.0308
Degree Program Agroecology and Sustainable Agriculture
Effective Term Fall
Effective Year 2021

Certificate Description The Agroecology Certificate explores the natural and social systems that guide sustainable agriculture. It provides interdisciplinary training and hands-on field research to teach the principles and practices of agroecological production within the context of environmental, social, and economic challenges. It prepares students for graduate programs or professions utilizing systems-thinking skills.

Requirements for Admission (List any requirements for admission to this new certificate program such as grade point average, background in the discipline, current enrollment status, etc.. Please indicate if the certificate only accepts students of a particular status: for example, current UF graduate students, graduate students in a specific college, non-degree seeking students, or any student status.)

Current UF students, of Sophomore or Junior standing.

Requirements for Completion Requirements for Completion (List all of requirements for completion of the certificate program, such as courses, internships, projects, etc. For each course, indicate prefix, number, title, # credits, and established grading scheme (letter grade or S/U). The title should be identical to the official title of the course as listed in the Undergraduate catalog or Graduate catalog.)

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number Course Title

Credit Hours Semester Offered Pre-requisites
ALS 4914

Project Teams

3

Fall

junior standing
AGR 4212

Alternative Cropping Systems 3

Spring

PLS 3004C

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are

letter-graded (3 credits).

Course Number Course Title

Credit Hours Semester Offered Pre-requisites
ALS 3153

Agricultural Ecology

3

Spring + Fall

junior standing
ALS 4154

Global Agroecosystems

3

Spring

PLS 3004C
SWS 4207

Sustainable Agricultural 3

Fall

SWS 3022
and Urban Land Management
IDS 2935 Living and Eating on Earth 3

Fall

None

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number

Course Title

Credit Hours Semester Offered Pre-requisites
AEB 3671

Comparative World Agriculture 3

course catalog does not list a prerequisite
AEB 4126

Agricultural and Natural Resource Ethics 3

junior or senior standing
ALS 3030C Urban Agriculture

3

sophomore standing
FYC 3521

Community Food Systems

3

Summer

Junior Standing

Rationale and Place in Curriculum (Describe the rationale for offering this new certificate and having it on the transcript, its place in the curriculum, how it will enhance the quality of the existing program or department. Also describe its overlap with any existing certificates and programs, and a justification for any such overlap. Note that documentation of consultation will be expected for any certificate with overlapping content.)

This certificate will provide students with unique training in sustainable agricultural systems that connects across ecological, agricultural, and social science disciplines. The required courses will provide critical experiential education opportunities to complement their in-class course of study. As a core courses, the Alternative Cropping Systems class provides breadth via a survey of agricultural systems and includes site visits to local farms and a hands-on project at the Field & Fork farm. The second core course, Project Teams, provides a more intensive, full-semester field research experience focused on exploring an agricultural question at the Field & Fork farm. In addition to the two core courses, the social science and natural science electives will broaden the students' perspectives of food systems and sustainability and help them examine how their interests fit into food system careers.

This certificate has similar themes as the graduate certificates in Agroecology (Sustainable Agroecosystem Certificate, Tropical Agriculture Certificate), but does not overlap closely with any of the undergraduate certificates.

Student Learning Outcomes Student Learning Outcomes (List each student learning outcome with its associated courses, assessment type (e.g. course-related exam/assignment/grade, final paper/project/presentation, standardized exam, capstone) and method (e.g. rubric, faculty committee, single faculty member)

Upon completion of this certificate students will be able to:

- Explain fundamental concepts relating to the structure and function of agroecosystems, techniques and methods for global food production, and the environmental challenges associated with various production systems.

- o Associated courses: AGR 4212, ALS 3153, ALS 4154, SWS 4207, AEB 4126, ALS 3030C, FYC 3521, IDS 2935

- o Achievement of these learning objectives will be assessed through class assessments (quizzes and exams), group projects, written reports, and class activities.

- Analyze and evaluate agricultural systems from ecological, environmental, and cultural perspectives.

- o Associated courses: ALS 4154, ALS, 4914, AGR 4212, ALS 3153, AEB 3671, AEB 4126

- o Achievement of these learning objectives will be assessed through Achievement of these learning objectives will be assessed through class assessments (quizzes and exams), group projects, written reports, and class activities.

- Apply scientific principles to develop testable scientific questions/hypotheses and research studies, and collect, analyze, and interpret data.

- o Associated courses: ALS 4914, AGR 4212, ALS 3030

- o Achievement of these learning objectives will be assessed through group research projects, written reports, and in-class activities and presentations.

- Synthesize course materials to develop and communicate (written and oral) solutions for real-world problems faced by local, regional, and global food production systems.

- o Associated courses: ALS 4914, AGR 4212, ALS 3153, IDS 2935

- o Achievement of these learning objectives will be assessed through group research projects, written reports, and in-class activities and presentations.

New Undergraduate or Professional Certificate Application: Draft

University of Florida Certificate Policy

Please review the University of Florida Certificate Policy (updated May, 2019), to ensure that the proposed certificate is in accord with UF Policy.

Certificate Name: Agroecology and Sustainable Food Systems

Transcript Title: Agroecology

Credits Required: 12

Level: Baccalaureate

CIP Code: 01.0308

Degree Program: Agroecology and Sustainable Agriculture

Effective Term: Fall 2021

Certificate Description (limited to 50 words or fewer).

The Agroecology Certificate explores the natural and social systems that guide sustainable agriculture. It provides interdisciplinary training and hands-on field research to teach the principles and practices of agroecological production within the context of environmental, social, and economic challenges. It prepares students for graduate programs or professions utilizing systems-thinking skills.

Requirements for Admission (List any requirements for admission to this new certificate program such as grade point average, background in the discipline, current enrollment status, etc.. Please indicate if the certificate only accepts students of a particular status: for example, current UF graduate students, graduate students in a specific college, non-degree seeking students, or any student status.)

Current UF students, of Sophomore or Junior standing.

Requirements for Completion (List all of requirements for completion of the certificate program, such as courses, internships, projects, etc. For each course, indicate prefix, number, title, # credits, and established grading scheme (letter grade or S/U). The title should be identical to the official title of the course as listed in the Undergraduate catalog or Graduate catalog.)

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
ALS 4914	Project Teams	3	Fall	junior standing
AGR 4212	Alternative Cropping Systems	3	Spring	PLS 3004C

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
ALS 3153	Agricultural Ecology	3	Spring + Fall	junior standing
ALS 4154	Global Agroecosystems	3	Spring	PLS 3004C
SWS 4207	Sustainable Agricultural and Urban Land Management	3	Fall	SWS 3022
IDS 2935	Living and Eating on Earth	3	Fall	None

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
AEB 3671	Comparative World Agriculture	3	Spring + Fall	(course catalog does not list a prerequisite)
AEB 4126	Agricultural and Natural Resource Ethics	3	Spring	junior or senior standing
ALS 3030C	Urban Agriculture	3	Spring + Fall	sophomore standing
FYC 3521	Community Food Systems	3	Summer	Junior Standing

Rationale and Place in Curriculum Required (Describe the rationale for offering this new certificate and having it on the transcript, its place in the curriculum, how it will enhance the quality of the existing program or department. Also describe its overlap with any existing certificates and programs, and a justification for any such overlap. Note that documentation of consultation will be expected for any certificate with overlapping content.)

This certificate will provide students with unique training in sustainable agricultural systems that connects across ecological, agricultural, and social science disciplines. The required courses will provide critical experiential education opportunities to complement their in-class course of study. As a core courses, the Alternative Cropping Systems class provides breadth via a survey of agricultural systems and includes site visits to local farms and a hands-on project at the Field & Fork farm. The second core course, Project Teams, provides a more intensive, full-semester field research experience focused on exploring an agricultural question at the Field & Fork farm. In addition to the two core courses, the social science and natural science electives will broaden the students' perspectives of food systems and sustainability and help them examine how their interests fit into food system careers.

This certificate has similar themes as the graduate certificates in Agroecology (Sustainable Agroecosystem Certificate, Tropical Agriculture Certificate), but does not overlap closely with any of the undergraduate certificates.

Student Learning Outcomes (List each student learning outcome with its associated courses, assessment type (e.g. course-related exam/assignment/grade, final paper/project/presentation, standardized exam, capstone) and method (e.g. rubric, faculty committee, single faculty member))

Upon completion of this certificate students will be able to:

- Explain fundamental concepts relating to the structure and function of agroecosystems, techniques and methods for global food production, and the environmental challenges associated with various production systems.
 - Associated courses: AGR 4212, ALS 3153, SWS 4207, AEB 4126, ALS 3030C, FYC 3521
 - Achievement of these learning objectives will be assessed through class assessments (quizzes and exams), group projects, written reports, and class activities.
- Analyze and evaluate agricultural systems from ecological, environmental, and cultural perspectives.
 - Associated courses: ALS, 4914, AGR 4212, ALS 3153, AEB 3671, AEB 4126
 - Achievement of these learning objectives will be assessed through Achievement of these learning objectives will be assessed through class assessments (quizzes and exams), group projects, written reports, and class activities.
- Apply scientific principles to develop testable scientific questions/hypotheses and research studies, and collect, analyze, and interpret data.
 - Associated courses: ALS 4914, AGR 4212, ALS 3030C
 - Achievement of these learning objectives will be assessed through group research projects, written reports, and in-class activities and presentations.
- Synthesize course materials to develop and communicate (written and oral) solutions for real-world problems faced by local, regional, and global food production systems.
 - Associated courses: ALS 4914, AGR 4212, ALS 3153
 - Achievement of these learning objectives will be assessed through group research projects, written reports, and in-class activities and presentations.

Final Instructions

Prepare and upload documentation showing consultation with any academic units which may be affected by the proposed certificate. This documentation may include email correspondence, memos, or other letters of support from consulted academic units.

Prepare a copy of the proposed catalog changes that shows all revisions, for example using strikeouts and underlined text, or using tracked changes.

Additional courses for future consideration

Natural Sciences

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
FOR 4854	Agroforestry	3	Spring	None
SWS 4116	Environmental Nutrient Management	3	Fall + Spring	SWS 3022
SWS 4231	Soil, Water, and Land Use	3		

Social Sciences

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
AEB 2014	Economic Issues, Food, and You	3	Fall	None
AEB 3103	Principles of Food and Resource Economics	4		MAC 2233/MAC 2311 or higher.
GEO 3315	Geography of Crop Plants	3		

Additional Random Notes:

Source: <https://nces.ed.gov/ipeds/cipcode/searchresults.aspx?y=55&aw=agroecology>

Classification of Instructional Programs (CIP) Code: 01.0308

Agroecology and Sustainable Agriculture. A program that focuses on agricultural principles and practices that, over the long term, enhance environmental quality, make efficient use of nonrenewable resources, integrate natural biological cycles and controls, and are economically viable and socially responsible; and that may prepare individuals to apply this knowledge to the solution of agricultural and environmental problems. Includes instruction in principles of agroecology, crop and soil sciences, entomology, horticulture, animal science, weed science and management, soil fertility and nutrient cycling, applied ecology, agricultural economics, and rangeland ecology and watershed management.

Certificate Submission Required Documents:

- Catalog copy - catalog-style description of the certificate, requirements for entry, requirements for completion, and a suggested semester-by-semester plan, prepared as a Microsoft Word document.
- Supporting documentation - memos, emails, etc. from other units to provide evidence of the availability of courses that are required for the certificate and/or to provide evidence for support of the proposed certificate if there is clear or potential overlap or duplication of content.

CALS Curriculum Committee

Submission Checklist

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

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

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

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

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

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

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

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

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

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

☑ Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://registrar.ufl.edu/pdf/ucccconsult.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. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl (brendj@ufl.edu) for further instruction)

Proposed curriculum

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
ALS 4914	Project Teams	3	Fall	None
AGR 4212	Alternative Cropping Systems	3	Spring	None

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
ALS 3153	Agricultural Ecology	3	Spring + Fall	None
ALS 4154	Global Agroecosystems	3	Spring	SWS3022, AGR 4214C, ALS 3153
SWS 4207	Sustainable Agricultural and Urban Land Management	3	Fall	SWS 3022
IDS 2935	Living and Eating on Earth	3	Fall	None

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
AEB 3671	Comparative World Agriculture	3		
AEB 4126	Agricultural and Natural Resource Ethics	3		junior or senior standing
ALS 3030C	Urban Agriculture	3		sophomore standing
FYC 3521	Community Food Systems	3	Summer	Junior Standing

Additional courses for future consideration

Natural Sciences

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
FOR 4854	Agroforestry	3	Spring	None
SWS 4116	Environmental Nutrient Management	3	Fall + Spring	SWS 3022

SWS 4231	Soil, Water, and Land Use	3		
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Social Sciences

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
AEB 2014	Economic Issues, Food, and You	3	Fall	None
AEB 3103	Principles of Food and Resource Economics	4		MAC 2233 / MAC 2311 or higher.
GEO 3315	Geography of Crop Plants	3		

AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS

CERTIFICATE

The Agroecology and Sustainable Food Systems Certificate explores the natural and social systems that guide sustainable agriculture. It provides interdisciplinary training and hands-on field research to teach the principles and practices of agroecological production within the context of environmental, social, and economic challenges. It prepares students for graduate programs or professions utilizing systems-thinking skills.

ABOUT THIS PROGRAM

College: College of Agricultural and Life Sciences

Credits: 12

Certificate must contain six required credits, three credits from Natural Sciences and three from Social Sciences.

DEPARTMENT INFORMATION: <https://agronomy.ifas.ufl.edu/>

Current UF students, of Sophomore or Junior standing may enroll.

REQUIRED COURSES

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number	Course Title	Credit Hours
ALS 4914	Project Teams	3
AGR 4212	Alternative Cropping Systems	3

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours
ALS 3153	Agricultural Ecology	3
ALS 4154	Global Agroecosystems	3
SWS 4207	Sustainable Agricultural and Urban Land Management	3
IDS 2935	Living and Eating on Earth	3

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours
AEB 3671	Comparative World Agriculture	3
AEB 4126	Agricultural and Natural Resource Ethics	3
ALS 3030C	Urban Agriculture	3
FYC 3521	Community Food Systems	3

Cover Sheet: Request 15272

Soil and Water Sciences-Research Concentration

Info

Process	Concentration New/Modify/Close Grad/Pro/Interdisciplinary
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Patrick Wilson pcwilson@ufl.edu
Created	9/17/2020 1:11:00 PM
Updated	10/14/2020 9:06:55 AM
Description of request	We are proposing to develop a "Research" concentration for thesis-bound students and a "Professional" concentration for non-thesis students (see separate application). If approved, all new students entering the Soil and Water Sciences M.S. Program will be required to select one of the concentrations based on whether they develop/defend a thesis.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Soil and Water Science 514921000	Matthew Whiles		10/14/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			10/14/2020
No document changes					
Graduate Council					
No document changes					
Graduate School Notified					
No document changes					
Office of the Registrar					
No document changes					
College Notified					
No document changes					

Concentration|New for request 15272

Info

Request: Soil and Water Sciences-Research Concentration

Description of request: We are proposing to develop a "Research" concentration for thesis-bound students and a "Professional" concentration for non-thesis students (see separate application). If approved, all new students entering the Soil and Water Sciences M.S. Program will be required to select one of the concentrations based on whether they develop/defend a thesis.

Submitter: Patrick Wilson pcwilson@ufl.edu

Created: 8/20/2020 9:02:09 AM

Form version: 1

Responses

Proposed Action Create a Concentration

Degree Level M - Master's Degree

Thesis or Non-Thesis Thesis

Concentration Name Research

Credits 30

Effective Term Earliest Available

Effective Year 2021

Students 30

Percentage of Credits Available Fully Online 50-99%

Percentage of Credits Available Off-Campus 50% or more

Is this an additional (secondary) concentration? No

All Department/Degree/Majors Adding Concentration Soil and Water Sciences: M.S. in Soil and Water Sciences

Rationale for Proposed Concentration Our department currently offers a M.S in Soil and Water Sciences degree to thesis and non-thesis students. Students taking the non-thesis option usually are professionals who are place-bound due to employment and families. These students are seeking further professional development (beyond BS) but are not necessarily interested in the traditional research process associated with developing and conducting a research project and writing/defending a thesis. In contrast, our students taking the thesis pathway are interested in developing their hands-on research skills in the traditional sense of developing a project and defending their resulting thesis. Both groups of students have access to the same course work but the non-thesis students are required to take more courses in lieu of the research. Given the differences in student experiences between the thesis and non-thesis tracks, our faculty feel that we need to better differentiate between the two. We are proposing to develop this "Research" concentration for the thesis-bound students and a "Professional" concentration for non-thesis students (see separate application). If approved, all new students entering the Soil and Water Sciences M.S. Program will be required to select one of the concentrations based on whether they develop/defend a thesis. The major benefit of developing this "Research" concentration is that it will alert potential employers and other universities (for PhD-bound students) to the fact that the student has verifiable research development experience that resulted in a defensible thesis and hopefully peer-reviewed publications.

Impacts on Other Programs This change should not have any impacts since the program already exists.

Cover Sheet: Request 15273

Soil and Water Sciences MS-Professional Concentration

Info

Process	Concentration New/Modify/Close Grad/Pro/Interdisciplinary
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Patrick Wilson pcwilson@ufl.edu
Created	9/17/2020 1:19:08 PM
Updated	9/17/2020 1:47:57 PM
Description of request	We are proposing to develop a "Research" concentration for thesis-bound students and a "Professional" concentration for non-thesis students (see separate application). If approved, all new students entering the Soil and Water Sciences M.S. Program will be required to select one of the concentrations based on whether they develop/defend a thesis.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Soil and Water Science 514921000	Matthew Whiles		9/17/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			9/17/2020
No document changes					
Graduate Council					
No document changes					
Graduate School Notified					
No document changes					
Office of the Registrar					
No document changes					
College Notified					
No document changes					

Concentration|New for request 15273

Info

Request: Soil and Water Sciences MS-Professional Concentration

Description of request: We are proposing to develop a "Research" concentration for thesis-bound students and a "Professional" concentration for non-thesis students (see separate application). If approved, all new students entering the Soil and Water Sciences M.S. Program will be required to select one of the concentrations based on whether they develop/defend a thesis.

Submitter: Patrick Wilson pcwilson@ufl.edu

Created: 9/17/2020 1:11:39 PM

Form version: 1

Responses

Proposed Action Create a Concentration

Degree Level M - Master's Degree

Thesis or Non-Thesis Non-Thesis

Concentration Name Professional

Credits 30

Effective Term Earliest Available

Effective Year 2021

Students 40

Percentage of Credits Available Fully Online 100%

Percentage of Credits Available Off-Campus 50% or more

Is this an additional (secondary) concentration? No

All Department/Degree/Majors Adding Concentration Soil and Water Sciences: MS in Soil and Water Sciences

Rationale for Proposed Concentration Our department currently offers a M.S in Soil and Water Sciences degree to thesis and non-thesis students. Students taking the non-thesis option are usually professionals who are place-bound due to employment and families. These students are seeking further professional development (beyond BS) but are not necessarily interested in the traditional research process associated with developing and conducting a research project and writing/defending a thesis. These students take all of their courses online and interact with their advisers through email, telephone, zoom and other remote means. Students in the non-thesis track are required to take more courses in lieu of the intensive research associated with the thesis option. Given the differences in student experiences between the thesis and non-thesis tracks, our faculty feel that we need to better differentiate between the two. We are proposing to develop this "Professional" concentration for non-thesis students and a "Research" concentration for the thesis-bound students (see separate application). If approved, all new students entering the Soil and Water Sciences M.S. Program will be required to select one of the concentrations based on whether they develop/defend a thesis or not. The major benefit of developing this "Professional" concentration is that it will alert potential employers to the fact that the student has post-baccalaureate training and professional development tailored to their professional needs. All employers are not necessarily interested in a student's ability to perform research in a lab and defend/publish their thesis research. Some employers are more interested in technical training, professional development, and further development of critical thinking skills, which are cultivated in this concentration.

Impacts on Other Programs This change should not impact any other programs since the degree program already exists.

Cover Sheet: Request 14650

FOR6xxx Bark and Ambrosia Beetles

Info

Process	Course New Grad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Rhiannon Pollard rhiannon-pollard@ufl.edu
Created	1/27/2020 10:01:27 AM
Updated	10/17/2020 12:43:48 PM
Description of request	Create new course

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Forest Resources and Conservation 514946000	Terrell Baker III		1/27/2020
No document changes					

Step	Status	Group	User	Comment	Updated
College	Recycled	CALS - College of Agricultural and Life Sciences	Joel H Brendemuhl	<p>I'm recycling this request back to the department for there has been no action taken since the CALS CC comments of 2/14/20.</p> <p>FOR 6XXX – Bark and Ambrosia Beetles (req. #14650)</p> <p>A motion was made by Dr. Coenen to recycle this item back to the department for required updates and resubmission. The Motion was approved. The contact hours on the UCC form need to be changed from 24 to two. Even though the course is only four days the form must be completed as if it was a full 16 week semester. All syllabuses are required to include available office hours. Scheduled appointments is not an acceptable option. The learning objectives need to include verbs more appropriate to the rigor of a graduate level course. Assistance with learning objectives can be found at: https://cals.ufl.edu/content/PDF/course-objectives.pdf. There is concern that grades are determined by a single exam. Consider the addition of quizzes, daily journal entries or other assignments. The UCC form indicates there is a textbook required, but the syllabus shows no textbook is required. If the course-specific guide mentioned in the syllabus is the same as the text indicated on the form, make sure the descriptions match. Finally, the committee had a question as to whether this course is worthy of graduate level credit. Therefore, the instructor is encouraged to attend the meeting of the CALS CC, at which his submission will be re-reviewed, in person or via zoom (link available at committee site: https://cals.ufl.edu/faculty-staff/committees/) to give a course background and field any questions.</p>	9/16/2020

Step	Status	Group	User	Comment	Updated
No document changes					
Department	Approved	CALS - Forest Resources and Conservation 514946000	Terrell Baker III		9/17/2020
FOR6xxx_barkbeetles_2020.docx					9/17/2020
Cconsult from Entomology on Bark Beetles course.pdf					9/17/2020

Step	Status	Group	User	Comment	Updated
College	Recycled	CALS - College of Agricultural and Life Sciences	Joel H Brendemuhl	<p>This course was recycled on 9/16/20 and was incorrectly approved by the department on 9/17/20. This courses needs to address the concerns that were outlined in the 9/16/20 email (also restated below).</p> <p>"I'm recycling this request back to the department for there has been no action taken since the CALS CC comments of 2/14/20. FOR 6XXX – Bark and Ambrosia Beetles (req. #14650) A motion was made by Dr. Coenen to recycle this item back to the department for required updates and resubmission. The Motion was approved. The contact hours on the UCC form need to be changed from 24 to two. Even though the course is only four days the form must be completed as if it was a full 16 week semester. All syllabuses are required to include available office hours. Scheduled appointments is not an acceptable option. The learning objectives need to include verbs more appropriate to the rigor of a graduate level course. Assistance with learning objectives can be found at: https://cals.ufl.edu/content/PDF/course-objectives.pdf. There is concern that grades are determined by a single exam. Consider the addition of quizzes, daily journal entries or other assignments. The UCC form indicates there is a textbook required, but the syllabus shows no textbook is required. If the course-specific guide mentioned in the syllabus is the same as the text indicated on the form, make sure the descriptions match. Finally, the committee had a question as to whether this course is worthy of graduate level credit. Therefore, the instructor is encouraged to attend the meeting of the CALS CC, at which his submission will be re-reviewed, in person or via zoom (link available at committee site: https://cals.ufl.edu/faculty-staff/committees/) to give a</p>	10/5/2020

Step	Status	Group	User	Comment	Updated
No document changes					
Department	Approved	CALS - Forest Resources and Conservation 514946000	Terrell Baker III		10/6/2020
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			10/6/2020
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 14650

Info

Request: FOR6xxx Bark and Ambrosia Beetles
Description of request: Create new course
Submitter: Rhiannon Pollard rhiannon-pollard@ufl.edu
Created: 9/17/2020 8:44:54 AM
Form version: 3

Responses

Recommended Prefix FOR
Course Level 6
Course Number xxx
Category of Instruction Advanced
Lab Code None
Course Title Bark and Ambrosia Beetles
Transcript Title Bark Ambrosia Beetles
Degree Type Graduate

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

Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic? No
Repeatable Credit? Yes
If repeatable, # total repeatable credit allowed 2
Amount of Credit 2

S/U Only? No

Contact Type Regularly Scheduled

Weekly Contact Hours 2

Course Description A comprehensive review of bark and ambrosia beetles (Coleoptera: Curculionidae: Scolytinae and Platypodinae), including global diversity, classification, field and lab diagnostics, morphology, overview of major pests globally and locally, types of damage, relationships with fungi and host trees, management strategies, legal context, and field demonstration.

Prerequisites n/a

Co-requisites n/a

Rationale and Placement in Curriculum Offers a unique, hands-on intensive experience with practical field skills in trapping and identification of important beetle species. This complements existing courses in forest pathology and health from a more in-depth and specialized perspective.

Course Objectives At the end of this course, each student will be able to:

- Identify major groups and species of bark and ambrosia beetles, including diagnosis in the field.
- Identify local pests, recommend management strategies.
- Evaluate the broader context of any bark beetle infestation in the forest and in the environment, including their role in healthy forests, their economic and environmental impacts, and legal issues with large-scale management.

Course Textbook(s) and/or Other Assigned Reading (Required) Vega & Hofstetter (2015) Bark Beetles. Elsevier.

Weekly Schedule of Topics This is a four-day intensive course.

Day 1 - Introduction, applied aspects, and morphology morning
9:00 Welcome and intro: What are bark and ambrosia beetles?
9:30 The history and politics of bark beetle impacts
10:30 Invasive bark beetles
11:00 www.barkbeetles.info – how to use it

Afternoon: The first hands-on guided session in microscope lab
13:15 Online resources on bark and ambrosia beetles
13:45 Scolytine morphological terminology: Find a character!
14:30 Advanced characters used in keys
15:30 S. L. Wood's key to genera

Day 2 – Field trip, pests, and the beginning of identification morning

9:00 field trip: outbreak of the Southern pine beetle
- demonstration and discussion of management approaches
- bark beetle trapping
- manual techniques for bark beetle collecting
- how to submit a sample for expert diagnosis

Afternoon

13:15 Southern Pine Beetle biology and prevention
14:00 The bad ambrosia beetles: *Xyleborus glabratus* and *Euwallacea fornicatus*
14:45 Introduction to the Distributed Reference Collections of invasive bark beetles: Practical training in identification of the world's 30 most important scolytine species with a synoptic collection and a manual.

Evening (shuttle pick up time: 18:45)

19:00 Light-trapping of bark beetles and other insects at the Austin Cary Forest

Day 3

9:00 field trip: outbreaks of two ambrosia beetles
11:00 optional: museum exhibit of bark beetle art
13:15 hands-on, guided identification: *Dendroctonus*, *Ips*, *Xyleborini* genera (*Xylosandrus*, *Xyleborinus*, *Euwallacea*, *Xyleborus*), *Xyleborus* species, *Euwallacea*, *Hypothenemus*

Day 4

9:00 Distributed Reference Collections workout
Afternoon: split in two groups, each student's preference:
A) Field group: more beetle collecting
B) Lab group: a. more guided identification

Grading Scheme A 93-100% B- 80-82.99% D+ 67-69.99%
A- 90-92.99% C+ 77-79.99% D 63-66.99%
B+ 87-89.99% C 73-76.99% D- 60-62.99%
B 83-86.99% C- 70-72.99% E <60%

Instructor(s) Jiri Hulcr

Attendance & Make-up Yes

Accommodations Yes

UF Grading Policies for assigning Grade Points Yes

Course Evaluation Policy Yes

CALS Curriculum Committee Submission Checklist

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

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

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

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

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

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

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

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

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

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

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

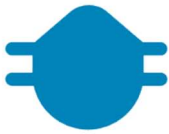
Department	Name and Title
_____	_____
Phone Number	E-mail
_____	_____
Comments	

Department	Name and Title
_____	_____
Phone Number	E-mail
_____	_____
Comments	

Bark and Ambrosia Beetles: FOR/ENY

Important Information

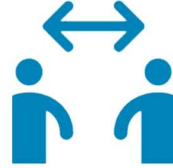
This course will be conducted in a face-to-face format that includes some face-to-face sessions. During all face-to-face activities, the following public health and safety protocols are required of all students, instructors, and teaching assistants:



Bring and wear a face mask at all times when indoors.



Wash hands (>20 sec) before and during class.



Maintain at least 6ft of distance from others.



If you feel sick or have symptoms, stay home.

Any individuals who are unable or unwilling to meet [these requirements](#) cannot participate in face-to-face activities and may be subject to progressive discipline. If you are experiencing [COVID-19 symptoms](#) please use the UF Health screening system and follow the instructions on [whether you are able to attend class](#). 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.

1 Overview

Course Description: A comprehensive review of bark and ambrosia beetles (Coleoptera: Curculionidae: Scolytinae and Platypodinae), including global diversity, classification, field and lab diagnostics, morphology, overview of major pests globally and locally, types of damage, relationships with fungi and host trees, management strategies, legal context, and field demonstration.

- 2 Credits
- Off-calendar 4-day course, Summer A even years
- Personal attendance required during the entire schedule
- Steinmetz Hall room 2218

Course Prerequisites: none

Instructor: Jiri Hulcr, Newins-Ziegler building, room 317, office phone: 352-273-0299, email: hulcr@ufl.edu

Office hours: the instructor is available for the entire duration of the 4-day course. Office visits outside of the course are available by appointment, Mon-Fri noon to 3PM.

Textbook(s) and/or readings: Vega & Hofstetter (2015) Bark Beetles. Elsevier. *Provided by the instructor, who authored the relevant chapter.*

2 Learning Outcomes

At the end of this course, each student will be able to:

- Identify major groups and species of bark and ambrosia beetles, including diagnosis in the field.
- Identify local pests, recommend management strategies.
- Evaluate the broader context of any bark beetle infestation in the forest and in the environment, including their role in healthy forests, their economic and environmental impacts, and legal issues with large-scale management.

3 Course Logistics

This course is a hands-on, face-to-face multi-day experience identifying bark and ambrosia beetles and exploring their significance in the ecosystem. Students will participate in the lab on campus at UF, in the field at the Austin Cary Forest, and will complete group activities in addition to lecture-based instruction. Some years, the course may be offered off-campus, even outside of the US.

Technology Requirements:

- None

3.1 Assignments & Deliverables

Exams

Each day ends with a multiple-choice quiz on the day's topics, each (total of 4) counts for 10% of the grade. There is a final exam at the end of the last day of the course which counts for 60% of the grade.

3.2 Grades & Grading Scale

Grading will be based on the number of points on the four exams, one at the end of every day and the final one.

Grading Scale (%)		
A 93-100%	B- 80-82.99%	D+ 67-69.99%
A- 90-92.99%	C+ 77-79.99%	D 63-66.99%
B+ 87-89.99%	C 73-76.99%	D- 60-62.99%
B 83-86.99%	C- 70-72.99%	E <60%

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

4 Course Schedule

Day 1 - Introduction, applied aspects, and morphology morning

9:00 Welcome and intro: What are bark and ambrosia beetles?
9:30 The history and politics of bark beetle impacts
10:30 Invasive bark beetles
11:00 www.barkbeetles.info – how to use it
Afternoon: The first hands-on guided session in microscope lab
13:15 Online resources on bark and ambrosia beetles
13:45 Scolytine morphological terminology: Find a character!
14:30 Advanced characters used in keys
15:30 S. L. Wood's key to genera

Day 2 – Field trip, pests, and the beginning of identification morning

9:00 field trip: outbreak of the Southern pine beetle
- demonstration and discussion of management approaches
- bark beetle trapping
- manual techniques for bark beetle collecting
- how to submit a sample for expert diagnosis
Afternoon
13:15 Southern Pine Beetle biology and prevention
14:00 The bad ambrosia beetles: *Xyleborus glabratus* and *Euwallacea fornicatus*
14:45 Introduction to the Distributed Reference Collections of invasive bark beetles: Practical training in identification of the world's 30 most important scolytine species with a synoptic collection and a manual.
Evening (shuttle pick up time: 18:45)
19:00 Light-trapping of bark beetles and other insects at the Austin Cary Forest

Day 3

9:00 field trip: outbreaks of two ambrosia beetles
11:00 optional: museum exhibit of bark beetle art
13:15 hands-on, guided identification: *Dendroctonus*, *Ips*, *Xyleborini* genera (*Xylosandrus*, *Xyleborinus*, *Euwallacea*, *Xyleborus*), *Xyleborus* species, *Euwallacea*, *Hypothenemus*

Day 4

9:00 Distributed Reference Collections workout
Afternoon: split in two groups, each student's preference:
A) Field group: more beetle collecting
B) Lab group: a. more guided identification

5 Policies and Requirements

This course plan and syllabus are subject to change in response to student and instructor needs. Any changes will be clearly communicated in advance.

5.1 Late Submissions & Make-up Requests

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>

5.2 Communication Courtesy and Professionalism

Just as in any professional environment, meaningful and constructive dialogue is expected in this class and requires a degree of mutual respect, willingness to listen, and tolerance of opposing points of view.

Respect for individual differences and alternative viewpoints will be maintained in this class at all times. All members of the class are expected to follow rules of common courtesy, decency, and civility in all interactions. Failure to do so will not be tolerated and may result in loss of participation points and/or referral to the Dean of Students' Office.

5.3 Semester 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 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/>.

5.4 Academic Honesty Policy

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 or 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>.

5.5 Inclusive Learning Environment

This course embraces the University of Florida's Non-Discrimination Policy, which reads,

The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act.

If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see the instructor or refer to the Office of Multicultural & Diversity Affairs website:

<http://multicultural.ufl.edu>.

5.6 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, www.dso.ufl.edu/drc/

5.7 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.

6 Campus Helping Resources

For issues with technical difficulties for e-learning in Canvas, please post your question to the Technical Help Discussion in your course, or contact the UF Help Desk at:

- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFRC Academic Hub <https://ufl.instructure.com/courses/303721>

6.1 Student Life, Wellness, and Counseling Help

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.

- Counseling and Wellness resources <http://www.counseling.ufl.edu/cwc/>
- U Matter, We Care <http://www.umatter.ufl.edu/>

- Career Connections Center <http://career.ufl.edu/>
- Other resources are available at <http://www.distance.ufl.edu/getting-help> for online students.

6.2 Student Complaint Process

The School of Forest Resources & Conservation cares about your experience and we will make every effort to address course concerns. We request that all of our online students complete a course satisfaction survey each semester, which is a time for you to voice your thoughts on how your course is being delivered.

If you have a more urgent concern, your first point of contact should be the SFRC Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration:

- Students in online courses: <http://www.distance.ufl.edu/student-complaint-process>
- Students in face-to-face courses: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>