

CALS Curriculum Committee Meeting
November 18, 2022
McCarty Hall D Rm. 1044/1045
1:00 p.m.

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

Members: S. Ahn, J. Brendemuhl, D. Coenen, J. Czipulis, K. Fogarty, D. Gabriel, V. Hull, P. Inglett, J. Larkin (Chair), T. Martin, G. Nunez, E. Pappo, C. Prince, J. Scheffler, B. Schutzman, M. Sharp, M. Sowcik, A. Watson, J. Weeks, A. Wsocki

Agenda and Index for Materials

Approve Minutes from October 21, 2022 meeting

Dr. Brendemuhl: Update from UCC

Undergraduate New Course Proposals

1. AEC 3XXX – Communication and Leadership for Agricultural and Life Sciences Policy Issues (req. #17831)
2. ANS 3XXXX – Practicum: Weanling Behavior Modification (req. #17836)
3. FAS 3XXXX – Master Scuba Diver (req. #17832)
4. FAS 3XXXX – Scuba Leadership I (req. #17833)
5. FOR 3XXX – Florida’s Forest Communities (req. #17777)
6. FAS 4XXX – Marine Adaptations: Environmental Physiology (req. #17767)
7. FAS 4XXX – Aquaculture I (req. #17774)
8. FAS 4XXXX – Scuba Leadership II: Research Divemaster (req. #17835)
9. FAS 4XXXX – Field Ecology of Aquatic Organisms (req. #17837)
10. FNR 4XXXXL – Natural Resource Conservation Capstone (req. #17822)

Undergraduate Course Change Proposals

11. FAS 4933 – Seminar in Fisheries and Aquatic Sciences (req. #17773)

12. FNR 4623C – Integrated Natural Resource Management (req. #17768)

13. FOR 4621 – Forest Economics and Management (req. #17772)

14. SUR 4912 – Senior Project (req. #17760)

Other Business

15. Vote on CALS Minor Policy

16. Selection of Chair-Elect

CALS Curriculum Committee Meeting
October 21, 2022
Submitted by James Fant

Members Present: S. Ahn, J. Brendemuhl, D. Coenen, J. Czipulis, K. Fogarty, V. Hull, J. Larkin, T. Martin, G. Nunez, C. Prince, J. Scheffler, B. Schutzman, M. Sharp, A. Watson, J. Weeks

Substitutes: Heather Enloe for P. Inglett, Lisa Lundy for M. Sowcik

Visitors: Becky Cook, Jennifer Vogel

Call to Order: The College of Agricultural and Life Sciences Curriculum Committee met in McCarty Hall D Rm. 1044/1045 on October 21, 2022. Dr. Larkin called the meeting to order at 1:00 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. Sharp to approve the minutes from the September 23, 2022 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/>
For Graduate Grades: <https://catalog.ufl.edu/graduate/regulations/#text>
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: 1) Here are the items that were **APPROVED** at the 10/18/22 UCC meeting. A. New Academic Assessment Plan – Weed Science Graduate Certificate. It was noted that 3000 and 4000 level courses that currently do not have prerequisites will be required to have a prerequisite and that process has begun. A congratulatory note was made for help with SACS reporting which has been completed for the 2021-22 academic year as well as thanks for development of several new Quest 2 courses for Fall 2023. It was also noted that a vote would be taken on the policy regarding CALS Minors at the November 2022 meeting.

Graduate New Course Proposals

1. FAS 6XXX – Freshwater Ecology (req. #17674)

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

2. FOR 6XXX – Issues in Southeastern Forest Health (req. #17679)

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

3. HOS 5XXX – Getting Published in Horticulture (req. #17639)

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

Undergraduate New Course Proposal

4. FAS 4XXX – Freshwater Ecology (req. #17673)

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

Undergraduate Course Change Proposals

5. ENY 4210 – Insects and Wildlife (req. #17612)

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

6. FOR 3200C – Foundations of Natural Resources and Conservation (req. #17659)

A motion was made by Dr. Coenen to approve this item as submitted. The motion was approved. The department was reminded to submit a new 8-semester plan once all course changes have been submitted.

Curriculum

7. Proposed Revisions to the AEC-CLD Subplan (req. #17650)

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

8. Proposed Revisions to the WEC 8-Semester Plan (req. #17620)

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

Minor Revision

9. Proposed Revisions to the WEC Minor (req. #17638)

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

The meeting was adjourned at **2:11** p.m.

Cover Sheet: Request 17831

Permanent course title for Communication and Leadership for Agricultural and Life Sciences Policy Issues

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Lisa Lundy lisalundy@ufl.edu
Created	10/27/2022 11:28:48 AM
Updated	10/27/2022 11:43:02 AM
Description of request	We are requesting a permanent course title for Communication and Leadership for Agricultural and Life Sciences Policy Issues. This class has been taught every Spring since 2019.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Agricultural Education and Communication 514926000	Brian Myers		10/27/2022
AECxxx.Spring2023_Syllabus(1).docx					10/27/2022
CALS CC Checklist.pdf					10/27/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/27/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17831

Info

Request: Permanent course title for Communication and Leadership for Agricultural and Life Sciences Policy Issues

Description of request: We are requesting a permanent course title for Communication and Leadership for Agricultural and Life Sciences Policy Issues. This class has been taught every Spring since 2019.

Submitter: Lisa Lundy lisalundy@ufl.edu

Created: 10/27/2022 11:17:01 AM

Form version: 1

Responses

Recommended Prefix AEC

Course Level 3

Course Number XXX

Lab Code None

Category of Instruction Intermediate

Course Title Communication and Leadership for Agricultural and Life Sciences Policy Issues

Transcript Title Comm and Lead for ANR Policy

Degree Type Baccalaureate

Delivery Method(s) On-Campus

Co-Listing Yes

Co-Listing Explanation In addition to the work that undergraduate students complete, graduate students will identify a Political Leader/Communicator with whom to conduct an interview via Zoom. A list of suggested questions will be provided. Students will supplement with questions relevant to the interviewee's work.

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

Course Type Lecture

Weekly Contact Hours 3

Course Description The course is designed to educate students about major policy issues in agricultural and life sciences (ALS) and to expose students to a variety of methods used to effectively communicate, inform, and influence decisions about these issues. All discussions and activities are planned to involve you in "real world" ways.

Prerequisites Sophomore-level standing

Co-requisites N/A

Rationale and Placement in Curriculum For our AEC students, this class allows them to explore how policy communication is different than the other types of communication they are exposed to. We also have students throughout UF who take this course to learn how to communicate about agricultural and life sciences issues they care about to policy makers.

Course Objectives After this course, the student will be able to:

Recognize and analyze topical policy issues in agricultural and life sciences and facilitate consensus building and conflict management.

Develop messages to communicate about topical policy issues in agricultural and life sciences using appropriate multimedia and social media.

Course Textbook(s) and/or Other Assigned Reading Writing Public Policy: A Practical Guide to Communicating in the Policy Making Process (5th Edition) by Catherine F. Smith

Weekly Schedule of Topics

January 13

Course Overview

Laws, Statutes, and Policies

True Colors

January 20

Chapter 1: Public Policy is Language Use

Guest Speaker:

QUIZ 1: Covers materials from Jan. 13 & 20 (take prior to class)

January 27

Chapter 2: Communicating in Policy Making

Guest Speaker:

Jaime Jerrels, Director of Agricultural Policy, Florida Farm Bureau Federation

February 3

Chapter 3: Definition: Describing the Problem

Guest Speaker:

Chris Moran, Special Assistant to the Vice President, UF/IFAS

QUIZ 2: Covers materials from Jan. 27 and Feb. 3 (take prior to class)

February 10

Downtown Gainesville

Chapter 4: Evaluation: Analyze and Advise

Guest Speakers:

Jeanna Mastrodicasa, Associate Vice President for Operations, UF/IFAS

Stacie Greco, Water Resources Program Manager, Alachua County

DUE: Message Box, Communication Points, Storytelling

February 17

Chapter 5: Legislative History: Know the Record

Guest Speakers:

Lauri Baker, Associate Professor, AEC

Valentina Castano, Recent Graduate, AEC

DUE: Reflection 1 (through Feb. 10 speakers)

QUIZ 3: Covers materials from Feb. 10 and 17 (take prior to class)

February 23

Chapter 6: Position Paper: Know the Arguments

Guest Speakers:

Sarah Edison Fowler, Associate Director of Communications, National Assoc. of State Departments of Agriculture

Felicity Mejeris, Regulatory Specialist, Nestle Purina Pet Care

March 3

Chapter 7: Petition, Proposal, Letter: Request Action

First Round of Issue Presentations

DUE: One-pager + Issues Presentation 1

March 10

Chapter 8: Brief, Opinion, Resolution: Inform Policy Makers

QUIZ 4: Covers materials from Feb. 23 and March 3 and 10 (take prior to class)

Guest Speaker:

Ashton Mears, Land and Gov't Affairs Associate, Deseret Cattle and Citrus

March 17

SPRING BREAK

March 21

Tallahassee

Chapter 9: Testimony: Witness in a Public Hearing

March 23

NO CLASS TODAY. (Tuesday's trip "counts" as Friday's class.)

March 30

Chapter 10: Public Comment: Influence Administration

Guest Speakers:

Katelyn Potter, Communications and Organizational Development Chief @ Suwannee River Water Management District

Mallory Dimmitt, CEO, Florida Wildlife Corridor Coalition

QUIZ 5: Covers materials from March 23 and 30 (take prior to class)

DUE: Reflection 2 (through March 23 speakers)

DUE (for Honors Students): Interview w/Political Leader/ Comm.

April 7

Conclusion (chapter): Ethics for Policy Communicators

Guest Speakers:

Jim Handley, Executive VP, Florida Cattlemen's Association

Mike Joyner, President, Florida Fruit and Vegetable Association

Tal Coley, CEO, Florida Nursery, Growers & Landscape Association

QUIZ 6 (make-up): Covers all materials this semester (take prior to class)

April 14

Issue Presentations (Revised)

DUE: One-pager + Issues Presentation 2

April 21

Issue Presentations (Revised)

DUE: Issues Presentation 2

DUE: Reflection 3 (synthesis of all speakers and content this semester)

Grading Scheme Grading Scale for
UNDERGRADUATES

A = 930-1000

A- = 900-929

B+ = 860-899

B = 830-859

B- = 800-829

C+ = 760-799

C = 730-759

C- = 700-729

D+ = 660-699

D = 630-659

D- = 600-629

E = 599 and below

Grading Scale for
GRADUATE/HONORS STUDENTS

A = 1023-1100

A- = 990-1022

B+ = 946-989

B = 913-945

B- = 880-912

C+ = 836-879

C = 803-835

C- = 770-802

D+ = 726-769

D = 693-725

D- = 660-692

E = 659 and below

Instructor(s) Dr. Ricky Telg

Dr. Lisa Lundy (not on submitted syllabus, because I am on sabbatical in Spring 2023. But Dr. Telg and I normally teach this class together)

Attendance & Make-up Yes

Accomodations Yes

UF Grading Policies for assigning Grade Points Yes

Course Evaluation Policy Yes

CALS Curriculum Committee Submission Checklist

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

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

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

- ✗ ___ It is required when making a submission that you consult your department’s representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>.
- ✗ ___ 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.
- ✗ ___ Submission of a course modification requires both the current version of the course syllabus and the proposed version.
- ✗ ___ Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document 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://approval.ufl.edu/policies/external-consultations/>.
- ✗ ___ 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)

AEC XXXX: Communication and Leadership for Agricultural and Life Sciences Policy Issues (3 credits) Spring 2023

INSTRUCTORS:

Ricky W. Telg, Ph.D.

126 Bryant Space Science Center

1408 Sabal Palm Drive, Level 2

Phone: (352) 273-2094

rwtelg@ufl.edu

Office Hours: Wednesday, 12:30-1:30; Friday, 8:30-9:30

CLASS MEETS in 107 Bryant Space Science Center (Mac Lab). Class meets weekly on Friday mornings (Third and fourth periods, 9:30-11:30).

COURSE OUTLINE AND GENERAL DESCRIPTION: The course is designed to educate students about major policy issues in agricultural and life sciences (ALS) and to expose students to a variety of methods used to effectively communicate, inform, and influence decisions about these issues. All discussions and activities are planned to involve you in "real world" ways.

READINGS: *Writing Public Policy: A Practical Guide to Communicating in the Policy Making Process* (5th Edition) by Catherine F. Smith

OBJECTIVES: After this course, the student will be able to:

- Recognize and analyze topical policy issues in agricultural and life sciences and facilitate consensus building and conflict management.
- Develop messages to communicate about topical policy issues in agricultural and life sciences using appropriate multimedia and social media.

BRIEF DESCRIPTION OF COURSE ASSIGNMENTS:

- *Message Box, Communication Points, & Storytelling:* In preparation for the *Issues Presentations and One-Pager* assignment, students will complete the handouts provided in class to help them develop their “issues” assignment.
- *Issue Presentations and One-Pager:* Students will select an agricultural and life sciences policy issue. Students will create a one-pager, based on instructions provided in class, as a “leave-behind” on the agricultural or life sciences policy or issue that the student selects to analyze. Students will present their one-pager as they would to a policymaker or leader in a one-on-one setting. Students will have the opportunity to revise their one-pager and presentation and do a second submission later in the semester.
- *Reflections (3) and Participation:* Students will provide three thoughtful reflection on guest speakers and/or overall topics. Students also will be assessed on their participation in class and during their interactions with speakers. It is expected that students take notes and interact with guest speakers.
- *Quizzes (5):* There will be five quizzes on the assigned readings and course materials. These will be due **prior** to class every other week. A sixth quiz will be conducted near the end of the semester; students will be able to make up one quiz by taking the sixth quiz OR drop their lowest quiz grade.
- **GRADUATE/UNDERGRADUATE HONORS STUDENTS:** *Interview with a Political Leader/ Communicator:* Students will identify a Political Leader/Communicator with whom to conduct an interview via Zoom. A list of suggested questions will be provided. Students will supplement with questions relevant to the interviewee’s work.

ASSIGNMENT GRADES (Undergraduate Students)

Assignment	Points
Message Box, Communication Points, Storytelling	150
Issue Presentations and One-Pager 1	150
Issue Presentations and One-Pager 2	200
Reflections 1 & 2 (100 x 2)	200
Reflection 3	125
Participation	75
Quizzes (5 x 20)	100
TOTAL	1000

ASSIGNMENT GRADES (Graduate & UG Honors Students)

Assignment	Points
Message Box, Communication Points, Storytelling	150
Issue Presentations and One-Pager 1	150
Issue Presentations and One-Pager 2	200
Reflections 1 & 2 (100 x 2)	200
Reflection 3	125
Participation	75
Quizzes (5 x 20)	100
Interview with a Political Leader/Communicator	100
TOTAL	1100

Grading Scale for UNDERGRADUATES

A = 930-1000
A- = 900-929
B+ = 860-899
B = 830-859
B- = 800-829
C+ = 760-799
C = 730-759
C- = 700-729
D+ = 660-699
D = 630-659
D- = 600-629
E = 599 and below

Grading Scale for GRADUATE/HONORS STUDENTS

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C+ = 836-879
C = 803-835
C- = 770-802
D+ = 726-769
D = 693-725
D- = 660-692
E = 659 and below

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/>.

Late assignment policy: A **10-percent per day** deduction will be assessed for assignments turned in late. Work more than a week late will **not** be accepted.

Attendance: It is not possible for a student to perform satisfactorily in the course without regular attendance. Students are **required** to attend class and to be in class **on time**. Only documented doctor's excuses or UF-approved activities will be excused. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

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 expected to wear approved face coverings at all times during class and within buildings.
- 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.
- 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](#).
- 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 unmute 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 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>

Course Schedule

January 13	Course Overview Laws, Statutes, and Policies True Colors
January 20	Chapter 1: Public Policy is Language Use Guest Speaker: QUIZ 1: Covers materials from Jan. 13 & 20 (take prior to class)
January 27	Chapter 2: Communicating in Policy Making Guest Speaker: Jaime Jerrels, Director of Agricultural Policy, Florida Farm Bureau Federation
February 3	Chapter 3: Definition: Describing the Problem Guest Speaker: Chris Moran, Special Assistant to the Vice President, UF/IFAS QUIZ 2: Covers materials from Jan. 27 and Feb. 3 (take prior to class)
February 10	Downtown Gainesville Chapter 4: Evaluation: Analyze and Advise Guest Speakers: Jeanna Mastrodicasa, Associate Vice President for Operations, UF/IFAS Stacie Greco, Water Resources Program Manager, Alachua County DUE: Message Box, Communication Points, Storytelling
February 17	Chapter 5: Legislative History: Know the Record Guest Speakers: Lauri Baker, Associate Professor, AEC Valentina Castano, Recent Graduate, AEC DUE: Reflection 1 (through Feb. 10 speakers) QUIZ 3: Covers materials from Feb. 10 and 17 (take prior to class)
February 23	Chapter 6: Position Paper: Know the Arguments Guest Speakers: Sarah Edison Fowler, Associate Director of Communications, National Assoc. of State Departments of Agriculture Felicity Mejeris, Regulatory Specialist, Nestle Purina Pet Care
March 3	Chapter 7: Petition, Proposal, Letter: Request Action First Round of Issue Presentations DUE: One-pager + Issues Presentation 1
March 10	Chapter 8: Brief, Opinion, Resolution: Inform Policy Makers QUIZ 4: Covers materials from Feb. 23 and March 3 and 10 (take prior to class) Guest Speaker: Ashton Mears, Land and Gov't Affairs Associate, Deseret Cattle and Citrus

March 17	SPRING BREAK
March 21	Tallahassee Chapter 9: Testimony: Witness in a Public Hearing
March 23	NO CLASS TODAY. (Tuesday’s trip “counts” as Friday’s class.)
March 30	Chapter 10: Public Comment: Influence Administration Guest Speakers: Katelyn Potter, Communications and Organizational Development Chief @ Suwannee River Water Management District Mallory Dimmitt, CEO, Florida Wildlife Corridor Coalition QUIZ 5: Covers materials from March 23 and 30 (take prior to class) DUE: Reflection 2 (through March 23 speakers) DUE (for Honors Students): Interview w/Political Leader/ Comm.
April 7	Conclusion (chapter): Ethics for Policy Communicators Guest Speakers: Jim Handley, Executive VP, Florida Cattlemen’s Association Mike Joyner, President, Florida Fruit and Vegetable Association Tal Coley, CEO, Florida Nursery, Growers & Landscape Association QUIZ 6 (make-up): Covers all materials this semester (take prior to class)
April 14	Issue Presentations (Revised) DUE: One-pager + Issues Presentation 2
April 21	Issue Presentations (Revised) DUE: Issues Presentation 2 DUE: Reflection 3 (synthesis of all speakers and content this semester)

Expanded Descriptions of Course Assignments

Message Box, Communication Points, Storytelling

In preparation for the *Issues Presentations and One-Pager* assignment, students will complete the handouts provided in class to help them develop their “issues” assignment. By this time, students will have selected the issue for their Issues Presentation + One-Pager assignment. Students will complete the Message Box and the communication points and create at least a draft of a story, using the “storytelling” handout. Students will submit these completed documents for grading, so that instructors can provide feedback to students. As part of this assignment, students must also provide at least a one-paragraph description of the following:

- Topic/issue that will be presented in the *Issues Presentations and One-Pager* assignment.
- A brief summary of the major “players/stakeholders” related to the topic/issue
- The policymaker/agency that the *Issues Presentations and One-Pager* assignment will be made to
- A summary of why this topic/issue is important

One-Pager + Issues Presentation

The objective of this assignment is to give you the opportunity to translate information on a policy issue into a “**one-pager**” for a “leave behind” to a legislator or agency and to present the issue to a policymaker in a mock setting.

Students will do the **Issues Presentation + One-Pager** about midway through the semester. Students will then REDO this assignment at the end of the semester, using the same issue. **The goal is for students to take the comments from the first presentation and then improve their presentation at the end of the semester.**

Students will develop an “**elevator message**” (**issues presentation**) to present the one-pager to a specific legislator or agency. The presentation will be graded based on brevity, focus, appropriate tone of the communication message, and clarity of the topic conveyed in the presentation. The **one-pager** will be graded on succinctness, focus, design, appropriate tone of the communication message, and grammar/punctuation.

The scenario:

You will “present” your issue (and one-pager) to an instructor in a role-play. One of us will take on the role of a decision-maker at the local, state, or national level, depending on the topic/issue you have selected. You will come into our “office” (or “virtually” via Zoom) and discuss the topic with us. After brief introductions – be sure to introduce yourself to us – you will present your topic/issue to us and provide us with the one-pager as a leave-behind. (HINT: It’s always a good idea to have a copy for the decision-maker and one for yourself.)

Remember to make the “pitch.” You can choose the topic/issue, and you can choose if it will be local, state, or national. You can also choose if you want us to take on the role of an elected official or a regulatory agency administrator (like the US Department of Agriculture, the Environmental Protection Agency, or the Florida Department of Agriculture and Consumer Services).

Time Limits:

For the **FIRST** time you present, you will have **up to THREE minutes**.

For the **SECOND** time you present, you will have **up to FIVE minutes**.

Remember: Briefer is better. ☺

Attire:

You are free to wear “regular” college clothes for the first presentation, but within reason. OK for jeans, but not cut-off shorts, if we can see them. (Or feel free to wear “business casual,” too.) For the **SECOND** round, we would like to see “business casual” (nice shirt/blouse).

Submit:

Submit your **ONE-PAGER** through Canvas by the **BEGINNING of class today (no later than 8:30 a.m.)**. Your presentation will be done either in-person (for the “in-person” section) or via Zoom.

Reflections

Students will provide a thoughtful reflection on guest speakers and/or overall topics. Students will discuss what they learned about communicating to policymakers from the speakers. There will be three reflection assignments throughout the semester. It is expected that the written reflection assignments would be at least two full pages (double-spaced). It is expected that students include specific examples from the speakers and course materials (readings, videos) as part of their reflections. The final reflection will be a synopsis of all that students learned during the semester.

To help guide your reflections, students may want to consider these questions. You don't have to use all of these questions, but they are provided to help you "reflect":

- What were the policy issues the guest speaker(s) discussed?
- What were the positions the guest speaker(s) had on the policy issue? And why?
- How does the guest speaker communicate about policy issues?
- What's in it for them?
- What are the resources of the guest speaker(s) related to the policy issue? Or what are the resources of the individuals/organizations who communicate about the policy issue?
- What did guest speaker(s) do to make the issue more (or less) visible to the public, or closer to (or farther from) government action?
- What were some specific examples from the guest speaker(s) that "spoke" to you?
- What did you learn about effectively communicating about agricultural and life sciences policies from the guest speaker(s)?
- How will you use what you learned from the guest speaker(s) after this course?
- Be sure to get the guest speaker(s) names and their organization/agency spelled correctly.

GRADING:

REFLECTIONS 1 and 2: 100 points each

REFLECTION 3: 125 points

Quizzes

There will be five quizzes (20 points each) on the assigned readings and course materials. These will be due **prior** to class the week that the quiz is assigned. A sixth quiz will be conducted near the end of the semester; students will be able to make up one quiz by taking the sixth quiz OR drop their lowest quiz grade. Quiz content will be based on one week's worth or two weeks' worth of material (the week immediately covered AND the content of the coming week). Students are to take the quiz before class.

Participation

Students are expected to participate in class by engaging with the instructors and guest speakers.

For Graduate/UG Honors Students:

Interview with a Political Leader/Communicator

Students will identify a **political leader/communicator** with whom to conduct and record an interview via Zoom. A list of suggested questions will be provided. Students will supplement with questions relevant to the interviewee's work. In addition to submitting the recorded interview, students will provide a written summary of the major points of the interview, as well as a reflection on what the student learned about how the political leader/communicator effectively communicates about issues.

Cover Sheet: Request 17836

New Course # for Weanling Behavior Modification

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Justin Callaham callaham@ufl.edu
Created	10/27/2022 1:52:26 PM
Updated	11/14/2022 9:47:00 AM
Description of request	This is a request to approve Weanling Behavior Modification as a new course. It is currently being offered under a catch all course number in the department. A complete syllabus is available.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Animal Sciences 60090000	Albert De Vries	Reviewed	10/27/2022
No document changes					
College	Pending	CALS - College of Agricultural and Life Sciences			10/27/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17836

Info

Request: New Course # for Weanling Behavior Modification

Description of request: This is a request to approve Weanling Behavior Modification as a new course. It is currently being offered under a catch all course number in the department.

A complete syllabus is available.

Submitter: Justin Callaham callaham@ufl.edu

Created: 10/27/2022 1:52:53 PM

Form version: 2

Responses

Recommended Prefix ANS

Course Level 3

Course Number XXX

Lab Code C

Category of Instruction Intermediate

Course Title Practicum: Weanling Behavior Modification

Transcript Title Weanling Behavior Modification

Degree Type Baccalaureate

Delivery Method(s) On-Campus

Co-Listing No

Effective Term Fall

Effective Year 2023

Rotating Topic? No

Repeatable Credit? No

Amount of Credit 2

S/U Only? No

Contact Type Regularly Scheduled

Course Type Lecture

Weekly Contact Hours 3

Course Description This practicum examines equine behavioral modification methods that emphasize a balanced approach for developing an adaptable, responsive young weanling horse using reasonable, achievable training methods.

Prerequisites Junior or Senior status.

Co-requisites N/A

Rationale and Placement in Curriculum Course is part of a larger series of cumulative horse classes that emphasize equine practical skills needed in the equine industry. This course provides beginner/novice students an entry point to learn about behavioral and ground handling techniques necessary to move on to more advanced colt starting and riding classes offered in equine studies..

Course Objectives Practicum courses offer hands on approaches to skills improvement that are founded on the science of actual production models. During this course you will develop and adapt the following skills:

- Develop an understanding of suckling/weanling horse behavior and safe handling practices.
- Develop confident ground handling skills around the unbroke young horse.
- Emphasize appropriate training methods, goals, and outcomes to develop a calm, well-mannered young horse.
- Demonstrate varied training styles including the appropriate use of verbal cues, body position, restraint, and correction.
- Observe equine behaviors, body language, and herd social structure as they relate to horse

psychology and training.

- Observe research methods used to evaluate horse behavior.

Course Textbook(s) and/or Other Assigned Reading None.

Weekly Schedule of Topics

Topic	Viewpoint	Videos	What's Due
W 8/24	Introduction to the Course		Video: Introduction to Weanling Handling
F 8/26	How to safely catch the young horse, Tying rope halters. and Catching Horses		Video: Chris Cox Behavior
M 8/29	Work Day		
W 8/31	Basic Desensitization / Introduction to Pressure Release on halter and pressure release using neck ropes		Video: Larry Trocha's lesson
F 9/2	Work Day	Assign weanlings	
M 9/5	M 9/5 – Memorial Day – NO CLASS		
W 9/7	Desensitizing feet legs safely Teaching the young horse to follow.		
F 9/9	Work Day	Horse Temperament Survey Due by end of class.	
M 9/12	Work Day		
W 9/14	Teaching the young horse to pick up feet		Video: Chris Cox Picking Up Feet
F 9/16	Work Day	Flip Grid Practical > Demonstrate haltering your horse and tying the rope halter correctly.	
M 9/19	Work Day		
W 9/21	Dealing with crowding Desensitization to Novel Objects		Video: Larry Trocha Space Relationship Video
F 9/23	Teaching the young to lead from the shoulder Introducing Spray Bottles and Water Hose		
M 9/26	Work Day		
W 9/28	Introduction to Lounging		Flip Grid Practical > Demonstrate picking up feet with out off balancing.
F 9/30	Work Day		
M 10/3	Work Day		
	Tying the young horse safely.		Research Task > Practice Heart Rate Girth by end of class.
W 10/5	Using the flank tap method to address problems.		Chris Cox: Lounging Video
		Research Task > Practice Heart Rate girth by end of class	
F 10/7	Work Day		Research Task > Practice Heart Rate girth by end of class
M 10/10	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
W 10/12	Teaching Horse to Trot in Hand		
	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
F 10/14	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
M 10/17	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
W 10/19	Introduction to Obstacles		
	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
F 10/21	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
M 10/24	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
W 10/26	Project Surprise Test Day		

Grading Scheme	Letter	Percentage
A		95 – 100
A –		90 – 94.9
B +		87 – 89.9
B		83 – 86.9
B –		80 – 82.9
C +		77 – 79.9

C 74 – 76.9
C – 70 – 73.9
D + 67 – 69.9
D 64 – 65.9
D – 60 – 63.9
F < 60

Instructor(s) Justin Callaham

Angela Chandler

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.

JC 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/>.

JC 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.

N/A Submission of a course modification requires both the current version of the course syllabus and the proposed version.

N/A Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document 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.

JC 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.

JC 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.

SC 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://approval.ufl.edu/policies/external-consultations/>.

SC 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.

SC 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.

SC 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.

SC 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)

Weanling Behavioral Modification

ANS 3XXX

2 credits

Fall 20xx

Textbook
No Textbook Required

Prerequisites
Junior/Senior Classification

Section 9796
Lecture: W 3:00-3:50 PM
Lab MF 3:00 - 3:50 PM

Section 2053
Lecture: W 4:05 -4:55 PM
Lab MF 4:05 - 4:55 PM

Location
Horse Teaching Unit
1934 SW 63rd Ave
Gainesville, FL 32611



Course Description

This practicum examines equine behavioral modification methods that emphasize a balanced approach for developing an adaptable, responsive young horse using reasonable, achievable training methods.

Course Objectives

Practicum courses offer hands on approaches to skills improvement that is founded on the science of actual production models. During this course you will develop and adapt the following skills:

- Develop an understanding of suckling/weanling horse behavior and safe handling practices.
- Develop confident ground handling skills around the unbroke young horse.
- Emphasize appropriate training methods, goals, and outcomes to develop a calm, well-mannered young horse.
- Describe the various training methodologies including the appropriate use of verbal cues, body position, restraint, and correction.
- Observe equine behaviors, body language, and herd social structure as they relate to horse psychology and training.
- Observe research methods used to evaluate horse behavior.

Your Professors

Justin Callaham
459-210E ANS Building
352-294-6754
callaham@ufl.edu
Office Hours:
MWF, 9 – 10 AM



Angela Chandler
Horse Teaching Unit
352-376-0562
angelachandler@ufl.edu
Office Hours:
TR, 2-3 PM



Student Centered Training Objectives

At the end of this course, students will be expected to demonstrate the following outcomes,

- Distinguish differences between the young horse and the broke horse.
- Identify reasonable, achievable training plans for the young horse.
- Perform calm and confident handling techniques of the young horse.
- Demonstrate an understanding of ask-encourage-assert in behavioral modification.
- Understand why an independent thinker improves market potential.
- Identify critical thinking skills when dealing with the problem horse.
- Identify adaptive training methods consistent with individual horse personalities in mind.
- Demonstrate effective communication with the young horse using verbal, visual, and social cues to communicate handler intent.
- Produce a young horse that is calm, quiet, and confident that demonstrates a willingness to follow and adapt.

Horse Goals

At the end of this course, horses will be expected to demonstrate each of the following in a calm, quite manner.

- Haltering and leading.
- Stand quietly for novel stimuli.
- Respond to pressure.
- Bathe and fly spray
- Pick up feet
- Lounge
- Trot in hand
- Yo-Yo Game
- Tie
- Navigate obstacles
- Self-load on a trailer
- Ground tie

Course Policies

- Communication is very important. If you have any questions or problems, please reach out to your instructors as soon as possible.
- Class begins promptly at the designated start times. Students will be marked absent if more than 10 minutes late. Students with course conflicts should notify an instructor as soon as possible if you have an issue.
- **Appropriate attire** is required for the safe handling of young horses. This includes long pants, short/long sleeve shirt, closed toed shoes. The most appropriate footwear is a leather boot or shoe that protects the foot and ankle from injury.
- In the event of **inclement weather**, please check the “Announcements” section of Canvas to see if there has been any adjustment to the class meeting schedule. Weather conditions change rapidly this time of year and last-minute class cancellations may occur based on rain and lightning events. Any cancellation will be sent with at least 30 minutes notice.

Working with Livestock

Working with livestock will require students to adhere to handling practices provided by the instructor either in written or verbal format. Animals are capable of injuring people, especially when they are in the flight or fight mode inspired by a stressful situation. The instructor will work to provide students with the ability to manage livestock with minimal stress, thus lowering the risk of injury to people and animals.

Assignments

Evaluation (tentative)	Total Points	Percent of Grade
<p>Class attendance is expected. Attendance is worth 50 points per day. Attendance grade is calculated by dividing points earned by total available points.</p> <p>In the event a student must miss class, notify Mr. Callaham before the absence. There will be no makeup days offered in this course. See section on excused absences on next page.</p> <p style="text-align: center;">Link to UF Catalog Attendance Policies</p> <p style="text-align: center;">https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#religiousholidaystext</p>	2,050	64%
<p>Video Practical's will be used to evaluate training benchmarks during the term. Students will use Microsoft Flipgrid assignments in Canvas to record short video clips of important training benchmarks. Each video practical will be graded using a rubric for feedback on these activities and peer reviewed by 1 other student and the course instructor. Each video practical will be worth 100 points each.</p> <p>Assigned Activities: Catching and haltering, picking up feet, moving the shoulder from a set point, lounging, and trailering.</p>	500	16%
<p>Startle Response Behavioral Research will be a part of the student experience in this course. Students will be assisting with a behavioral experiment designed to assess startle response in the horse when exposed to a sudden novel stimulus. This project aims to characterize, in a study over multiple years and generations of horses, the startle response in the UF herd of weanlings and 2-year-olds.</p> <p>Assigned Activities: Initial Behavioral Animal Survey (50 points), Acclimate to heart rate monitor girth (100 points), acclimate to the round pen (100 points each), and Startle Day (150 points), Final Behavioral Animal Survey (50 points)</p>	450	14%
<p>Weanling Extravaganza Horseshow is the final exam in this course. It is an opportunity for students to demonstrate semester achievements to horse industry leaders, family, friends, and the public. Students and horses will demonstrate their comprehensive skill sets as they navigate a mixed obstacle course and horse show pattern to a panel of judges.</p>	200	7%

Grading Scale

Link to [University Grades and Grading Policy](#)

Letter	Percentage
A	95 – 100
A –	90 – 94.9
B +	87 – 89.9
B	83 – 86.9
B –	80 – 82.9
C +	77 – 79.9
C	74 – 76.9
C –	70 – 73.9
D +	67 – 69.9
D	64 – 65.9
D –	60 – 63.9
F	< 60

Excused Absences and Attendance Policy

Class grade will be lowered one letter grade with excessive unexcused absences (>3). Excused absences are consistent with university policy. Confirmed illnesses, family emergencies, military/jury duty, religious observances, and university-sponsored events will be excused with proper documentation. For each of these instances, you must (1) provide written documentation from an authority (such as a doctor's note, commanding officer, published obituary, etc) and (2) notify Mr. Callaham before the absence. Link to university policy <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#religiousholidaystext>

Important Dates

August 24	First class meeting
August 30	Last day of Drop/Add
September 5	Holiday – No class
October 26 & 28	Behavioral Research Test Days
November 11	Holiday – No class
November 21 – 25	Holiday – No class
November 21	Last day to drop a class
December 7	Final Exam – Horseshow

In Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

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.ua.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.ua.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 Success Initiative, <http://studentsuccess.ufl.edu>.

Student Complaints:

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>.
- Online Course: <https://distance.ufl.edu/state-authorization-status/#student-complaint>

Class Schedule

- **Tentative – schedule may change due to weather, homecoming, and horse readiness)**
- **Work Day's are intended as supervised horse training days for students to work with their assigned horse.**

Date	Topic	Viewpoint Videos	What's Due
W 8/24	Introduction to the Course	Video: Introduction to Weanling Handling	
F 8/26	How to safely catch the young horse, Tying rope halters.	Video: Chris Cox Behavior and Catching Horses	
M 8/29	Work Day		
W 8/31	Basic Desensitization / Introduction to Pressure Release	Video: Larry Trocha's lesson on halter and pressure release using neck ropes	
F 9/2	Work Day		Assign weanlings
M 9/5	M 9/5 – Memorial Day – NO CLASS		
W 9/7	Desensitizing feet legs safely Teaching the young horse to follow.		
F 9/9	Work Day		Horse Temperament Survey Due by end of class.
M 9/12	Work Day		
W 9/14	Teaching the young horse to pick up feet	Video: Chris Cox Picking Up Feet	
F 9/16	Work Day		Flip Grid Practical > Demonstrate haltering your horse and tying the rope halter correctly.
M 9/19	Work Day		
W 9/21	Dealing with crowding Desensitization to Novel Objects	Video: Larry Trocha Space Relationship Video	

F 9/23	Teaching the young to lead from the shoulder Introducing Spray Bottles and Water Hose		
M 9/26	Work Day		
W 9/28	Introduction to Lounging		Flip Grid Practical > Demonstrate picking up feet with out off balancing.
F 9/30	Work Day		
M 10/3	Work Day Tying the young horse safely.		Research Task > Practice Heart Rate Girth by end of class.
W 10/5	Using the flank tap method to address problems.	Chris Cox: Lounging Video	Research Task > Practice Heart Rate girth by end of class
F 10/7	Work Day		Research Task > Practice Heart Rate girth by end of class
M 10/10	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
W 10/12	Teaching Horse to Trot in Hand Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
F 10/14	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
M 10/17	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
W 10/19	Introduction to Obstacles Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
F 10/21	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
M 10/24	Work Day		Research Task > Practice Heart Rate girth by end of class & Feed horse in round pen
W 10/26	Project Surprise Test Day		

F 10/28	Project Surprise Test Day		
M 10/31	Work Day		
W 11/2	Teaching the young horse to load on a trailer using the flank tap method	Read: Householder: Trailer Loading horses using flank tap method.	Flip Grid Practical > Demonstrate loughing technique from both sides.
F 11/4	Work Day		
M 11/7	Work Day		
W 11/9	Prepping for the Weanling Extravaganza	Review: Show Pattern	
F 11/11	F 11/11 - Veterans Day - NO CLASS		
M 11/14	Work Day		Practice Show Pattern
W 11/16	Work Day		Practice Show Pattern
F 11/18	Work Day		Practice Show Pattern
M 11/21 - F 11/25 - Thanksgiving Week - NO CLASS			
M 11/28	Work Day		Practice Show Pattern
W 11/30	Work Day		Practice Show Pattern
F 12/2	Work Day		Flip Grid Practical > Demonstrate shoulder yield using flank tap method
			Practice Show Patter
M 12/5	Work Day > Prep for Horseshow		
W 12/7	Weanling Extravaganza Horseshow		Mark your calendar from 5:30 - 8:00 pm. Classes will not meet until 5:00 pm on this day.

Cover Sheet: Request 17832

3

FAS 3xxx Master Diver

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/27/2022 12:51:10 PM
Updated	11/14/2022 10:38:26 AM
Description of request	Create a new 10-week course Master Diver as part of Scuba certification progression

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Fisheries, Aquatic Sciences, and Geomatics 60469000	Terrell Baker III		10/27/2022
CALS CC Checklist_MD.pdf					10/27/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/27/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17832

Info

Request: FAS 3xxx Master Diver

Description of request: Create a new 10-week course Master Diver as part of Scuba certification progression

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 10/27/2022 12:33:51 PM

Form version: 1

Responses

Recommended Prefix FAS

Course Level 3

Course Number XXX

Lab Code C

Category of Instruction Intermediate

Course Title Master Scuba Diver

Transcript Title Master Scuba Diver

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

Course Type Lecture

Weekly Contact Hours 4

Course Description This 10-week course provides high-level recreational SCUBA training in accordance with National Association of Underwater Instructors (NAUI) Master Diver standards. This course is a prerequisite for Scuba Leadership II: Research Divemaster and Instructor training.

Prerequisites PEN2138C or instructor approval (see qualifications section of syllabus)

Co-requisites n/a

Rationale and Placement in Curriculum This course is part of the Scuba training progression used by both undergraduate and graduate Fisheries and Aquatic Sciences students, certificate students, Wildlife ecology as well as The Diving Science and Safety Program (DSSP) at UF. This trainings results in NAUI Master Diver credentials.

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

- apply and manage knowledge of the science and technology applicable to SCUBA and related topics.
- plan and conduct team-based diving activities to accomplish complex tasks underwater.
- respond effectively to unexpected diving situations by displaying comfort with equipment while using minimal wasted movements.
- Upon the discretion of the instructor, receive NAUI Master Diver credentials.

Course Textbook(s) and/or Other Assigned Reading Required Texts/Readings

1. NOAA Dive Manual, 5th or 6th edition
2. NAUI Master Diver Textbook (this will be available via NAUI e-learning)
3. NAUI Air Table

Weekly Schedule of Topics Monday Lectures:

- Introduction & Leadership

- Student Feedback & Rescue Prep
- Task Based Diving
- Dive Planning
- Dive Equipment: Valves, BCDs, Regulators
- Dive Physics
- Dive Physiology
- Decompression Theory
- Risk Management / Emergency Procedures
- Boat/Shore Diving
- Student Presentations

Thursday Pool Sessions:

- Core Skill Eval & Rescue Review
- Gear Familiarity & Neutral Buoyancy Skills 1
- Fin Kicks & Gear Failures 1
- Task Loading Exercises
- Interim Skill Evaluations
- Team Task Management
- Advanced Rescues & Gear Failure 2
- Search, Recovery, Salvage & Navigation Review
- Skills Evaluations 1
- Skills Evaluation 2

Grading Scheme Quizzes/ HW 200 Points

Presentations 100 Points

NAUI E-Learning Completion 200 Points

Attendance / Safety 300 Points

Checkout Dives 200 Points

Total possible 1000 points

Unexcused Lecture Absence -50 Points

Unexcused Pool Absence -50 Points

Unexcused Pool Tardiness -25 Points

Instructor(s) Doug Marcinek, Michael Kutyna, Katelyn Ludington

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.

jv 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/>.

jv 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.

na 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.

jv 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.

jv 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.

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

na 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.

na 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>.

jv 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.

jv 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.

jv 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.

jv 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)

Master Scuba Diver

FAS3xxx (3 credits) SEMESTER YEAR

Course Description

This 10-week course provides high-level recreational SCUBA training in accordance with National Association of Underwater Instructors (NAUI) Master Diver standards. This course is a prerequisite for Scuba Leadership II: Research Divemaster and Instructor training.

Instructors and Qualifications

*Doug Marcinek Course Coordinator marcinek@ufl.edu 352.273.3626
Before lecture 4pm-5:30pm Mondays NAUI Course Director IANTD Technical Instructor*

*Mike Kutyna Lecturer, Pool Instructor Contact via Canvas grommit@ufl.edu
Office Hours: 4pm-5:30pm Mondays*

*Katelyn Ludington Instructor
Contact via Canvas*

Prerequisites:

PEN2138C or instructor approval (see qualifications section)

Student Learning Outcomes

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

- apply and manage knowledge of the science and technology applicable to SCUBA and related topics.
- plan and conduct team-based diving activities to accomplish complex tasks underwater.
- respond effectively to unexpected diving situations by displaying comfort with equipment while using minimal wasted movements.
- Upon the discretion of the instructor, receive NAUI Master Diver credentials.

Course Meeting Times and Section Instructors

<u>Lecture</u>	<u>Florida Gym 210</u>	
Mike Kutyna, Kylle Cahill-Patray	5:10pm-7:05pm	Monday
<u>Lab</u>	<u>Florida Pool</u>	
Mike Kutyna, Kylle Cahill-Patray	7:20pm-9:10pm	Thursday

Required Texts/Readings/ Equipment

1. NOAA Dive Manual, 5th or 6th edition
2. NAUI Master Diver Textbook (this will be available via NAUI e-learning)
3. NAUI Air Table
4. Scuba quality mask, snorkel, fins, and neoprene dive booties, primary and backup dive lights, timing device, SMB & reel, dive slate w/ pencil, line cutting device, gear bag.
5. Provide your own wetsuit for checkout dives. Either rental or purchase.

Recommended Reading/ Equipment

1. A nitrox capable dive computer with a planning function
2. A BCD, Regulator, wetsuit, and dive computer

Class Format and Policies

FAS4932 is an intensive lecture/lab/certification course that will result in internationally accepted SCUBA certification. Due to the intrinsic risks associated with SCUBA and the rapid pace of skill and knowledge development it is essential that students attend every lecture and lab session.

Qualifications for Participation in FAS4932 Master Scuba Diver

- Minimum age of 18 years by the water phase of the course.
- Signed the NAUI Express Assumption of Risk and Indemnity Agreement, Release of Liability and Waiver of Claims
- Certified as a NAUI Advanced Scuba Diver or the equivalent.
- Certified as a NAUI Advanced Rescue Diver or the equivalent.
- Certified as a NAUI Nitrox Diver or equivalent.
- Certified as a NAUI First Aid for Dive Professionals or equivalent.
- A minimum of 20 logged open water scuba dives with a minimum of 10 hours bottom time. Dives shall be varied in environment, depth, and activities.

Course Fee

- \$875.00
- \$100.00 for each make-up dive if you are unable to attend any mandatory regularly scheduled dives

Due: **TBD**

An additional **\$50 per week late fee** will be assessed for any fees paid after this date. Failure to pay ALL course fees will result in non-certification and student records being flagged.

Payment Information:

Payments will be made online following the link to DoCE in Canvas.
Make sure that you pay for the proper course- **FAS4932 Master Scuba Diver**.
VISA, Mastercard, and American Express are accepted. Bright Futures will not cover this fee.

Included in the fee:

- NAUI Active registered instructors for all water activity
- NAUI student records & e-learning for Master Diver
- NAUI Certification fees and digital certification card
- Entrance fees and boat charter fees for certification dives
- SCUBA equipment used for the lab and open water dives:
 - Regulator
 - Buoyancy Control Device
 - Air & Nitrox tanks
 - Underwater Compass
 - Dive flags
 - Misc diving equipment

Equipment Notes:

- You must provide your own wetsuit for the checkout dives. You may either purchase your own wetsuit or rent it from one of the local dive shops.
- You will be provided an Equipment Standards of Care form which you will be required to sign. This form outlines the care we expect you to take when using the University of Florida SCUBA equipment as well as fees assessed for required repair or replacement of equipment resulting from misuse or neglect.

Lecture

The lecture will be held on Mondays from 5:10pm-7:05pm in Florida Gym 210. Students are expected to complete any readings and homework prior to lecture. Attendance is mandatory and will be taken through various methods. Known excusable conflicts must be worked out with your instructor prior to the absence. Quizzes will cover lectures and reading material. There will be no make-ups for quizzes. Quizzes missed for a valid UF excuse will be dropped. Homework turned in late will receive a zero grade and must be turned in or will result in non-certification.

Lab

Pool sessions will be held on Thursdays at Florida Pool. It is important that students attend the pool section for which they registered as allowable student to instructor ratios are set by the certification agency. Attendance is mandatory. Known excusable conflicts must be worked out with your instructor prior to the absence and when possible, a make-up session should be scheduled in the same week.

List of Required Dives

- Rainbow River (Drift) (optional)
- Troy Springs (Search & Recovery / Salvage, Environmental Study)

- Rescue Diver Weekend (Emergency Procedures & Rescue)
- Hudson Grotto (Deep, Limited Visibility, Navigation)
- Blue Grotto (Team Skills)
- Pompano Beach (Boat Dives, Shore Dive)

Certification/Master Diver

In order to be eligible for certifications students must:

- a. Attend all lecture and pool sessions.
- b. Score $\geq 80\%$ on the final examination and be coached up to 100% to the satisfaction of your instructor.
- c. Be coached up to 100% on the decompression portions of all quizzes and exams to the satisfaction of your instructor.
- d. Complete the class with a minimum overall grade of 70%.
- e. Score $\geq 80\%$ on all skill evaluations.
- f. Pay all fees.
- g. Successfully complete all open water proficiency dives.
 - a. Emergency procedures / Rescue
 - b. Deep/simulated decompression
 - c. Limited visibility or night dive
 - d. Underwater navigation
 - e. Search & Recovery – light salvage
 - f. Three additional dives as specified by the instructor
- h. Successfully pass required pool skills.
 - a. 450 yd swim
 - b. 900 yd snorkel swim
 - c. 25 yd underwater swim
 - d. Scuba ditch
 - e. Buddy breathing horizontal swim
 - f. Alternate shared air horizontal swim
 - g. Neutral buoyancy
 - h. Fin kicks
- i. Complete NAUI e-learning materials for Master Diver.
- j. Be recommended by your instructor as a safe and competent diver.

Lecture/Pool Topics

Lectures:

- Introduction & Leadership
- Student Feedback & Rescue Prep
- Task Based Diving
- Dive Planning
- Dive Equipment: Valves, BCDs, Regulators
- Dive Physics
- Dive Physiology
- Decompression Theory
- Risk Management / Emergency Procedures
- Boat/Shore Diving
- Student Presentations

Pool Sessions:

- Core Skill Eval & Rescue Review
- Gear Familiarity & Neutral Buoyancy Skills 1
- Fin Kicks & Gear Failures 1
- Task Loading Exercises
- Interim Skill Evaluations
- Team Task Management
- Advanced Rescues & Gear Failure 2
- Search, Recovery, Salvage & Navigation Review
- Skills Evaluation 1
- Skills Evaluation 2

Evaluation of Student Learning

Quizzes/ HW	200	Points
Presentations	100	Points
NAUI E-Learning Completion	200	Points
Attendance / Safety	300	Points
Checkout Dives	200	Points
Unexcused Lecture Absence	-50	Points
Unexcused Pool Absence	-50	Points
Unexcused Pool Tardiness	-25	Points

Attendance / Safety Points are points that can be deducted from a student's grade for repeated unsafe behavior or repeated abuse or misuse of University of Florida equipment, be it intentional or not.

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

A student may check their point standing at any point during the semester with their pool instructor or via e-Learning.

Grading Scale

Points: 900-1000 870-899 800-869 770-799 700-769 670-699 600-669 <600
Grade: A B+ B C+ C D+ D E

Additional information on grading may be found at:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Additional References

UF SCUBA Web Site	http://sfrc.ufl.edu/class/scuba
UF Diving Science and Safety Program Web Site	www.ehs.ufl.edu/Dive
NAUI Web Site	www.naui.org
IANTD Web Site	www.iantd.com
Diver's Alert Web Site	www.dan.org

Other Information

Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities

In 1995 the UF student body enacted an honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students.

<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor 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.

On all work submitted for credit by students at the university, the following pledge is either required or implied: "**On my honor, I have neither given nor received unauthorized aid in doing this assignment.**"

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.

(Source: 2010-2011 Undergraduate Catalog)

It is assumed 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.

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.

- *U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit umatter.ufl.edu to refer or report a concern and a team member will reach out to the student in distress.*
- *Counseling and Wellness Center: Visit counseling.ufl.edu or call 352-392-1575 for information on crisis services as well as non-crisis services.*
- *Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit shcc.ufl.edu.*
- *University Police Department: Visit 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; ufhealth.org/emergency-room-trauma-center.*
- *E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.*
- *Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu/.*
- *Library Support: cms.uflib.ufl.edu/ask various ways to receive assistance with respect to using the libraries or finding resources.*
- *Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring. teachingcenter.ufl.edu/*
- *Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/*
- *Student Complaints <https://www.ombuds.ufl.edu/>*

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluations

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/>.

Cover Sheet: Request 17833

FAS 3xxx Scuba Leadership I

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/27/2022 1:04:30 PM
Updated	11/14/2022 10:40:47 AM
Description of request	Create a four-week Scuba Leadership I course to run consecutively after Master Diver in the Scuba certification progression in Fisheries and Aquatic Sciences.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Fisheries, Aquatic Sciences, and Geomatics 60469000	Terrell Baker III		10/27/2022
CALS CC Checklist_SL1.pdf					10/27/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/27/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17833

Info

Request: FAS 3xxx Scuba Leadership I

Description of request: Create a four-week Scuba Leadership I course to run consecutively after Master Diver in the Scuba certification progression in Fisheries and Aquatic Sciences.

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 10/27/2022 12:52:49 PM

Form version: 1

Responses

Recommended Prefix FAS

Course Level 3

Course Number XXX

Lab Code C

Category of Instruction Intermediate

Course Title Scuba Leadership I

Transcript Title Scuba Leadership I

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 1

S/U Only? No

Contact Type Regularly Scheduled

Course Type Lecture

Weekly Contact Hours 4

Course Description This four-week course provides high-level recreational SCUBA training as well as introduces leadership level training in accordance with National Association of Underwater Instructors (NAUI) Master Diver standards. This course is taught consecutively following the 10-week Master Diver course and is a prerequisite for Scuba Leadership II: Research Divemaster and Instructor training.

Prerequisites PEN2138C or instructor approval (see qualifications section of syllabus)

Co-requisites The 10-week Master Diver is required in order to take the following 4-week Scuba Leadership I.

Students can take the 10-week Master Diver without subsequently taking Scuba Leadership I

Rationale and Placement in Curriculum This course is part of Scuba certification training that is of importance to both undergraduate and graduate students in Fisheries and Aquatic Sciences, Wildlife Ecology, Marine Science as well as certificate students and the The Diving Science and Safety Program (DSSP) at UF.

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

- plan and conduct basic oral and in-water presentations.
- apply instructor guidance in leading certified and uncertified divers.
- Upon the discretion of the instructor, receive NAUI and Training Assistant credentials.

Course Textbook(s) and/or Other Assigned Reading 1. NOAA Dive Manual, 5th or 6th edition
2. NAUI Training Assistant e-Learning (Provided by the required course fee)

Weekly Schedule of Topics Lectures: Pool Sessions:

- NAUI Rubric Dive Locker Procedures
- Teaching Theory Teaching Skills

- Leading Dives Escorting Divers / Assisting Divers in Distress
- Class Presentations Skills Evaluation 3

Grading Scheme Quizzes/ HW 200 Points

Presentations 100 Points

Exam 200 Points

Attendance / Safety 500 Points

Total possible points 1000

Unexcused Lecture Absence -50 Points

Unexcused Pool Absence -50 Points

Unexcused Pool Tardiness -25 Points

Instructor(s) Doug Marcinek, Michael Kutnya, Katelyn Ludington

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.

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SCUBA Leadership I

FAS3xxx (1 credits) Fall 2022

Course Description

This four-week course provides high-level recreational SCUBA training as well as introduces leadership level training in accordance with National Association of Underwater Instructors (NAUI) Master Diver standards. This course is taught consecutively following Master Diver and is a prerequisite for Scuba Leadership II: Research Divemaster and Instructor training.

Instructors and Qualifications

*Doug Marcinek Course Coordinator marcinek@ufl.edu 352.273.3626
Available by appointment NAUI Course Director IANTD Technical Instructor*

*Mike Kutyna Lecturer, Pool Instructor Contact via Canvas grommit@ufl.edu
Office Hours: Online by appointment*

*Katelyn Ludington Instructor
Contact via Canvas*

Prerequisites: PEN2138C or instructor approval (see qualifications section)

Student Learning Outcomes

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

- plan and conduct basic oral and in-water presentations.
- respond to instructor guidance in leading certified and uncertified divers.
- Upon the discretion of the instructor, receive NAUI and Training Assistant credentials.

Course Meeting Times and Section Instructors

<u>Lecture</u> Mike Kutyna, Katelyn Ludington	Online Lecture 5:30pm-7:30pm	Monday
<u>Lab</u> Mike Kutyna, Katelyn Ludington	Florida Pool 7:20pm-9:10pm	Thursday

Required Texts/Readings/ Equipment

1. NOAA Dive Manual, 5th or 6th edition
2. NAUI Training Assistant e-Learning (Provided by the required course fee)

3. NAUI Air Table
4. Scuba quality mask, snorkel, fins, and neoprene dive booties, timing device, dive slate w/ pencil, gear bag.
5. Provide your own wetsuit for checkout dives. Either rental or purchase.

Recommended Reading/ Equipment

1. A nitrox capable dive computer with a planning function
2. A BCD, Regulator, wetsuit, and dive computer

Class Format and Policies

FAS4932 is an intensive lecture/lab/certification course that will result in internationally accepted SCUBA certification. Due to the intrinsic risks associated with SCUBA and the rapid pace of skill and knowledge development it is essential that students attend every lecture and lab session.

Qualifications for Participation in FAS4932 Scuba Leadership I

- Age. Minimum is 18 years by the water phase of the course.
- Signed the NAUI Express Assumption of Risk and Indemnity Agreement, Release of Liability and Waiver of Claims
- Certified as a NAUI Scuba Diver or the equivalent.
- Certified as a NAUI Rescue Scuba Diver or the equivalent.
- Certified as a NAUI Nitrox Diver or equivalent.
- Certified as a NAUI First Aid for Dive Professionals or equivalent.
- A minimum of 20 logged open water scuba dives with a minimum of 10 hours bottom time. Dives shall be varied in environment, depth, and activities.

Course Fee

- \$875.00 due on September 29th.
- \$100.00 for each make-up dive if you are unable to attend any mandatory regularly scheduled dives

Due: 29 September 2020

An additional **\$50 per week late fee** will be assessed for any fees paid after this date. Failure to pay ALL course fees will result in non-certification and student records being flagged.

Payment Information:

Payments will be made online following the link to DoCE in Canvas. Make sure that you pay for the proper course- **FAS4932 Leadership 1**. VISA, Mastercard, and American Express are accepted. Bright Futures will not cover this fee.

Included in the fee:

- NAUI Active registered instructors for all water activity

- NAUI student records & e-learning for Training Assistant
- NAUI Certification fees and digital certification card
- Entrance fees for certification dives
- SCUBA equipment used for the lab and open water dives:
 - Regulator
 - Buoyancy Control Device
 - Air tanks
 - Underwater Compass

Equipment Notes:

- You must provide your own wetsuit for the checkout dives. You may either purchase your own wetsuit or rent it from one of the local dive shops.
- You will be provided an Equipment Standards of Care form which you will be required to sign. This form outlines the care we expect you to take when using the University of Florida SCUBA equipment as well as fees assessed for required repair or replacement of equipment resulting from misuse or neglect.

Lecture

Lecture will be held on Mondays from 5:30pm-7:05pm via online lecture. Students are expected to complete any readings and homework prior to lecture. Attendance is mandatory and will be taken through various methods. Known excusable conflicts must be worked out with your instructor prior to the absence. Quizzes will cover lecture and reading material. There will be no make-ups for quizzes. Quizzes missed for a valid UF excuse will be dropped. Homework turned in late will receive a zero grade and must be turned in or will result in non-certification.

Lab

Pool sessions will be held on Thursdays at Florida Pool. It is important that students attend the pool section for which they registered as allowable student to instructor ratios are set by the certification agency. Attendance is mandatory. Known excusable conflicts must be worked out with your instructor prior to the absence and when possible a make-up session should be scheduled in the same week.

Certification as Training Assistant

In order to be eligible for certifications students must:

- a. Attend all lecture and pool sessions.
- b. Score $\geq 80\%$ on the final examination and be coached up to 100% to the satisfaction of your instructor.
- c. Be coached up to 100% on the decompression portions of all quizzes and exams to the satisfaction of your instructor.
- d. Complete the class with a minimum overall grade of 70%.
- e. Score $\geq 80\%$ on all skill evaluations.
- f. Pay all fees.
- g. Successfully complete all open water proficiency dives.
 - a. Emergency procedures / Rescue
 - b. Underwater navigation
 - c. Escort dive
- h. Successfully pass required pool skills.
 - a. Scuba doff & don

- b. Buddy gear exchange
- c. 20 minute water tread
- d. Buddy rescue tow
- i. Complete NAUI e-learning materials for Training Assistant.
- j. Be recommended by your instructor as a safe and competent diver.

Lecture/Pool Topics

Lectures:

- NAUI Rubric
- Teaching Theory
- Leading Dives
- Class Presentations

Pool Sessions:

- Dive Locker Procedures
- Teaching Skills
- Escorting Divers / Assisting Divers in Distress
- Skills Evaluation 3

Evaluation of Student Learning

Quizzes/ HW	200	Points
Presentations	100	Points
Exam	200	Points
Attendance / Safety	500	Points
Unexcused Lecture Absence	-50	Points
Unexcused Pool Absence	-50	Points
Unexcused Pool Tardiness	-25	Points

Attendance / Safety Points are points that can be deducted from a student’s grade for repeated unsafe behavior or repeated abuse or misuse of University of Florida equipment, be it intentional or not.

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

A student may check their point standing at any point during the semester with their pool instructor or via e-Learning.

Grading Scale

Points:	900-1000	870-899	800-869	770-799	700-769	670-699	600-669	<600
Grade:	A	B+	B	C+	C	D+	D	E

Additional information on grading may be found at:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Additional References

UF SCUBA Web Site	http://sfrc.ufl.edu/class/scuba
UF Diving Science and Safety Program Web Site	www.ehs.ufl.edu/Dive
NAUI Web Site	www.naui.org
IANTD Web Site	www.iantd.com
Diver's Alert Web Site	www.dan.org

Other Information

Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities

In 1995 the UF student body enacted an [honor code](#) and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students.

<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor 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.

On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.

(Source: 2010-2011 Undergraduate Catalog)

It is assumed 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.

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.

Accommodations for students with disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Click here to get started with the Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Online Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. 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/>

Campus Resources

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or [visit the U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

University Police Department: [Visit UF Police Department website](#) 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; [Visit the UF Health Emergency Room and Trauma Center website](#).

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, [visit the GatorWell website](#) or call 352-273-4450.

Academic Resources

E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints The first point of contact for student complaints should be the Academic Coordinator for your program. For issues that remain unresolved review [the Student Complaint Policy](#).

Cover Sheet: Request 17777

FOR3XXX Florida Forest Communities

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/19/2022 2:57:35 PM
Updated	11/14/2022 9:19:46 AM
Description of request	New undergraduate course request for Florida Forest Communities

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Forest Resources and Conservation 60460000	Terrell Baker III		10/19/2022
CALs CC Checklist_FFC.pdf					10/19/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/19/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17777

Info

Request: FOR3XXX Florida Forest Communities

Description of request: New undergraduate course request for Florida Forest Communities

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 10/19/2022 3:16:10 PM

Form version: 3

Responses

Recommended Prefix FOR

Course Level 3

Course Number XXX

Lab Code None

Category of Instruction Advanced

Course Title Florida's Forest Communities

Transcript Title Florida's Forest Communities

Degree Type Baccalaureate

Delivery Method(s) Online

Co-Listing No

Effective Term Earliest Available

Effective Year Earliest Available

Rotating Topic? No

Repeatable Credit? No

Amount of Credit 2

S/U Only? No

Contact Type Regularly Scheduled

Course Type Lecture

Weekly Contact Hours 2

Course Description In this course, you will learn to recognize some Florida forest communities and the dominant trees and common plants that grow in them. Using the principles of plant taxonomy and tree identification skills, students will identify common forest trees in Florida using visual physical plant characteristics coupled with habitat cues and tree species groupings. Students will apply these classifications to describe the conditions that underlie forest community distributions in Florida.

Prerequisites junior or senior standing

Co-requisites n/a

Rationale and Placement in Curriculum This course trains students in regionally important economic and keystone tree and plant species and ecological communities. It is part of the Forest Resources & Conservation undergraduate major and can be taken by Natural Resource Conservation students.

Course Objectives Upon completing the course, students will be able to:

- Identify major forest communities in Florida
- Explain how disturbances, hydrology, soils, geology and climate influence plant distributions in Florida.
- Relate tree species groups to forest communities and ecological setting.
- Identify and classify plants (woody & herbaceous) commonly found in Florida.
- Demonstrate the proper use of tree identification resources.
- Articulate information about plant species learned, such as historic use or wildlife value.

Course Textbook(s) and/or Other Assigned Reading Recommended Texts:

Nelson G. 2011. The Trees of Florida. Pineapple Press Inc. Sarasota, FL. 428 p. (ToF)

Whitney, E., D.B. Means, A. Rudloe. 2004. Priceless Florida: Natural Ecosystems and Native Species. Pineapple Press, Inc. Sarasota, FL. 423 p. (PF)

Burns, R.M. and B.H. Honkala. 1990. Silvics of North America, Volumes 1 (conifers) and 2 (hardwoods). U.S.D.A. For. Ser. Agr. Handbook No. 654. Washington, D.C. 675 & 877 p. [Free online] http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm (SoNA)

Weekly Schedule of Topics Week of: Topics Quiz

Quiz Due Date

Zoom Meeting

- 1 Aug. 24 Course Introduction. Introduction to Forest Communities of Florida
- 2 Aug. 29 Florida Climate & Weather, Geology of Florida, Florida Soils Quiz Required
Q1R Sept. 7 August 29: Noon
- 3 Sept. 5 Ecology: The Concept of Disturbances, Forest Structure and Function Quiz Required
Q2R Sept. 14
- 4 Sept. 12 Tree identification Part 1
- 5 Sept. 19 Tree identification basics Part II Quiz Required Q3R Sept. 28
Sept. 22: 5:30 PM
- 6 Sept. 26 Forest Community #1 Coastal/Maritime Quiz Required Q4R
Oct. 5
- 7 Oct. 3 Forest Community #2 Cypress Dome Quiz Required Q5R Oct. 12
- 8 Oct. 10 Forest Community #3 Alluvial Floodplain Quiz Required Q6R Oct. 19
- 9 Oct. 17 Forest Community #4 Bottomland Hardwood Quiz Required Q7R
Oct. 26 Oct. 18: 5:30 PM
- 10 Oct. 24 Forest Community #5 Flatwoods Quiz Required Q8R Nov. 2
- 11 Oct. 31 Forest Community #6 Sandhill & Scrub Quiz Required Q9R Nov. 9
- 12 Nov. 7 Florida Community #7 Upland Hardwood Quiz Required Q10R Nov. 16
- 13 Nov. 14 Optional Ecosystem Field Tour Nov. 18 (Time: TBD)
- 14 Nov. 21 Thanksgiving Break
- 15 Nov. 28 Forest Community #8 Pick one: Invasive Species or S. FL Urban/Palms Quiz -
Optional Q11O Dec. 7 Nov.28: Noon
- 16 Dec. 7 Project showcase (Exact Date TBD)

Grading Scheme Grading

Quizzes (X):

50%

Digital Tree Collection:

25%

360 Spot Community videos 25%
Total: 100%

Final grading follows University standards and is based on the following scale (no rounding up or down):

- 100-93% = A
- 77-73.99% = C
- 90-92.99% = A-
- 72-70.99% = C-
- 89-88.99% = B+
- 69-68.99% = D+
- 87-83.99% = B
- 67-63.99% = D

82-80.99% = B-

62-60.99% = D-

79-78.99% = C+

< 59% = E

Instructor(s) Dr. Michael Andreu

Attendance & Make-up Yes

Accomodations Yes

UF Grading Policies for assigning Grade Points Yes

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CALS Curriculum Committee

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Dr. Michael G. Andreu
Assoc. Prof. of Forest Systems
Room 351 Newins-Ziegler Hall
(352) 846-0355
mandreu@ufl.edu

TA: Gage Lapierre
Ph.D. Student
gagemo@ufl.edu

Office Hours:
Tuesday and Thursday 4pm-5pm

Class Schedule: Online
2 credits

Class Location: CANVAS Online (Asynchronous delivery)

Prerequisites: junior or senior standing

Course Description

In this course, you will learn to recognize some Florida forest communities and the dominant trees and common plants that grow in them. Using basic principles of plant taxonomy and tree identification skills, students will recognize common forest trees in Florida using visual physical plant characteristics coupled with habitat cues and tree species groupings.

Course Essential Questions

- Why do trees grow where they do?
- How do forest communities form and how are they distributed across the landscape?
- Why is tree identification important?

Course Objectives

Upon completing the course, students will be able to:

- Identify major forest communities in Florida
- Explain how disturbances, hydrology, soils, geology and climate influence plant distributions in Florida.
- Relate tree species groups to forest communities and ecological setting.
- Identify and classify plants (woody & herbaceous) commonly found in Florida.
- Demonstrate the proper use of tree identification resources.
- Articulate information about plant species learned, such as historic use or wildlife value.

Cornerstone Tasks

- **Forest Community Attributes:** Use geographic context, species composition and ecological characteristics to recognize Florida's forested communities.

- **Tree ID:** Use basic morphologic characteristics to correctly identify major tree species common in Florida by examining living specimens in the landscape and samples or photographs of flowers, twigs, leaves, and fruits. This task will be assessed through quizzes.

Teaching Methods, Assignment and Deliverables

- **Lectures:** Lectures (online) will focus on presenting new information
- **Zoom Meetings (optional):** Periodically during the semesters, we will host a Zoom meeting for students to participate in live discussion about the course. Participation is not required, but we want to make sure you have an opportunity to clear up any questions you might have, the meetings will be open for up to one hour but may end early if all issues have been addressed. We will record and post the session if you are unable to participate but wish to view it later.
- **Readings:** Various articles and videos will be posted online. It is to your advantage to read these articles as they will often reinforce information given in lecture or aid in field study.
- **Field studies:** Success in tree identification is dependent on memorization and repeated detailed observation of trees. Although this is intended to be an online class you will have to step outside to practice identification. Trees to be learned will be viewed in a variety of settings and life stages. Field tours (virtual) will focus on acquiring the observational and memory skills needed to identify a tree, from both near and far.
- **Quizzes:** Each module (lecture and “field” session will end with a quiz: covering the material presented. Quiz questions may include: identifying a tree based on: morphological characteristics, ecological setting, and other facts relating to the specimen.

Module Quizzes: Timed on-line quizzes will be given at the end of most class periods and will cover material presented in that module only. Quizzes will be open book, but time limited. You will be given up two attempts on the quiz but be aware, the questions will vary each time you take the quiz. It will be your best attempt that counts as your grade.

Digital Tree Collection: Create a digital tree collection of species from 3 forest communities from the class list by use of personal photography. Detailed instructions and a grading rubric will be provided in the on-line assignment.

360° Community videos: For three forest communities (can be the same or different from the plant collection communities), complete a 360-degree spot video (not to exceed 3-7 minutes each) detailing various attributes and species associated with that community. Detailed instructions and a grading rubric will be provided in the on-line assignment.

Due Dates: First Community video (Nov. 10), 2nd and 3rd Community videos (Dec. 7).
5,10,10 points respectively.

Digital Tree Collection: You will develop a digital plant collection focusing on three forest communities and containing five unique plants from each community (total of 15 species). Detailed instructions and a grading rubric will be given in the assignment on creating and presenting your collection. Develop your collection over the course of the semester and use it as a study guide; turn it in on-line.

Due Dates: First set of 5 species (Oct. 27), 2nd set of 5 (Nov. 10), 3rd set of 5 (Dec 7):
5,10,10 pts respectively.

Grading

<i>Quizzes (X):</i>	50%
<i>Digital Tree Collection:</i>	25%
<i>360 Spot Community videos</i>	25%
<i>Total:</i>	100%

Final grading follows University standards and is based on the following scale (no rounding up or down):

100-93%	= A	73-77.99%	= C
90-92.99%	= A-	70-72.99%	= C-
88-89.99%	= B+	68-69.99%	= D+
83-87.99%	= B	63-67.99%	= D
80-82.99%	= B-	60-62.99%	= D-
78-79.99%	= C+	< 60%	= E

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

Recommended Texts:

Nelson G. 2011. The Trees of Florida. Pineapple Press Inc. Sarasota, FL. 428 p. **(ToF)**

Whitney, E., D.B. Means, A. Rudloe. 2004. Priceless Florida: Natural Ecosystems and Native Species. Pineapple Press, Inc. Sarasota, FL. 423 p. **(PF)**

Burns, R.M. and B.H. Honkala. 1990. Silvics of North America, Volumes 1 (conifers) and 2 (hardwoods). U.S.D.A. For. Ser. Agr. Handbook No. 654. Washington, D.C. 675 & 877 p.
[Free online] http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm **(SoNA)**

FOR 4934 : Florida Forest Communities : 2022 Fall Class Schedule

(More reading and video assignments may be posted on-line)

Week of:		Topics	Quiz	Quiz Due Date	Zoom Meeting
1	Aug. 24	Course Introduction. Introduction to Forest Communities of Florida			
2	Aug. 29	Florida Climate & Weather, Geology of Florida, Florida Soils Quiz Required	Q1R	Sept. 7	August 29: Noon
3	Sept. 5	Ecology: The Concept of Disturbances, Forest Structure and Function Quiz Required	Q2R	Sept. 14	
4	Sept. 12	Tree identification Part 1			
5	Sept. 19	Tree identification basics Part II Quiz Required	Q3R	Sept. 28	Sept. 22: 5:30 PM
6	Sept. 26	Forest Community #1 Coastal/Maritime Quiz Required	Q4R	Oct. 5	
7	Oct. 3	Forest Community #2 Cypress Dome Quiz Required	Q5R	Oct. 12	
8	Oct. 10	Forest Community #3 Alluvial Floodplain Quiz Required	Q6R	Oct. 19	
9	Oct. 17	Forest Community #4 Bottomland Hardwood Quiz Required	Q7R	Oct. 26	Oct. 18: 5:30 PM
10	Oct. 24	Forest Community #5 Flatwoods Quiz Required	Q8R	Nov. 2	
11	Oct. 31	Forest Community #6 Sandhill & Scrub Quiz Required	Q9R	Nov. 9	
12	Nov. 7	Florida Community #7 Upland Hardwood Quiz Required	Q10R	Nov. 16	
13	Nov. 14	Optional Ecosystem Field Tour Nov. 18 (Time: TBD)			
14	Nov. 21	Thanksgiving Break			
15	Nov. 28	Forest Community #8 Pick one: Invasive Species or S. FL Urban/Palms Quiz - Optional	Q110	Dec. 7	Nov.28: Noon
16	Dec. 7	Project showcase (Exact Date TBD)			

Attendance and Late Policy

Generally, no make-up quizzes or make-up final exam will be offered other than for exceptional situations such as University-sanctioned absence, death of an immediate family member (pets not included), serious illness or injury (reported to the instructor with a physician's note within five days of the first absence), or extreme weather resulting in the closure of campus. You may review UF Attendance Policies here:

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

Other Tree Identification Resources:

Beentje, H.J. 2010. The Kew Plant Glossary: An Illustrated Dictionary of Plant of Identification Terms. Royal Botanical Gardens, Kew UK. 220 p.

Castner, James L. 2005. Photographic Atlas of Botany and Guide to Plant Identification. Feline Press. 310 p.

Godfrey, R. K. 1988. Trees, Shrubs and Woody Vines of Northern Florida and Adjacent Georgia and Alabama. The University of Georgia Press, Athens. 734 p.

Harris, J.G. and Harris, M. W. 2000. Plant Identification Terminology: An Illustrated Glossary Spring Lake Publishing, Spring Lake UT. 206 p.

Kirkman, L.K., C.L. Brown & D.J. Leopold. 2007. Native trees of the Southeast: An identification guide. Timber Press, Portland, OR. 370 p.

Knight, G.R., J.B. Oetting, and L. Cross. 2011. Atlas of Florida's Natural Heritage – Biodiversity, Landscapes, Stewardship and Opportunities. Tallahassee, FL Florida State University.

Langeland, K. A. and Burks K. C. 1998. Identification & Biology of Non-native Plants in Florida's Natural Areas. University of Florida IFAS. Gainesville. 165 p.

Lakela, O. and Wunderlin, R. P. 1980. Trees of Central Florida. Banyan Books, Miami. 208 p.

Miller H. J. and Miller K. V. 1999. Forest Plants of the Southeast and Their Wildlife Uses. University of Georgia Press. 454 p.

Riffle, R. L. and Craft, P. 2003. An Encyclopedia of Cultivated Palms. Timber Press. 528 p.

Tomlinson, P.B. 1980. The Biology of Trees Native to Tropical Florida. Harvard University Printing, Allston MA. 480 p.

Wunderlin, R. P. and Hansen, B. F. 2003. Guide to the Vascular Plants of Florida, 2nd Ed. University Press of Florida, Gainesville. 787 p.

Ecosystem, Tree & Plant Online Resources:

Ecosystems of Florida:

[Species Navigation - Florida Natural Areas Inventory \(fnai.org\)](http://www.landscape.org/florida/ecosystems/ecosystems_101/) – Ecosystem Descriptions

http://www.landscape.org/florida/ecosystems/ecosystems_101/ - Ecosystems 101

http://www.landscape.org/florida/natural_geography/ - Florida Geography Summary

Plant databases:

<http://plants.usda.gov/> - list of plants and characteristics

<http://www.sfrc.ufl.edu/Extension/ffws/tof.htm> - Trees of Florida

<http://www.florida.plantatlas.usf.edu/> - Florida plant atlas (USF)

<http://www.flmnh.ufl.edu/herbarium/cat/> - UF herbarium

Invasive plants:

<http://www.fleppc.org/> - Florida Exotic Pest Plant Council

<http://www.invasiveplantatlas.org/trees.html> - Invasive Plant Atlas

Apps:

Pl@ntNet – Plant ID

IveGot1 – Invasive Plants & Animals

Things you will need for this class: N/A

The following is important information you need to know when working outdoors:

- Chiggers: <http://edis.ifas.ufl.edu/pdf/IG/IG08500.pdf>
- Ticks & Lyme Disease: <http://edis.ifas.ufl.edu/pdf/MG/MG20400.pdf>
- West Nile Virus: <https://www.cdc.gov/westnile/index.html>
- Dengue Fever: <https://www.cdc.gov/dengue/index.html>
- Heat: <https://www.cdc.gov/niosh/topics/heatstress/default.html>
- Dehydration: <https://www.webmd.com/a-to-z-guides/dehydration-adults#1>

The Legal Stuff: 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 through Canvas.

Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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>

<https://gradcatalog.ufl.edu/graduate/regulations/>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the

technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 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.

Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation! **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/>.

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>.

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>.

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, <http://www.disability.ufl.edu>

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

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>
- SFFGS Academic Hub <https://ufl.instructure.com/courses/303721>

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.

Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

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

- <https://distance.ufl.edu/getting-help/>
- <https://registrar.ufl.edu/complaint.html>

Cover Sheet: Request 17767

FAS 4xxx Marine Adaptations: Environmental Physiology

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/18/2022 10:26:30 AM
Updated	11/14/2022 10:15:44 AM
Description of request	Create a new course number for undergraduate sections of a co-taught grad-undergrad course in Marine Adaptations

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Fisheries, Aquatic Sciences, and Geomatics 60469000	Terrell Baker III		10/18/2022
CALS CC Checklist_Marine Adaptations.pdf					10/18/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/18/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17767

Info

Request: FAS 4xxx Marine Adaptations: Environmental Physiology

Description of request: Create a new course number for undergraduate sections of a co-taught grad-undergrad course in Marine Adaptations

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 11/14/2022 10:16:50 AM

Form version: 4

Responses

Recommended Prefix FAS

Course Level 4

Course Number XXX

Lab Code None

Category of Instruction Advanced

Course Title Marine Adaptations: Environmental Physiology

Transcript Title Marine Adapt: Env Phy

Degree Type Baccalaureate

Delivery Method(s) On-Campus

Co-Listing Yes

Co-Listing Explanation This is the advanced undergraduate sections of a 3-way co-taught course that includes this 4000 level face to face, a 6000 level face to face and a 6000 level online course.

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

Course Type Lecture

Weekly Contact Hours 3

Course Description This course will focus on the responses of species and habitats to stressors encountered in the marine environment. We will first examine the physiological responses to salinity, hypoxia, ocean acidification, thermal stress, pollutants, nitrogen stress, UV radiation, and noise. Then we will explore these physiological stressors as drivers of marine ecological processes in a wide array of marine habitats. Finally, we will discuss societal, economic, and management implications.

Prerequisites BSC 2010 and 2011

Co-requisites na

Rationale and Placement in Curriculum Marine Adaptations is an approved elective for both the Marine Sciences BS-MAS and the Fisheries and Aquatic Sciences Minor. It also serves as an elective for students in Zoology.

Course Objectives • Describe the impacts of stressors on the physiology and ecology of marine phyla and ecosystems.

- Compare physiological mechanisms of stress adaptation in a variety of marine phyla.
- Analyze the effects of stressors and physiological responses in shaping ecological patterns observed in marine ecosystems.
- Evaluate primary literature in the discipline.

Course Textbook(s) and/or Other Assigned Reading • Whitefield, A.K., Elliott, M. Basset, A., Blaber, S.J.M., & West, R.J. (2012). Paradigms in estuarine ecology - a review of the Remane diagram with a suggested revised model for estuaries. *Estuarine, Coastal and Shelf Science* 97: 78-90

- Spicer, J.I. (2014). What can an ecophysiological approach tell us about the physiological responses of marine invertebrates to hypoxia? *Journal of Experimental Biology* 217: 46-56

- Steckbauer, A., Duarte, C.M., Carstensen, J., Vaquer-Sunyer, R., & Conley, D.J. (2011). Ecosystem impact of hypoxia: thresholds of hypoxia and pathways to recovery. *Environmental Research Letters* 6: 025003
- Whiteley, N.M. (2011). Physiological and ecological responses of crustaceans to ocean acidification. *Marine Ecology Progress Series* 430: 257-271.
- Fabricius, K.E., De'ath, G., Noonan, S. & Uthicke S. (2014). Ecological effects of ocean acidification and habitat complexity on reef-associated macroinvertebrate communities. *Proceedings of the Royal Society of London Series B* 281: 20132479
- Busch, D.S., Harvey, C.J. & McElhany, P. (2013). Potential impacts of ocean acidification on the Puget Sound food web. *ICES Journal of Marine Science* 70: 823-833
- Stark, J.S. et al. 2019. Free Ocean CO₂ Enrichment (FOCE) experiments: Scientific and technical recommendations for future in situ ocean acidification projects. *Progress in Oceanography* 172: 89-107.
- Hofmann, G.E. & Todgham, A.E. (2010). Living in the now: physiological mechanisms to tolerate a rapidly changing environment. *Annual Review of Physiology* 72: 127-145.
- Kordas, R.L., Harley, C.D.G., & O'Connor, M.I. (2011). Community ecology in a warming world: the influence of temperature on interspecific interactions in marine systems. *Journal of Experimental Marine Biology and Ecology* 400: 218-226.
- Cole, M., Lindeque, P., Fileman, E., Halsband, C. , & Galloway, T.S. (2015). The impact of polystyrene microplastics on feeding, function and fecundity in the marine copepod *Calanus helgolandicus*. *Environmental Science & Technology* 49: 1130-1137.
- Hooper, M.J., Ankley, G.T., Cristol, D.A., Maryoung, L.A., Noyes, P.D. & Pinkerton, K.E. (2013). Interactions between chemical and climate stressors: a role for mechanistic toxicology in assessing climate change risks. *Environmental Toxicology and Chemistry* 32: 32-48.

Ceh, J., Kilburn, M.R., Cliff, J.B., Raina, J.-B., van Keulen, M. & Bourne, D.G. (2013). Nutrient cycling in early coral life stages: *Pocillopora damicornis* larvae provide their algal symbiont (*Symbiodinium*) with nitrogen acquired from bacterial associates. *Ecology and Evolution* 3: 2393-2400.

- Radecker, N., Pogoreutz, C., Voolstra, C.R., Wiedenmann, J. & Wild, C. (2015). Nitrogen cycling in corals: the key to understanding holobiont functioning? *Trends in Microbiology* 23: 490-497.

Hernandez Moresinao, R.D. & Helbling, E.W. (2010). Combined effects of UVR and temperature on the survival of crab larvae (*Zoea* I) from Patagonia: The role of UV-absorbing compounds. *Marine Drugs* 8: 1681-1698.

- Dahms, H.-U., Dobretsov, S., & Lee J.-S. (2011). Effects of UV radiation on marine ectotherms in polar regions. *Comparative Biochemistry and Physiology, Part C* 153: 363-371.
- Pine, M.K. Jeffs, a.G., & Radford, C.A. (2012). Turbine sound may influence the metamorphosis behavior of estuarine crab megalopae. *PLoS ONE* 7(12): e51790.
- Hawkins, A.D., Pembroke, A.E., & Popper, A.N. (2015). Information gaps in understanding the effects of noise on fishes and invertebrates. *Reviews in Fish Biology and Fisheries* 25: 39-64.
- Sandifer, P.A. & Sutton-Grier, A.E. (2014). Connecting stressors, ocean ecosystem services, and human health. *Natural Resources Forum* 38: 157-167
- Weijerman, M., Veazey, L., Yee, S., Vache, K., Delevaux, J.M.S., Donovan, M.K., Falinski, K., Lecky, J., & Oleson, K.L.L. (2018). Managing local stressors for coral reef condition and ecosystem services delivery under climate scenarios. *Frontiers in Marine Science* 5:

Weekly Schedule of Topics **Week** **Date**

Topic

Assignment Due

1 25 August Introduction and expectations

T: Quiz, T: 20% Project, W: Perusal, R: Discussion, R: Introduction

2 30 August Effects of salinity as a stressor

T: Quiz, T: 20% Project, W: Perusal, R: Discussion,

3 6 September Effects of changing salinity on ecology

T: Quiz, T: 20% Project, W: Perusal, R: Discussion,

4 13 September Respiratory responses to environmental hypoxia T: Quiz, T: 20% Project, W:

- Perusall, R: Discussion,
 5 20 September Ecological consequences of hypoxia
- T: Quiz, T: 20% Project, W: Perusall, R: Discussion,
 6 27 September Physiological effects of ocean acidification
- T: Quiz, T: 20% Project, W: Perusall, R: Discussion,
 7 4 October Ecological effects of ocean acidification
- T: Quiz, T: 20% Project, W: Perusall, R: Discussion,
 8 11 October Physiological responses to thermal stress
- T: Quiz, T: 20% Project, W: Perusall, R: Discussion,
 9 18 October Effects of temperature stress on ecological processes T: Quiz, T: 20% Project,
 W: Perusall, R: Discussion,
 10 25 October Chemical pollutants in the marine environment and physiological impacts
 T: Quiz, T: 20% Project, W: Perusall, R: Discussion, R: Halloween Costume for Extra Credit
 11 1 November Nitrogen stress in the marine environment
- T: Quiz, T: 20% Project, W: Perusall, R: Discussion,
 12 8 November Physiological responses to, and ecological impacts of, UV radiation
 T: Quiz, T: 20% Project, W: Perusall, R: Discussion,
 13 15 November Physiological effects and ecological impacts of underwater noise
 T: Quiz, T: 20% Project, W: Perusall, R: Discussion,
 14 22 November Thanksgiving Managing stressors in the marine environment
 T: Quiz T: 20% Project
 15 29 November T/R: "Best of the Best" presented in class, T/R: End-of-Semester
 Participation, T: Quiz, T: Annotated Collection W: Perusall R: Discussion
 16 6 December T: "Best of the Best" presented in class, T: End-of-Semester Participation

Grading Scheme Grading Scale (%)

- A 100% to 94%
- A- 93.99% to 90%
- B+ 89.99% to 87%
- B 86.99% to 84%
- B- 83.99% to 80%
- C+ 79.99% to 77%
- C 76.99% to 74%
- C- 73.99% to 70%
- D+ 69.99% to 67%
- D 66.99% to 64%
- D- 63.99% to 61%
- E 60.99% to 0%

Instructor(s) Dr. Shirley Baker

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.

jv 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/>.

jv 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.

jv 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.

jv 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.

jv 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.

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

jv 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.

na 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>.

jv 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.

jv 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.

jv 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.

jv 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)

Marine Adaptations – FAS4932

1 Course Overview

Course description:

This course will focus on the responses of species and habitats to stressors encountered in the marine environment. We will first examine the physiological responses to salinity, hypoxia, ocean acidification, thermal stress, pollutants, nitrogen stress, UV radiation, and noise. Then we will explore these physiological stressors as drivers of marine ecological processes in a wide array of marine habitats. Finally, we will discuss societal, economic, and management implications.

- 3 Credits
- Fall 2022
- Face to face, period 7 (1:55-2:45pm)
- Tuesdays NZH 222, Thursdays MCCB 1108

Course Prerequisites: BSC 2010 and 2011 or equivalent; courses in animal physiology and ecology are recommended.

Instructor: Dr. Shirley Baker

- Please use the Canvas message/Inbox feature for fastest response.
- Office hours: In-person or virtual (Zoom) office hours, Tuesdays and Thursdays 1pm
- Phone: 352-273-3627, Text: 352-213-3808

Teaching Assistant: Coleson Wrege

- Please use the Canvas message/Inbox feature for fastest response.
- Office hours: Virtual office hours by appointment.

Textbook(s) and/or readings: There is no required text for the course. Online readings will be provided for each learning topic.

2 Learning Outcomes

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

- Describe the impacts of stressors on the physiology and ecology of marine phyla and ecosystems.
- Compare physiological mechanisms of stress adaptation in a variety of marine phyla.
- Analyze the effects of stressors and physiological responses in shaping ecological patterns observed in marine ecosystems.
- Evaluate primary literature in the discipline.

3 Course Logistics

Students may access assignments, readings, and supporting materials through the course Canvas site as they become available. ***You should plan to attend all classes.***

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)
- Installation of proctoring software may be required and will be provided if so.

Synchronous online sessions may be recorded. By sharing your video, screen, or audio during any synchronous online class sessions, you are consenting to being recorded for the benefit of students who cannot attend live as well as for class review during the current semester. If you have special circumstances or concerns about privacy, it is your responsibility to discuss it with your instructor.

3.1 Description of Assessments & Activities

Introduction: 1 @ 2 points, due in Canvas. Please introduce yourself in the Canvas *Discussion* set up for that purpose. Read and comment on your peer's introductions.

Quizzes: 14 @ 5 points each, due in Canvas on Tuesdays. Quizzes will be administered once a week through Canvas (see schedule). Quizzes will consist of multiple choice, short answer, and short essays. Questions will be "open notes" but will require critical thinking, integration, and application of interdisciplinary concepts. Quizzes will open and close on the dates noted; once a quiz is closed, I will not reopen it.

"Journal Club" We will read and discuss primary literature related to course topics on a weekly basis. "Journal Club" will consist of two parts:

Perusall: 13 @ 5 points each, due online on Wednesdays. I will post scientific papers in Perusall. You will be expected to read the entire paper and annotate content, write comments/questions that elicit responses, and upvote other student comments/questions. This assignment will be due before in-class discussions.

Discussion: 13 @ 2 points each, in class on Thursdays. The papers read in Perusall will be discussed in class. You will be expected to *actively participate in every discussion*. Please bring a laptop or other mobile device to class from which you can access Perusall. Unexcused absences will result in a score of zero.

"Choose Your Own Adventure" Project We will collaborate on a semester-long assignment which will culminate in an annotated collection. You will choose an organism and/or a stressor to focus on. We will discuss topics in class, and I will approve them. There are three parts to this assignment:

"20% Project" Participation: 13 @ 2 points each, in class on Tuesdays. We will spend approximately 20% of our weekly class time (20 minutes) gathering, curating, and sharing resources (articles, websites, videos, etc) related to your "Choose Your Own Adventure" Projects. You are expected to be present, engaged and share your findings with the class. You will maintain your resources and notes in TEAMS, where you can also share with your peers throughout the week. Please bring a laptop or other mobile device from which you

can access TEAMS and the UF libraries.

Annotated Collection: 1 @ 20 points each, due in Canvas in Week 15. During “20% Project” Participation in class and throughout the week in TEAMS, you will be gathering, selecting, and organizing resources related to your topic. You will find more resources than you can use, some may not be relevant, and some may not be scientifically sound. From the resources you have gathered, you will select the best and annotate them – write short descriptions of why these are good resources, what you learned from them, and how they fit with what else you have learned. Your final Word document (with citations and links to resources) will be submitted in Canvas.

The Best of the Best: 1 @ 5 points each, in class in Weeks 15 and 16. In an “elevator pitch” (5 minutes or less, no slides), share the main points of what you learned about your topic in class. Also be prepared to share your favorite resource (however you want to define that - does not have to be the most relevant/scientifically sound).

End-of-Semester Participation: 3 @ 2 points each, in class in Weeks 15 and 16. On each of the three days of class in Weeks 15 and 16, your peers will be presenting their “Best of the Best” and graduate students will be presenting their Scientific Communication Project. You are expected to be present and engaged.

3.2 Grades & Grading Scale

Introduction, 1 @ 2 points	2 points
Quizzes, 14 @ 5 points each	70 points
Perusall, 13 @ 5 points each	65 points
Discussion, 13 @ 2 points each	26 points
20% Project Participation, 13 @ 2 points each	26 points
Annotated Collection, 1 @ 20 points	20 points
Best of the Best, 1 @ 5 points	5 points
End-of-Semester Participation, 3 @ 2 points	6 points
TOTAL	220 points

Grading Scale (%)

A	100% to 94%
A-	93.99% to 90%
B+	89.99% to 87%
B	86.99% to 84%
B-	83.99% to 80%
C+	79.99% to 77%
C	76.99% to 74%
C-	73.99% to 70%
D+	69.99% to 67%
D	66.99% to 64%
D-	63.99% to 61%
E	60.99% to 0%

For information on current UF policies for assigning grade points, see

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

Grad <https://catalog.ufl.edu/graduate/regulations/#text>

4 Learning Content

T = Tuesday, W = Wednesday, R= Thursday			
Week	Date	Topic	Assignment Due
1	25 August	Introduction and expectations	
2	30 August	Effects of salinity as a stressor	T: Quiz T: 20% Project W: Perusall R: Discussion R: Introduction
3	6 September	Effects of changing salinity on ecology	T: Quiz T: 20% Project W: Perusall R: Discussion
4	13 September	Respiratory responses to environmental hypoxia	T: Quiz T: 20% Project W: Perusall R: Discussion
5	20 September	Ecological consequences of hypoxia	T: Quiz T: 20% Project W: Perusall R: Discussion
6	27 September	Physiological effects of ocean acidification	T: Quiz T: 20% Project W: Perusall R: Discussion
7	4 October	Ecological effects of ocean acidification	T: Quiz T: 20% Project W: Perusall R: Discussion
8	11 October	Physiological responses to thermal stress	T: Quiz T: 20% Project W: Perusall R: Discussion
9	18 October	Effects of temperature stress on ecological processes	T: Quiz T: 20% Project W: Perusall R: Discussion
10	25 October	Chemical pollutants in the marine environment and physiological impacts	T: Quiz T: 20% Project W: Perusall R: Discussion R: Halloween Costume Extra Credit

11	1 November	Nitrogen stress in the marine environment	T: Quiz T: 20% Project W: Perusall R: Discussion
12	8 November	Physiological responses to, and ecological impacts of, UV radiation	T: Quiz T: 20% Project W: Perusall R: Discussion
13	15 November	Physiological effects and ecological impacts of underwater noise	T: Quiz T: 20% Project W: Perusall R: Discussion
14	22 November Thanksgiving	Managing stressors in the marine environment	T: Quiz T: 20% Project
15	29 November	T/R: "Best of the Best" presented in class T/R: End-of-Semester Participation	T: Quiz T: Annotated Collection W: Perusall R: Discussion
16	6 December	T: "Best of the Best" presented in class T: End-of-Semester Participation	

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 through Canvas.

5.1 Attendance, Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

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 approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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, <http://www.disability.ufl.edu>

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>
- SFFGS 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, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

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

- <https://distance.ufl.edu/getting-help/>
- <https://registrar.ufl.edu/complaint.html>

Marine Adaptations – FAS6154-6939

1 Course Overview

Course description:

This course will focus on the responses of species and habitats to stressors encountered in the marine environment. We will first examine the physiological responses to salinity, hypoxia, ocean acidification, thermal stress, pollutants, nitrogen stress, UV radiation, and noise. Then we will explore these physiological stressors as drivers of marine ecological processes in a wide array of marine habitats. Finally, we will discuss societal, economic, and management implications.

- 3 Credits
- Fall 2022
- Face to face, period 7 (1:55-2:45pm)
- Tuesdays NZH 222, Thursdays MCCB 1108

Course Prerequisites: BSC 2010 and 2011 or equivalent; courses in animal physiology and ecology are recommended.

Instructor: Dr. Shirley Baker

- Please use the Canvas message/Inbox feature for fastest response.
- Office hours: In-person or virtual (Zoom) office hours, Tuesdays and Thursdays 1pm
- Phone: 352-273-3627, Text: 352-213-3808

Teaching Assistant: Coleson Wrege

- Please use the Canvas message/Inbox feature for fastest response.
- Office hours: Virtual office hours available by appointment.

Textbook(s) and/or readings: There is no required text for the course. Online readings will be provided for each learning topic.

2 Learning Outcomes

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

- Describe the impacts of stressors on the physiology and ecology of marine phyla and ecosystems.
- Compare physiological mechanisms of stress adaptation in a variety of marine phyla.
- Analyze the effects of stressors and physiological responses in shaping ecological patterns observed in marine ecosystems.
- Evaluate primary literature in the discipline.
- Design and create an educational scientific communication product based on an intended audience analysis

3 Course Logistics

Students may access assignments, readings, and supporting materials through the course Canvas site as

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they become available. ***You should plan to attend all classes.***

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)
- Installation of proctoring software may be required and will be provided if so.

Synchronous online sessions may be recorded. By sharing your video, screen, or audio during any synchronous online class sessions, you are consenting to being recorded for the benefit of students who cannot attend live as well as for class review during the current semester. If you have special circumstances or concerns about privacy, it is your responsibility to discuss it with your instructor.

3.1 Description of Assessments & Activities

Introduction: 1 @ 2 points, due in Canvas. Please introduce yourself in the Canvas Discussion set up for that purpose. Read and comment on your peer's introductions.

Quizzes: 14 @ 5 points each, due in Canvas on Tuesdays. Quizzes will be administered once a week through **Canvas** (see schedule). Quizzes will consist of multiple choice, short answer, and short essays. Questions will be "open notes" but will require critical thinking, integration, and application of interdisciplinary concepts. Quizzes will open and close on the dates noted; once a quiz is closed, I will not reopen it.

"Journal Club" We will read and discuss primary literature related to course topics on a weekly basis. Graduate students are expected to serve as role models and mentors. Consider contributing by summarizing and synthesizing the papers, asking follow-up questions, and providing additional background materials about the topic, authors, methods, terms, etc. "Journal Club" will consist of two parts:

Perusall: 13 @ 5 points each, due online on Wednesdays. I will post scientific papers in Perusall. You will be expected to read the entire paper and annotate content, write comments/questions that elicit responses, and upvote other student comments/questions. This assignment will be due before in-class discussions.

Discussion: 13 @ 2 points each, in class on Thursdays. The papers read in Perusall will be discussed in class. You will be expected to *actively participate in every discussion*. Please bring a laptop or other mobile device to class from which you can access Perusall. Unexcused absences will result in a score of zero.

"Choose Your Own Adventure" Project We will collaborate on a semester-long assignment which will culminate in an annotated collection. In addition, **graduate students** will be expected to create a science communication product. You will choose an organism and/or a stressor to focus on. We will discuss topics in class, and I will approve them. For **graduate students**, there are three parts to this assignment:

"20% Project" Participation: 13 @ 2 points each, in class on Tuesdays. We will spend approximately 20% of our weekly class time (20 minutes) gathering, curating, and sharing resources (articles, websites, videos, etc) related to your "Choose Your Own Adventure" Projects. You are expected to be present, engaged and share your findings with the class. You will maintain

your resources and notes in TEAMS, where you can also share with your peers throughout the week. Please bring a laptop or other mobile device from which you can access TEAMS and the UF libraries. *Graduate students* are expected to serve as role models in this endeavor.

Annotated Collection: 1 @ 20 points each, due in Canvas in Week 15. During “20% Project” Participation in class and throughout the week in TEAMS, you will be gathering, selecting, and organizing resources related to your topic. You will find more resources than you can use, some may not be relevant, and some may not be scientifically sound. From the resources you have gathered, you will select the best and annotate them – write short descriptions of why these are good resources, what you learned from them, and how they fit with what else you have learned. Your final Word document (with citations and links to resources) will be submitted in Canvas.

Scientific Communication Product: 1 @ 20 points each, due in Canvas in Week 15. Using your gathered resources, you will develop a brief scientific communication product to convey what you learned about your topic. Your medium could be an infographic, podcast, video, magazine or news article, blog, map, interview, exhibit, comic, lesson plan, etc. We will discuss your medium, intended audience, and grading expectations in class and I will approve them.

End-of-Semester Participation: 3 @ 2 points each, in class in Weeks 15 and 16. On each of the three days of class in Weeks 15 and 16, undergraduate students will be presenting their “Best of the Best” and *graduate students* will be presenting their Scientific Communication Product. You are expected to be present and engaged.

3.2 Grades & Grading Scale

Introduction, 1 @ 2 points	2 points
Quizzes, 14 @ 5 points each	70 points
Perusall, 13 @ 5 points each	65 points
Discussion, 13 @ 2 points each	26 points
20% Project Participation, 13 @ 2 points each	26 points
Annotated Collection, 1 @ 20 points	20 points
Scientific Communication Product	20 points
End-of-Semester Participation, 3 @ 2 points	6 points
TOTAL	209 points

Grading Scale (%)	
A	100% to 94%
A-	93.99% to 90%
B+	89.99% to 87%
B	86.99% to 84%
B-	83.99% to 80%
C+	79.99% to 77%
C	76.99% to 74%
C-	73.99% to 70%
D+	69.99% to 67%
D	66.99% to 64%
D-	63.99% to 61%
E	60.99% to 0%

For information on current UF policies for assigning grade points, see

Ugrad <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>
 Grad <https://catalog.ufl.edu/graduate/regulations/#text>

4 Learning Content

T = Tuesday, W = Wednesday, R= Thursday			
Week	Date	Topic	Assignment Due
1	25 August	Introduction and expectations	
2	30 August	Effects of salinity as a stressor	T: Quiz T: 20% Project W: Perusall R: Discussion R: Introduction
3	6 September	Effects of changing salinity on ecology	T: Quiz T: 20% Project W: Perusall R: Discussion
4	13 September	Respiratory responses to environmental hypoxia	T: Quiz T: 20% Project W: Perusall R: Discussion
5	20 September	Ecological consequences of hypoxia	T: Quiz T: 20% Project W: Perusall R: Discussion
6	27 September	Physiological effects of ocean acidification	T: Quiz T: 20% Project W: Perusall R: Discussion
7	4 October	Ecological effects of ocean acidification	T: Quiz T: 20% Project W: Perusall R: Discussion
8	11 October	Physiological responses to thermal stress	T: Quiz T: 20% Project W: Perusall R: Discussion
9	18 October	Effects of temperature stress on ecological processes	T: Quiz T: 20% Project W: Perusall R: Discussion
10	25 October	Chemical pollutants in the marine environment and physiological impacts	T: Quiz T: 20% Project W: Perusall R: Discussion R: Halloween Costume Extra Credit

11	1 November	Nitrogen stress in the marine environment	T: Quiz T: 20% Project W: Perusall R: Discussion
12	8 November	Physiological responses to, and ecological impacts of, UV radiation	T: Quiz T: 20% Project W: Perusall R: Discussion
13	15 November	Physiological effects and ecological impacts of underwater noise	T: Quiz T: 20% Project W: Perusall R: Discussion
14	22 November Thanksgiving	Managing stressors in the marine environment	T: Quiz T: 20% Project
15	29 November	T/R: Undergraduate “Best of the Best” and Graduate “Scientific Communication Products” presented in class T/R: End-of-Semester Participation	T: Quiz T: Annotated Collection T: Scientific Communication Product W: Perusall R: Discussion
16	6 December	T: Undergraduate “Best of the Best” and Graduate “Scientific Communication Products” T: End-of-Semester Participation	

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 through Canvas.

5.1 Attendance, Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:

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Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues **MUST** be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

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.

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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 approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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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.

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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, <http://www.disability.ufl.edu>

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

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- Learning-support@ufl.edu | (352) 392-HELP - select option 2 | <http://elearning.ufl.edu>
- Library Help Desk support <http://cms.uflib.ufl.edu/ask>
- SFFGS 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, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

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- <https://distance.ufl.edu/getting-help/>
- Original file: FAS6154-F2F_Marine Adaptations_Syllabus 2022.pdf**

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Marine Adaptations Reading List

- Whitefield, A.K., Elliott, M. Basset, A., Blaber, S.J.M., & West, R.J. (2012). Paradigms in estuarine ecology - a review of the Remane diagram with a suggested revised model for estuaries. *Estuarine, Coastal and Shelf Science* 97: 78-90
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- Radecker, N., Pogoreutz, C., Voolstra, C.R., Wiedenmann, J. & Wild, C. (2015). Nitrogen cycling in corals: the key to understanding holobiont functioning? *Trends in Microbiology* 23: 490-497.
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Marine Adaptations – FAS6154

Sections-6940, 6941, 6965

1 Course Overview

Course description:

This course will focus on the responses of species and habitats to stressors encountered in the marine environment. We will first examine the physiological responses to salinity, hypoxia, ocean acidification, thermal stress, pollutants, nitrogen stress, UV radiation, and noise. Then we will explore these physiological stressors as drivers of marine ecological processes in a wide array of marine habitats. Finally, we will discuss societal, economic, and management implications.

- 3 Credits
- Fall 2022
- Format: online, asynchronous
- <http://elearning.ufl.edu/>

Course Prerequisites: BSC 2010 and 2011 or equivalent; courses in animal physiology and ecology are recommended.

Instructor: Dr. Shirley Baker

- Please use the Canvas message/Inbox feature for fastest response.
- Office hours: Virtual (Zoom) office hours, Tuesdays and Thursdays 1pm, or as arranged
- Phone: 352-273-3627, Text: 352-213-3808

Teaching Assistant: Coleson Wrege

- Please use the Canvas message/Inbox feature for fastest response.
- Office hours: Virtual (Zoom) office hours available by appointment.

Textbook(s) and/or readings: There is no required text for the course. Online readings will be provided for each learning topic.

2 Learning Outcomes

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

- Describe the impacts of stressors on the physiology and ecology of marine phyla and ecosystems.
- Compare physiological mechanisms of stress adaptation in a variety of marine phyla.
- Analyze the effects of stressors and physiological responses in shaping ecological patterns observed in marine ecosystems.
- Evaluate primary literature in the discipline.
- Design and create an educational scientific communication product based on an intended audience analysis

3 Course Logistics

Students may access lectures, assignments, readings, and supporting materials through the course Canvas site as they become available.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser.
- Installation of proctoring software may be required and will be provided if so.

Synchronous online sessions may be recorded. By sharing your video, screen, or audio during any synchronous online class sessions, you are consenting to being recorded for the benefit of students who cannot attend live as well as for class review during the current semester. If you have special circumstances or concerns about privacy, it is your responsibility to discuss it with your instructor.

3.1 Description of Assessments & Activities

Introduction: 1 @ 2 points, due in Canvas. Please introduce yourself in the Canvas Discussion set up for that purpose. Read and comment on your peer's introductions.

Quizzes: 14 @ 5 points each, due in Canvas on Tuesdays. Quizzes will be administered once a week through Canvas (see schedule). Quizzes will consist of multiple choice, short answer, and short essays. Questions will be "open notes" but will require critical thinking, integration, and application of interdisciplinary concepts. Quizzes will open and close on the dates noted; once a quiz is closed, I will not reopen it.

"Journal Club" We will read and critique primary literature related to course topics on a weekly basis. Graduate students are expected to serve as role models for undergraduates. Consider contributing by summarizing and synthesizing the papers, asking follow-up questions, and providing additional background materials about the topic, authors, methods, terms, etc. "Journal Club" will consist of:

Perusall: 13 @ 5 points each, due online on Wednesdays. I will post scientific papers in Perusall. You will be expected to read the entire paper and annotate content, write comments/questions that elicit responses, and upvote other student comments/questions.

"Choose Your Own Adventure" Project We will collaborate on a semester-long assignment which will culminate in an annotated collection. In addition, graduate students will be expected to create a science communication product. You will choose an organism and/or a stressor to focus on. Topics must be approved by me. For graduate students, there are three parts to this assignment:

"20% Project" Participation: 13 @ 2 points each, in TEAMS. You should expect to spend approximately 20% of our weekly class time (20 minutes) gathering, curating, and sharing resources (articles, websites, videos, etc) related to your "Choose Your Own Adventure"

Projects. You will maintain your resources and notes in TEAMS, where you can also share with your peers and myself throughout the week. Graduate students are expected to serve as role models in this endeavor.

Annotated Collection: 1 @ 20 points each, due in Canvas in Week 15. The “20% Project” will require that you gather, select, and organize resources related to your topic. You will find more resources than you can use, some may not be relevant, and some may not be scientifically sound. From the resources you have gathered, you will select the best and annotate them – write short descriptions of why these are good resources, what you learned from them, and how they fit with what else you have learned. Your final Word document (with citations and links to resources) will be submitted in Canvas.

Scientific Communication Product: 1 @ 20 points each, due in Canvas in Week 15. Using your gathered resources, you will develop a brief scientific communication product to convey what you learned about your topic to a particular audience. Your medium could be an infographic, podcast, video, magazine or news article, blog, map, interview, exhibit, comic, lesson plan, children’s book, TED talk, demonstration, briefing, training, community presentation, etc. Your medium, intended audience, and grading expectations/rubric must be approved by me.

End-of-Semester Participation: 3 @ 2 points each in Weeks 15 and 16. Scientific Communication Products of both in-class and distance graduate students will be shared with the entire class (TEAMS or Canvas). You are expected to view and comment on peer projects.

3.2 Grades & Grading Scale

Introduction, 1 @ 2 points	2 points
Quizzes, 14 @ 5 points each	70 points
Perusall, 13 @ 5 points each	65 points
20% Project Participation, 13 @ 2 points each	26 points
Annotated Collection, 1 @ 20 points	20 points
Scientific Communication Product	20 points
End-of-Semester Participation, 3 @ 2 points	6 points
TOTAL	209 points

Grading Scale (%)
A 100% to 94%
A- 93.99% to 90%
B+ 89.99% to 87%
B 86.99% to 84%
B- 83.99% to 80%
C+ 79.99% to 77%
C 76.99% to 74%
C- 73.99% to 70%
D+ 69.99% to 67%
D 66.99% to 64%
D- 63.99% to 61%
E 60.99% to 0%

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

4 Learning Content

T = Tuesday, W = Wednesday, R= Thursday			
Week	Date	Topic	Assignment Due
1	25 August	Introduction and expectations	
2	30 August	Effects of salinity as a stressor	T: Quiz T: 20% Project W: Perusall R: Introduction
3	6 September	Effects of changing salinity on ecology	T: Quiz T: 20% Project W: Perusall
4	13 September	Respiratory responses to environmental hypoxia	T: Quiz T: 20% Project W: Perusall
5	20 September	Ecological consequences of hypoxia	T: Quiz T: 20% Project W: Perusall
6	27 September	Physiological effects of ocean acidification	T: Quiz T: 20% Project W: Perusall
7	4 October	Ecological effects of ocean acidification	T: Quiz T: 20% Project W: Perusall
8	11 October	Physiological responses to thermal stress	T: Quiz T: 20% Project W: Perusall
9	18 October	Effects of temperature stress on ecological processes	T: Quiz T: 20% Project W: Perusall
10	25 October	Chemical pollutants in the marine environment and physiological impacts	T: Quiz T: 20% Project W: Perusall R: Halloween Costume Extra Credit
11	1 November	Nitrogen stress in the marine environment	T: Quiz T: 20% Project W: Perusall
12	8 November	Physiological responses to, and ecological impacts of, UV radiation	T: Quiz T: 20% Project W: Perusall
13	15 November	Physiological effects and ecological impacts of underwater noise	T: Quiz T: 20% Project W: Perusall

14	22 November Thanksgiving	Managing stressors in the marine environment	T: Quiz T: 20% Project
15	29 November	End-of-Semester Participation	T: Quiz T: Annotated Collection T: Scientific Communication Product W: Perusall
16	6 December	End-of-Semester Participation	

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 through Canvas.

5.1 Attendance, Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues **MUST** be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

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 approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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

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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, disability.ufl.edu

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:

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Differentiation Summary

FAS4932 Marine Adaptations F2F

FAS6154 Marine Adaptations F2F and online

Student Learning Objectives

FAS4932

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

- Describe the impacts of stressors on the physiology and ecology of marine phyla and ecosystems.
- Compare physiological mechanisms of stress adaptation in a variety of marine phyla.
- Analyze the effects of stressors and physiological responses in shaping ecological patterns observed in marine ecosystems.
- Evaluate primary literature in the discipline.

FAS6154

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- Analyze the effects of stressors and physiological responses in shaping ecological patterns observed in marine ecosystems.
- Evaluate primary literature in the discipline.
- Design and create an educational scientific communication product based on an intended audience analysis

Assignments

FAS4932

Introduction, 1 @ 2 points	2 points
Quizzes, 14 @ 5 points each	70 points
Perusall, 13 @ 5 points each	65 points
Discussion, 13 @ 2 points each	26 points
20% Project Participation, 13 @ 2 points each	26 points
Annotated Collection, 1 @ 20 points	20 points
Best of the Best, 1 @ 5 points	5 points
End-of-Semester Participation, 3 @ 2 points	6 points

TOTAL 220 points

FAS6154

Introduction, 1 @ 2 points	2 points
Quizzes, 14 @ 5 points each	70 points
Perusall, 13 @ 5 points each	65 points
20% Project Participation, 13 @ 2 points each	26 points
Annotated Collection, 1 @ 20 points	20 points
Scientific Communication Product	20 points
End-of-Semester Participation, 3 @ 2 points	6 points
TOTAL	209 points

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- Cole, M., Lindeque, P., Fileman, E., Halsband, C. , & Galloway, T.S. (2015). The impact of polystyrene microplastics on feeding, function and fecundity in the marine copepod *Calanus helgolandicus*. *Environmental Science & Technology* 49: 1130-1137.
- Hooper, M.J., Ankley, G.T., Cristol, D.A., Maryoung, L.A., Noyes, P.D. & Pinkerton, K.E. (2013). Interactions between chemical and climate stressors: a role for mechanistic toxicology in assessing climate change risks. *Environmental Toxicology and Chemistry* 32: 32-48.
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Cover Sheet: Request 17774

FAS 4XXX Aquaculture I

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/18/2022 2:43:45 PM
Updated	10/18/2022 2:51:32 PM
Description of request	Create undergraduate course Aquaculture I

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Fisheries, Aquatic Sciences, and Geomatics 60469000	Terrell Baker III		10/18/2022
Aquaculture_I_Syllabus_2022_FAS_4932.pdf					10/18/2022
Aquaculture_I_Syllabus_2022_FAS_5015.pdf					10/18/2022
Differentiation Summary_Aquaculture I.docx					10/18/2022
CALS CC Checklist_Aquaculture I.pdf					10/18/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/18/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17774

Info

Request: FAS 4XXX Aquaculture I

Description of request: Create undergraduate course Aquaculture I

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 10/18/2022 1:54:52 PM

Form version: 1

Responses

Recommended Prefix FAS

Course Level 4

Course Number XXX

Lab Code None

Category of Instruction Joint (Ugrad/Grad)

Course Title Aquaculture I

Transcript Title Aquaculture I

Degree Type Baccalaureate

Delivery Method(s) Online

Co-Listing Yes

Co-Listing Explanation This advanced undergraduate class is taught alongside the beginning graduate student version of the course FAS 5015. This course is followed by Aquaculture II in the curriculum.

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

Course Type Lecture

Weekly Contact Hours 3

Course Description Provides an overview of the field of aquaculture, including water quality, production systems, nutrition, spawning, and the common fish and invertebrate groups cultured in the United States. The course is entirely web-based, with narrated PowerPoint lectures followed by readings and other resources for each learning topic. Weekly topics are included in asynchronous class discussions.

Prerequisites junior or senior standing

Co-requisites n/a

Rationale and Placement in Curriculum This course and the following course Aquaculture II are electives in the Marine Sciences major and Fisheries and Aquatic Sciences minor. These courses are also available to students in Zoology, Natural Resources and VetMed.

Course Objectives • Describe and apply the basic principles of aquaculture

- Discuss culture methods for common aquaculture species
- Evaluate articles and studies on aquaculture topics
- Communicate effectively and professionally on aquaculture topics

Course Textbook(s) and/or Other Assigned Reading Reading list is uploaded and attached to the request

Weekly Schedule of Topics Semi-Self-Paced Learning Modules

1. Introduction to Aquaculture
2. Fish Biology
3. Water Quality Management
4. Recirculating Aquaculture Systems

5. Farm Ponds
6. Net Pens
7. Nutrition and Feed Manufacture
8. Handling and Hauling
9. Spawning
10. Disease
11. Prawns/Shrimp
12. Catfish
13. Hybrid Striped Bass
14. Tilapia
15. Salmonids
16. Freshwater Ornamentals I
17. Freshwater Ornamentals II
18. Marine Ornamentals
19. Marine Baitfish
20. Clams, Oysters, Scallops
21. Other Important Species

Important Dates:

August 24 – Classes start

August 24-October 7 – Modules 1-9 available (Quizzes and Discussions)

October 8-14 – Mid-term exam available

October 10-December 7 – Modules 10-21 available (Quizzes and Discussions)

December 7 – Classes end

December 8-9 – Reading days

December 10-15 – Final exam available

Grading Scheme Grade Percentage Points

A 90-100 = 410

B+ 85-89.99 387-409

B 80-84.99 364-386

C+ 75-79.99 341-363

C 70-74.99 318-340

D+ 65-69.99 296-317

D 60-64.99 273-295

E < 60 = 272

Instructor(s) Dr. Jeffrey Hill

Dr. Courtney Ohs

Attendance & Make-up Yes

Accommodations Yes

UF Grading Policies for assigning Grade Points Yes

Course Evaluation Policy Yes

Aquaculture I

FAS 4932 (3 credits) Fall, 2022

Course Description

Provides an overview of the field of aquaculture, including water quality, production systems, nutrition, spawning, and the common fish and invertebrate groups cultured in the United States. The course is entirely web-based, with narrated PowerPoint lectures followed by readings and other resources for each learning topic. Weekly topics are included in asynchronous class discussions.

Instructors

Jeffrey E. Hill, Ph.D.
jeffhill@ufl.edu
*UF/IFAS Tropical Aquaculture
Laboratory (TAL)
1408 24th Street SE
Ruskin, FL 33570
813-671-5230 x118*

*Office hours: 2-4 pm Tuesday
afternoons (office, zoom, email,
phone). Available other times by
appointment*

Cortney L. Ohs, Ph.D.
cohs@ufl.edu
*UF/IFAS Indian River Research
and Education Center (IRREC)
2199 South Rock Road
Ft. Pierce, FL 34945
772-468-3922*

*Office hours: 11-12 am
Thursdays. Available other times
by appointment*

Student Learning Outcomes

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

- Describe and apply the basic principles of aquaculture
- Discuss culture methods for common aquaculture species
- Evaluate articles and studies on aquaculture topics
- Communicate effectively and professionally on aquaculture topics

Course Meeting Times

This course is entirely web-based and students may access lectures, readings, and supporting materials at their own pace. Exams are available only on the dates listed in the syllabus.

Required Texts/Readings

There is no required text for the course. Online readings will be provided for each learning topic (list attached). A computer with internet connection and sound speakers are required. The UF Canvas E-Learning site can be accessed at <http://elearning.ufl.edu/> using your Gatorlink account.

Class Format, Policies on Attendance and Make-up Exams

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

The class is in an asynchronous, web-based format. There are no pre-requisites for taking this course. Attendance records will not be maintained. **It is the responsibility of the student to access on-line lectures, readings, quizzes, discussions, and exams and to maintain satisfactory progress in the course.** Two exams are scheduled (see schedule below) and are only available on the days scheduled. **Missed exams cannot be taken after the scheduled date without prior written consent of the instructor except under exceptional circumstances.** Cases of serious illness, bereavement, or activities covered under the Twelve-Day Rule will be considered for make-up. Appropriate documentation must be provided in all cases. Computer or other hardware failures, except failure of the UF E-Learning system, will not excuse students for missing exams. For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352-392-4357 (option 2). A writing or presentation assignment is due. Late assignments will be penalized 10% for the first day and 5% per day thereafter unless prior written arrangements are made or there is an exceptional circumstance.

Assignments

- *Learning modules consisting of one or more lectures (narrated PowerPoint or video), readings, supporting material, discussion, and a quiz are provided online for each topic. Learning modules build on previous modules so you should complete the learning modules in the order presented.*
- *Learning modules covered on the mid-term exam (modules 1-9) are available from the beginning of the semester. Learning modules covered on the final exam (modules 10-21) are available after the mid-term exam. You may access and complete learning modules at your own pace.*
- *Each learning module will have a narrated PowerPoint presentation/video. Each presentation will have numerous photographs or diagrams and will summarize important information for each topic. You will be able to go back and view and listen to each slide as many times as you wish during the initial viewing of the lecture or at a later date.*
- *Each learning module has required readings beyond the lecture. This information will be covered on quizzes and exams. These files will all be made available for you to view on your computer, save, or print. There will also be references to additional (optional) readings if you desire further investigation of a topic.*
- *Most learning modules will have a discussion related to the topic of the module. Students are required to participate in at least 5 discussions in the first half of the*

semester (Modules 1-9) and at least 5 in the second half (Modules 10-21).

Participation can include posting answers or additional, pertinent questions. A robust discussion rather than a few simple answers will make this a more useful enterprise. In particular, students posing questions/thoughts discussed by other students in the class will provide an excellent learning environment. Instructors and a TA will assist in moderating to ensure a fact-based discussion.

- Each learning module will have a quiz. The questions will require the student to go through the PowerPoint presentation, watch any attached videos, and read the assigned readings to answer the questions correctly. These quizzes will contribute to the grade. Quizzes in Modules 1-9 are taken prior to the Mid-term and quizzes in Modules 10-21 are taken prior to the final exam. All quizzes will be taken from your computer.
- Mid-term and final exams: Each exam will consist of 50 questions. Some of the questions will come directly from the lecture quizzes. These exams will consist of multiple choice questions and maybe a few matching questions. The mid-term will consist of questions from the first half of the learning modules. The final exam will consist of questions from the last half of the learning modules. The exams will be taken on your computer. Exams are only available on the days indicated.
- Graduate students and others registered in FAS 5015 have to complete either a review paper or Voicethread presentation on a pre-approved aquaculture topic. Undergraduates and others registered in FAS 4932 do not have this assignment.

Evaluation of Student Learning

45% or 205 points	Quizzes
11% or 50 points	Discussion participation
22% or 100 points	Mid-term exam (Learning modules 1-9)
22% or 100 points	Final exam (Learning modules 10-21)

455 points total

Grading Scale

Grade	Percentage	Points
A	90-100	≥ 410
B+	85-89.99	387-409
B	80-84.99	364-386
C+	75-79.99	341-363
C	70-74.99	318-340
D+	65-69.99	296-317
D	60-64.99	273-295
E	< 60	≤ 272

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Schedule of Class Topics

Learning Modules

1. Introduction to Aquaculture
2. Fish Biology
3. Water Quality Management
4. Recirculating Aquaculture Systems
5. Farm Ponds
6. Net Pens
7. Nutrition and Feed Manufacture
8. Handling and Hauling
9. Spawning
10. Disease
11. Prawns/Shrimp
12. Catfish
13. Hybrid Striped Bass
14. Tilapia
15. Salmonids
16. Freshwater Ornamentals I
17. Freshwater Ornamentals II
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19. Marine Baitfish
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December 7 – Classes end

December 8-9 – Reading days

December 10-15 – Final exam available

Other Information

Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities

In 1995 the UF student body enacted an honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students. <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor 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.

On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.

It is assumed 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.

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.

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>

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.

- *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.*

- *Career Resource Center*, First Floor JWRU, 392-1601, www.career.ufl.edu/

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.

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

Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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/>.

Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

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

- <https://distance.ufl.edu/getting-help/>
- <https://registrar.ufl.edu/complaint.html>

Readings for FAS4932 Aquaculture I

Introduction to Aquaculture

USDA. 2013. 2012 Census of agriculture. U.S. Department of Agriculture National Agricultural Statistics Service.

USDA. 2013. Census of aquaculture. U.S. Department of Agriculture National Agricultural Statistics Service.

FAO. 2014. The state of world fisheries and aquaculture. Food and Agriculture Organization of the United Nations.

Introduction to Fish Biology

FWC. 2016. Fish anatomy. Florida Fish and Wildlife Conservation Commission.

<http://myfwc.com/fishing/freshwater/fishing-tips/anatomy/> .

Water Quality Management

Durborow et al. 1997. Ammonia in Fish Ponds. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 463.

Durborow et al. 1997. Nitrite in Fish Ponds. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no.

Hargreaves and Tucker. 2002. Measuring Dissolved Oxygen Concentration in Aquaculture. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 4601

USDA. Pond Fertilization: Initiating an Algal Bloom. U.S. Department of Agriculture Western Regional Aquaculture Center. Publication no: 104.

Recirculating Aquaculture Systems

ating Aquaculture Tank Production Systems: Management of Recirculating Systems. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 452.

Losordo et al. 1998. Recirculating Aquaculture Tank Production Systems: An Overview of Critical Considerations. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 451.

Losordo et al. 1999. Recirculating Aquaculture Tank Production Systems: A Review of Component Options. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 453.

Farm Ponds

Steeby et al. 1998. Repairing Fish Pond Levees. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 104.

Wellborn and Brunson. 1997. Construction of Levee-Type Ponds for Fish Production. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 101.

Net Pens

Masser. 1997. Cage Culture: Species Suitable for Cage Culture. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 163.

Masser. 1997. Cage Culture: Cage Construction, Placement, and Aeration. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 162.

Feed Manufacture and Nutrition

Robinson et al. 2001. A Practical Guide to Nutrition, Feeds, and Feeding of Catfish. Mississippi State University Division of Agriculture, Forestry, and Veterinary Medicine Office of Agricultural Communications. Bulletin: 1113

Handling and Transporting Fish

- Cole et al. 1999. Shipping Practices in the Ornamental Fish Industry. Center for Tropical and Subtropical Aquaculture. Publication no: 131.
- Jensen and Brunson. 1992. Harvesting Warmwater Fish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 394.
- Jensen. 1990. Transportation of Warmwater Fish: Equipment and Guidelines. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 390.
- Watson et al. 2010. Shipping Fishes in Boxes. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 3903.

Spawning

- Rottman et al. 1991. Introduction to Hormone-Induced Spawning of Fish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 421.
- Rottman et al. 1991. Capturing, Holding Handling, Transporting, Injecting and Brood Fish for Induced Spawning. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 422.
- Rottman et al. 1991. Techniques for Taking and Fertilizing the Spawn of Fish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 426.

Disease

- Camus. 2004. Channel Catfish Virus Disease. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 4702.
- Durborow et al. 1998. Ich (White Spot Disease). U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 476.
- Durborow et al. 1998. Columnaris Disease: A Bacterial Infection Caused by *Flavobacterium columnare*. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 479.
- Hawke et al. 1998. ESC — Enteric Septicemia of Catfish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 477.
- Lane and Morris. 2000. Biology, Prevention, and Effects of Common Grubs (Digenetic trematodes) in Freshwater Fish. U.S. Department of Agriculture, Iowa State University Department of Animal Ecology. Technical Bulletin Series no: 115.

Prawns/Shrimp

- Hargreaves. 2013. Biofloc Production Systems for Aquaculture. Channel Catfish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 4503.

Catfish

- Morris. 1993. Pond Culture of Channel Catfish in the North Central Region. U.S. Department of Agriculture North Central Regional Aquaculture Center. Fact Sheet Series no: 106.
- Ohs. 2004. Channel Catfish (*Ictalurus punctatus*) Production Methods.
- Robinson et al. 1998. Feeding Catfish in Commercial Ponds. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 181.
- Robinson et al. 2001. A Practical Guide to Nutrition, Feeds, and Feeding of Catfish. Mississippi State University Division of Agriculture, Forestry, and Veterinary Medicine Office of Agricultural Communications. Bulletin: 1113
- Tucker. 1991. Water Quantity and Quality Requirements for Channel Catfish Hatcheries. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 461.

Wellborn. Catfish Farmers Handbook. U.S. Department of Agriculture, Mississippi State University Extension Service. Publication 1549.

Hybrid Striped Bass

Dunning. Aquaculture in North Carolina: Hybrid Striped Bass. North Carolina Department of Agricultural and Consumer Services.

Dunning and Daniels. 2001. Hybrid Striped Bass Production in Ponds: Enterprise Budget. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 3000.

Hodson. 1989. Hybrid Striped Bass: Biology and Life History. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 300.

Hodson and Hayes. 1989. Hybrid Striped Bass: Hatchery Phase. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 301.

Hodson and Hayes. 1989. Hybrid Striped Bass: Pond Production of Foodfish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 303.

McGinty and Rakocy. 1989. Cage culture of Tilapia. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 281

Tilapia

Popma and Masser. 1999. Tilapia: Life History and Biology. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 283.

Rakocy, 1989. Tank Culture of Tilapia. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 282.

Rakocy and McGinty. 1989. Pond Culture of Tilapia. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 280.

Salmonids

Hinshaw. 1990. Trout Production: Handling Eggs and Fry. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 220.

Hinshaw. 1999. Trout Production Feeds and Feeding Methods. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 223.

Ladewig and Morat. 1995. Rainbow Trout. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 224.

Crosby et al. 2005. Harvesting Ornamental Fish From Ponds. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-117.

Freshwater Ornamentals I

Cole et al. 1999. Shipping Practices in the Ornamental Fish Industry. Center for Tropical and Subtropical Aquaculture. Publication no: 131.

Crosby et al. 2005. Harvesting Ornamental Fish From Ponds. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-117.

Hill and Yanong. 2002. Freshwater Ornamental Fish Commonly Cultured in Florida. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Circular 54.

Livengood and Chapman. 2007. The Ornamental Fish Trade: An Introduction with Perspectives for Responsible Aquarium Fish Ownership. University of Florida Fisheries and Aquatic Sciences

Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-124.

Watson and Shireman. 1996. Production of Ornamental Aquarium Fish. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-35.

Freshwater Ornamentals II

Cole et al. 1999. A Manual for Commercial Production of the Gourami, *Trichogaster Trichopterus*, A Temporary Paired Spawner. Center for Tropical and Subtropical Aquaculture. Publication no: 135.

Cole and Haring. 1999. Spawning and Production of the Serpae Tetra, *Hyphessobrycon serape*. Center for Tropical and Subtropical Aquaculture. Publication no: 138.

Tamaru et al. 1997. A Manual for Commercial Production of the Tiger Barb, *Capoeta tetrazona*, A Temporary Paired Tank Spawner. Center for Tropical and Subtropical Aquaculture. Publication no: 129.

Tamaru et al. 2001. A Manual for Commercial Production of the Swordtail, *Xiphophorus helleri*. Center for Tropical and Subtropical Aquaculture. Publication no: 128.

Marine Ornamentals

Ellis. Spawning and Early Larval Rearing of Giant Clams (Bivalvia: Tridacnidae). Center for Tropical and Subtropical Aquaculture. Publication no: 130.

Watson and Hill. 2006. Design criteria for recirculating, marine ornamental production systems. *Aquacultural Engineering*. 34:157-162.

Marine Baitfish

Cassiano et al. 2009. Candidate Species for Florida Aquaculture: Pigfish, *Orthopristis chrysoptera*. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-160.

Ohs et al. 2010. Candidate Species for Florida Aquaculture: Pinfish, *Lagodon rhomboides*. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-168.

Wallace and Waters. 2004. Growing Bull Minnows for Bait. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 1200.

Other Important Species

Avery et al. 1998. Crawfish Production: Production Economics, Pond Construction and Water Supply. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 240.

D'abramo et al. 2004. Semi-Intensive Production of Red Swamp Crawfish in Earthen Ponds without Planted Forage. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 2401.

Davis and Locke. 1997. Culture of Largemouth Bass Fingerlings. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 201.

Heidinger. 2000. A White Paper on the Status and Needs of Largemouth Bass Culture in the North Central Region. U.S. Department of Agriculture North Central Regional Aquaculture Center.

Hill and Yanong. 2002. Freshwater Ornamental Fish Commonly Cultured in Florida. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service,

- Institute of Food and Agricultural Sciences. Circular 54.
- Stone and Thomforde. 2001. Common Farm-Raised Baitfish. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 120.
- Tidwell et al. 2000. Species Profile: Largemouth Bass. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 722.
- Watson and Shireman. 1996. Production of Ornamental Aquarium Fish. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-35.

Aquaculture I

FAS 5015 (3 credits) Fall, 2022

Includes Continuing Education (CE) requirements

Course Description

An examination of the field of aquaculture, including water quality, production systems, nutrition, spawning, and the common fish and invertebrate groups cultured in the United States. The course is entirely web-based, with narrated PowerPoint lectures followed by readings and other resources for each learning topic. Weekly topics are included in asynchronous class discussions.

Instructors

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Student Learning Outcomes

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

- Describe and apply the basic principles of aquaculture
- Discuss culture methods for common aquaculture species
- Evaluate articles and studies on aquaculture topics
- Present a topical examination of current developments in aquaculture

Course Meeting Times

This course is entirely web-based and students may access lectures, readings, and supporting materials at their own pace. Exams are available only on the dates listed in the syllabus.

Required Texts/Readings

There is no required text for the course. Online readings will be provided for each learning topic (list attached). A computer with internet connection and sound speakers are required. The UF Canvas E-Learning site can be accessed at <http://elearning.ufl.edu/> using your Gatorlink account.

Class Format, Policies on Attendance and Make-up Exams

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

The class is in an asynchronous, web-based format. There are no pre-requisites for taking this course. Attendance records will not be maintained. **It is the responsibility of the student to access on-line lectures, readings, quizzes, discussions, and exams and to maintain satisfactory progress in the course.** Two exams are scheduled (see schedule below) and are only available on the days scheduled. **Missed exams cannot be taken after the scheduled date without prior written consent of the instructor except under exceptional circumstances.** Cases of serious illness, bereavement, or activities covered under the Twelve-Day Rule will be considered for make-up. Appropriate documentation must be provided in all cases. Computer or other hardware failures, except failure of the UF E-Learning system, will not excuse students for missing exams. For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352-392-4357 (option 2). A writing or presentation assignment is due. Late assignments will be penalized 10% for the first day and 5% per day thereafter unless prior written arrangements are made or there is an exceptional circumstance.

Continuing Education (CE) student requirements

CE students will complete all learning modules (including lectures, readings, discussions, and quizzes). CE students are NOT required to complete mid-term or final exams, or to complete a paper/presentation.

Assignments

- *Learning modules consisting of one or more lectures (narrated PowerPoint or video), readings, supporting material, discussion, and a quiz are provided online for each topic. Learning modules build on previous modules so you should complete the learning modules in the order presented.*
- *Learning modules covered on the mid-term exam (modules 1-9) are available from the beginning of the semester. Learning modules covered on the final exam (modules 10-21) are available after the mid-term exam. You may access and complete learning modules at your own pace. Once a module is completed (quiz taken), you will have access to the next module.*

- *Each learning module will have a narrated PowerPoint presentation/video. Each presentation will have numerous photographs or diagrams and will summarize important information for each topic. You will be able to go back and view and listen to each slide as many times as you wish during the initial viewing of the lecture or at a later date.*
- *Each learning module has required readings beyond the lecture. This information will be covered on quizzes and exams. These files will all be made available for you to view on your computer, save, or print. There will also be references to additional (optional) readings if you desire further investigation of a topic.*
- *Most learning modules will have a discussion related to the topic of the module. Students are required to participate in at least 5 discussions in the first half of the semester (Modules 1-9) and at least 5 in the second half (Modules 10-21). Participation can include posting answers or additional, pertinent questions. A robust discussion rather than a few simple answers will make this a more useful enterprise. In particular, students posing questions/thoughts discussed by other students in the class will provide an excellent learning environment. Instructors and a TA will assist in moderating to ensure a fact-based discussion.*
- *Each learning module will have a quiz. The questions will require the student to go through the PowerPoint presentation, watch any attached videos, and read the assigned readings to answer the questions correctly. These quizzes will contribute to the grade. Quizzes in Modules 1-9 are taken prior to the Mid-term and quizzes in Modules 10-21 are taken prior to the final exam. All quizzes will be taken from your computer.*
- *Mid-term and final exams: Each exam will consist of 50 questions. Some of the questions will come directly from the lecture quizzes. These exams will consist of multiple choice questions and maybe a few matching questions. There may be a discussion/long-answer question. The mid-term will consist of questions from the first half of the learning modules. The final exam will consist of questions from the last half of the learning modules. The exams will be taken on your computer. Exams are only available on the days indicated.*
- *Students will complete either a review paper or Voicethread presentation on a pre-approved aquaculture topic. The review paper or Voicethread presentation should cover all of the following: species, stages of culture, specific culture methods for each stage, system requirements, potential commercial application, current or potential markets. The review paper should be between 8 and 10 pages of text, have complete references, and include appropriate charts, photos, or tables. One or more examples will be provided. If you choose a Voicethread presentation, you will create and narrate a 20-minute PowerPoint presentation and load it on the Voicethread website for all students to view and comment on it, all of the required information for the review paper will also be included in the Voicethread presentation. The review paper or Voicethread presentation will be equivalent to an exam in points.*

Evaluation of Student Learning

30% or 150 points	Quizzes (total of 205 points available—percentage earned placed on 150-point scale)
10% or 50 points	Discussion participation
20% or 100 points	Mid-term exam (Learning modules 1-9)
20% or 100 points	Writing or Voicethread assignment
20% or 100 points	Final exam (Learning modules 10-21)
500 points total	

Grading Scale

Grade	Percentage	Points
A	90-100	≥ 450
B+	85-89.99	425-449
B	80-84.99	400-424
C+	75-79.99	375-399
C	70-74.99	350-374
D+	65-69.99	325-349
D	60-64.99	300-324
E	< 60	≤ 299

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Schedule of Class Topics

Learning Modules

1. Introduction to Aquaculture
2. Fish Biology
3. Water Quality Management
4. Recirculating Aquaculture Systems
5. Farm Ponds
6. Net Pens
7. Nutrition and Feed Manufacture
8. Handling and Hauling
9. Spawning
10. Disease
11. Prawns/Shrimp
12. Catfish
13. Hybrid Striped Bass
14. Tilapia
15. Salmonids
16. Freshwater Ornamentals I
17. Freshwater Ornamentals II
18. Marine Ornamentals
19. Marine Baitfish
20. Clams, Oysters, Scallops
21. Other Important Species

Important Dates:

August 24 – Classes start

August 24-October 7 – Modules 1-9 available (Quizzes and Discussions)

October 8-14 – Mid-term exam available

October 10-December 7 – Modules 10-21 available (Quizzes and Discussions)

November 18 – Writing/Voicethread assignment due

December 7 – Classes end

December 8-9 – Reading days

December 10-15 – Final exam available

Other Information & Policies

Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities

In 1995 the UF student body enacted an honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students. <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor 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.

On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.

It is assumed 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.

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.

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>

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.

- *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.*
- *Career Resource Center, First Floor JWRU, 392-1601, www.career.ufl.edu/*

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.

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

Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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.a.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.a.ufl.edu/public-results/>.

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Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

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

- <https://distance.ufl.edu/getting-help/>
- <https://registrar.ufl.edu/complaint.html>

Readings for FAS5015 Aquaculture I

Introduction to Aquaculture

USDA. 2013. 2012 Census of agriculture. U.S. Department of Agriculture National Agricultural Statistics Service.

USDA. 2013. Census of aquaculture. U.S. Department of Agriculture National Agricultural Statistics Service.

FAO. 2014. The state of world fisheries and aquaculture. Food and Agriculture Organization of the United Nations.

FAO. 2015. FAO Global Aquaculture Production database updated to 2013—summary information. Food and Agriculture Organization of the United Nations.

Introduction to Fish Biology

FWC. 2016. Fish anatomy. Florida Fish and Wildlife Conservation Commission.

<http://myfwc.com/fishing/freshwater/fishing-tips/anatomy/> .

Water Quality Management

Durborow et al. 1997. Ammonia in Fish Ponds. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 463.

Durborow et al. 1997. Nitrite in Fish Ponds. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no.

Hargreaves and Brunson. 1996. Carbon Dioxide in Fish Ponds. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 468.

Hargreaves and Tucker. 2002. Measuring Dissolved Oxygen Concentration in Aquaculture. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 4601

Morgan and Brunson. 2002. Toxicities of Agricultural Pesticides to Selected Aquatic Organisms.

U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 4600.
Swann. A Fish Farmer's Guide to Understanding Water Quality. Illinois-Indiana Seagrant Program
Aquaculture Extension. Fact sheet AS-503.
USDA. Pond Fertilization: Initiating an Algal Bloom. U.S. Department of Agriculture Western
Regional Aquaculture Center. Publication no: 104.

Recirculating Aquaculture Systems

Dunning et al. 1998. The Economics of Recirculating Tank Systems: A Spreadsheet for Individual
Analysis. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication
no: 456.
Masser et al. 1999. Recirculating Aquaculture Tank Production Systems: Management of
Recirculating Systems. U.S. Department of Agriculture Southern Regional Aquaculture
Center. Publication no: 452.
Losordo et al. 1998. Recirculating Aquaculture Tank Production Systems: An Overview of Critical
Considerations. U.S. Department of Agriculture Southern Regional Aquaculture Center.
Publication no: 451.
Losordo et al. 1999. Recirculating Aquaculture Tank Production Systems: A Review of Component
Options. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication
no: 453.
Swann. Potential of Recirculating Aquaculture Systems in the Midwest. U.S. Department of
Agriculture Illinois-Indiana Seagrant Program Aquaculture Extension.

Farm Ponds

Steeby et al. 1998. Repairing Fish Pond Levees. U.S. Department of Agriculture Southern Regional
Aquaculture Center. Publication no: 104.
Wellborn. 1988. Site Selection of Levee-Type Fish Production Ponds. U.S. Department of
Agriculture Southern Regional Aquaculture Center. Publication no: 100.
Wellborn and Brunson. 1997. Construction of Levee-Type Ponds for Fish Production. U.S.
Department of Agriculture Southern Regional Aquaculture Center. Publication no: 101.

Net Pens

Masser. 1997. Cage Culture: Species Suitable for Cage Culture. U.S. Department of Agriculture
Southern Regional Aquaculture Center. Publication no: 163.
Masser. 1997. Cage Culture: Cage Construction, Placement, and Aeration. U.S. Department of
Agriculture Southern Regional Aquaculture Center. Publication no: 162.
Swann and Selock. 1994. Cage Culture of Fish in the North Central Region. U.S. Department of
Agriculture Illinois-Indiana Seagrant Program. Technical Bulletin no: 110.

Feed Manufacture and Nutrition

Robinson and Li. 1999. Catfish Protein Nutrition. Mississippi State University Division of
Agriculture, Forestry, and Veterinary Medicine Office of Agricultural Communications.
Bulletin: 1090
Robinson et al. 2001. A Practical Guide to Nutrition, Feeds, and Feeding of Catfish. Mississippi State
University Division of Agriculture, Forestry, and Veterinary Medicine Office of Agricultural
Communications. Bulletin: 1113

Handling and Transporting Fish

- Cole et al. 1999. Shipping Practices in the Ornamental Fish Industry. Center for Tropical and Subtropical Aquaculture. Publication no: 131.
- Jensen and Brunson. 1992. Harvesting Warmwater Fish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 394.
- Jensen. 1990. Transportation of Warmwater Fish: Equipment and Guidelines. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 390.
- Jensen. 1990. Transportation of Warmwater Fish: Procedures and Loading Rates. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 392.
- Jensen. 1990. Transportation of Warmwater Fish: Loading Rates and Tips by Species. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 393.
- Watson et al. 2010. Shipping Fishes in Boxes. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 3903.

Spawning

- Chapman and Eenennaam. 2007. Sturgeon Aquaculture - Specialized Techniques Determining the Stage of Sexual Maturity in Female Sturgeon for Artificial Spawning: The Egg Polarization Index or PI. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA153.
- Rottman et al. 1991. Introduction to Hormone-Induced Spawning of Fish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 421.
- Rottman et al. 1991. Capturing, Holding Handling, Transporting, Injecting and Brood Fish for Induced Spawning. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 422.
- Rottman et al. 1991. Determining Sexual Maturity of Broodstock for Induced Spawning of Fish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 423.
- Rottman et al. 1991. Hormonal Control of Reproduction in Fish for Induced Spawning. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 424.
- Rottman et al. 1991. Hormone Preparation, Dosage Calculation, and Injection Techniques for Induced Spawning of Fish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 425.
- Rottman et al. 1991. Techniques for Taking and Fertilizing the Spawn of Fish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 426.

Disease

- Camus. 2004. Channel Catfish Virus Disease. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 4702.
- Camus et al. 1998. Aeromonas Bacterial Infections — Motile Aeromonad Septicemia. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 478.
- Durborow. 2003. Protozoan Parasites. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 4701.
- Durborow et al. 1998 Ich (White Spot Disease). U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 476.
- Durborow et al. 1998. Columnaris Disease: A Bacterial Infection Caused by Flavobacterium columnare. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 479.
- Hawke et al. 1998. ESC — Enteric Septicemia of Catfish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 477.
- Mitchell et al. 1998. Proliferative Gill Disease (Hamburger Gill Disease). U.S. Department of

Agriculture Southern Regional Aquaculture Center. Publication no: 475.
Lane and Morris. 2000. Biology, Prevention, and Effects of Common Grubs (Digenetic trematodes) in Freshwater Fish. U.S. Department of Agriculture, Iowa State University Department of Animal Ecology. Technical Bulletin Series no: 115.
Swan and White. Diagnosis and Treatment of “Aeromonas hydrophila” Infection of Fish. U.S. Department of Agriculture Illinois-Indiana Sea Grant Program Aquaculture Extension. Fact Sheet AS-461.

Prawns/Shrimp

Ebeling and Rishel. Performance Evaluation of Geotextile Tubes. Aquaculture Systems Technologies, The Conservation Fund The Conservation Fund Freshwater Institute.
Hargreaves. 2013. Biofloc Production Systems for Aquaculture. Channel Catfish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 4503.

Catfish

- Morris. 1993. Pond Culture of Channel Catfish in the North Central Region. U.S. Department of Agriculture North Central Regional Aquaculture Center. Fact Sheet Series no: 106.
- Ohs. 2004. Channel Catfish (*Ictalurus punctatus*) Production Methods.
- Ratliff. 2003. Scientists Tackle “off flavor” Catfish. Mississippi State University.
- Robinson et al. 1998. Feeding Catfish in Commercial Ponds. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 181.
- Robinson et al. 2001. A Practical Guide to Nutrition, Feeds, and Feeding of Catfish. Mississippi State University Division of Agriculture, Forestry, and Veterinary Medicine Office of Agricultural Communications. Bulletin: 1113
- Silva et al. 2001. Processing Channel Catfish. . U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 183.
- Tucker. 1991. Water Quantity and Quality Requirements for Channel Catfish Hatcheries. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 461.
- Tucker and Ploeg. 1999. Managing Off-Flavor Problems in Pond-Raised Catfish. . U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 192.
- Wellborn. Catfish Farmers Handbook. U.S. Department of Agriculture, Mississippi State University Extension Service. Publication 1549.

Hybrid Striped Bass

- Dunning. Aquaculture in North Carolina: Hybrid Striped Bass. North Carolina Department of Agricultural and Consumer Services.
- Dunning and Daniels. 2001. Hybrid Striped Bass Production in Ponds: Enterprise Budget. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 3000.
- Hodson. 1989. Hybrid Striped Bass: Biology and Life History. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 300.
- Hodson and Hayes. 1989. Hybrid Striped Bass: Hatchery Phase. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 301.
- Hodson and Hayes. 1989. Hybrid Striped Bass: Pond Production of Foodfish. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 303.
- Kohler. 2004. A White Paper on the Status and Needs of Hybrid Striped Bass Aquaculture in the North Central Region. U.S. Department of Agriculture North Central Regional Aquaculture Center.
- Morris et al. 1999. Pond Culture of Hybrid Striped Bass in the North Central Region. U.S. Department of Agriculture North Central Regional Aquaculture Center. Fact Sheet Series no: 107.
- Ludwig. 2004. Hybrid Striped Bass: Fingerling Production in Ponds. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 302.
- McGinty and Rakocy. 1989. Cage culture of Tilapia. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 281

Tilapia

- Popma and Masser. 1999. Tilapia: Life History and Biology. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 283.
- Rakocy, 1989. Tank Culture of Tilapia. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 282.
- Rakocy and McGinty. 1989. Pond Culture of Tilapia. U.S. Department of Agriculture Southern Regional Aquaculture Center. Publication no: 280.

Salmonids

- Cain and Garling. Trout Culture in the North Central Region. U.S. Department of Agriculture North Regional Aquaculture Center.
- Hinshaw. 1990. Trout Production: Handling Eggs and Fry. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 220.
- Hinshaw. 1999. Trout Production Feeds and Feeding Methods. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 223.
- Hinshaw et al. 1990. Budgets for Trout: Production Costs and Returns for Trout Farming in the South. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 221.
- Ladewig and Morat. 1995. Rainbow Trout. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 224.
- Crosby et al. 2005. Harvesting Ornamental Fish From Ponds. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-117.

Freshwater Ornamentals I

- Cole et al. 1999. Shipping Practices in the Ornamental Fish Industry. Center for Tropical and Subtropical Aquaculture. Publication no: 131.
- Crosby et al. 2005. Harvesting Ornamental Fish From Ponds. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-117.
- Crosby et al. 2005. Grading Ornamental Fish. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-118.
- Crosby et al. 2005. On-Farm Transport of Ornamental Fish. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-119.
- Crosby et al. 2005. Preparation of Ornamental Fish for Shipping. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-120.
- Hill and Yanong. 2002. Freshwater Ornamental Fish Commonly Cultured in Florida. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Circular 54.
- Livengood and Chapman. 2007. The Ornamental Fish Trade: An Introduction with Perspectives for Responsible Aquarium Fish Ownership. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-124.
- Watson and Shireman. 1996. Production of Ornamental Aquarium Fish. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-35.

Freshwater Ornamentals II

- Bailey and Cole. 1999. Spawning the tinfoil barb, *Barbodes schwanenfeldi* in Hawaii. Center for Tropical and Subtropical Aquaculture. Publication no: 136.
- Cole et al. 1999. A Manual for Commercial Production of the Gourami, *Trichogaster Trichopterus*, A Temporary Paired Spawner. Center for Tropical and Subtropical Aquaculture. Publication no: 135.

- Cole et al. 1999. Spawning and Production of the Lemon Tetra *Hyphessobrycon pulchripinnis*. Center for Tropical and Subtropical Aquaculture. Publication no: 142.
- Cole and Haring. 1999. Spawning and Production of the Serpae Tetra, *Hyphessobrycon serape*. Center for Tropical and Subtropical Aquaculture. Publication no: 138.
- Tamaru et al. 1997. A Manual for Commercial Production of the Tiger Barb, *Capoeta tetrazona*, A Temporary Paired Tank Spawner. Center for Tropical and Subtropical Aquaculture. Publication no: 129.
- Tamaru et al. 2001. A Manual for Commercial Production of the Swordtail, *Xiphophorus helleri*. Center for Tropical and Subtropical Aquaculture. Publication no: 128.

Marine Ornamentals

- Ellis. Spawning and Early Larval Rearing of Giant Clams (Bivalvia: Tridacnidae). Center for Tropical and Subtropical Aquaculture. Publication no: 130.
- Palmtag and Holt. 2001. Captive Rearing of Fire Shrimp (*Lysemata debelius*). Sea Grant Office, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, Texas A and M University.
- Watson and Hill. 2006. Design criteria for recirculating, marine ornamental production systems. *Aquacultural Engineering*. 34:157-162.

Marine Baitfish

- Cassiano et al. 2009. Candidate Species for Florida Aquaculture: Pigfish, *Orthopristis chrysoptera*. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-160.
- Creswell et al. 2007. Candidate Species for Florida Aquaculture: Atlantic Croaker, *Micropogonias undulates*. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-148.
- Ohs et al. 2010. Candidate Species for Florida Aquaculture: Pinfish, *Lagodon rhomboides*. University of Florida Fisheries and Aquatic Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences. Document FA-168.
- Wallace and Waters. 2004. Growing Bull Minnows for Bait. U.S. Department of Aquaculture Southern Regional Aquaculture Center. Publication no: 1200.

Other Important Species

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CALS Curriculum Committee

Submission Checklist

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Differentiation Summary Aquaculture I

Student Learning Objectives

FAS4932

- Describe and apply the basic principles of aquaculture
- Discuss culture methods for common aquaculture species
- Evaluate articles and studies on aquaculture topics
- Communicate effectively and professionally on aquaculture topics

FAS 5015

- Describe and apply the basic principles of aquaculture
- Discuss culture methods for common aquaculture species
- Evaluate articles and studies on aquaculture topics
- Present a topical examination of current developments in aquaculture

Assignments/Weighting

FAS4932

45% or 205 points	Quizzes
11% or 50 points	Discussion participation
22% or 100 points	Mid-term exam (Learning modules 1-9)
22% or 100 points	Final exam (Learning modules 10-21)
455 points total	

FAS 5015

30% or 150 points	Quizzes (total of 205 points available—% earned placed on 150-point scale)
10% or 50 points	Discussion participation
20% or 100 points	Mid-term exam (Learning modules 1-9)
20% or 100 points	Writing or Voicethread assignment
20% or 100 points	Final exam (Learning modules 10-21)
500 points total	

Grading Scale

FAS 4932

Grade	Percentage	Points
A	90-100	≥ 410
B+	85-89.99	387-409
B	80-84.99	364-386
C+	75-79.99	341-363
C	70-74.99	318-340
D+	65-69.99	296-317
D	60-64.99	273-295
E	< 60	≤ 272

FAS 5015

Grade	Percentage	Points
A	90-100	≥ 450
B+	85-89.99	425-449
B	80-84.99	400-424
C+	75-79.99	375-399
C	70-74.99	350-374
D+	65-69.99	325-349
D	60-64.99	300-324
E	< 60	≤ 299

Readings

See Reading List

Cover Sheet: Request 17835

FAS 4xxx Scuba Leadership II: Research Divemaster

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/27/2022 1:24:01 PM
Updated	11/14/2022 10:43:26 AM
Description of request	Create a new course Scuba Leadership II: Research Divemaster as the final course in a NAUI Scuba certification progression.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Fisheries, Aquatic Sciences, and Geomatics 60469000	Terrell Baker III		10/27/2022
CALS CC Checklist_SL2_Research Divemaster.pdf					10/27/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/27/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17835

Info

Request: FAS 4xxx Scuba Leadership II: Research Divemaster

Description of request: Create a new course Scuba Leadership II: Research Divemaster as the final course in a NAUI Scuba certification progression.

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 10/27/2022 1:11:43 PM

Form version: 1

Responses

Recommended Prefix FAS

Course Level 4

Course Number XXX

Lab Code C

Category of Instruction Advanced

Course Title Scuba Leadership II: Research Divemaster

Transcript Title Scuba LII: Research Divemaster

Degree Type Baccalaureate

Delivery Method(s) On-Campus

Co-Listing No

Effective Term Earliest Available

Effective Year Earliest Available

Rotating Topic? No

Repeatable Credit? No

Amount of Credit 3

S/U Only? No

Contact Type Regularly Scheduled

Weekly Contact Hours 3

Course Description This 15-week course builds upon the leadership level training of Leadership 1 in accordance with National Association of Underwater Instructors (NAUI) Divemaster standards. This includes gear repair and maintenance, planning and leading dives, conducting discover scuba sessions, and assisting with instruction. This course is a prerequisite for Instructor training.

Prerequisites Master Scuba Diver & Scuba Leadership I

Co-requisites n/a

Rationale and Placement in Curriculum This course is the final course of the NAUI Scuba certification training progression that is of importance to both undergraduate and graduate students in Fisheries and Aquatic Sciences, Wildlife Ecology, Marine Science as well as certificate students and the Diving Science and Safety Program (DSSP) at UF.

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

- apply and manage knowledge of the science and technology applicable to SCUBA and related topics.
- plan and conduct basic oral and in-water presentations.
- safely conduct a NAUI try scuba, refresher scuba, and skin diver session.
- respond to instructor guidance in leading certified and uncertified divers.
- plan and conduct guided dives of certified divers.
- Upon the discretion of the instructor, receive NAUI Divemaster credentials.

Course Textbook(s) and/or Other Assigned Reading 1. NOAA Dive Manual, 5th or 6th edition
2. NAUI Master Diver Textbook

3. NAUI Air Table

4. NAUI Leadership Textbook

Weekly Schedule of Topics Lectures: Pool Sessions:

- Introduction & Leadership Dive Locker Procedures
- Professionalism in Diving Equipment maintenance
- Student Feedback & Rescue Prep Rescue Review & Skill Demo
- NAUI Orientation Teaching Skills – Skin Diving
- Teaching Courses / Programs Teaching Skills – Reg Recoveries
- Risk Management Teaching Skills – Air Shares
- Midterm review Emergency Procedures
- Business of Diving Try Scuba
- Teaching Theory Refresher Scuba
- Teaching Theory cont. Equipment maintenance cont.
- NAUI Rubric Skin Diver
- Divemaster Duties Skill Evaluations
- Classroom Presentations 1 Skill Evaluations
- Classroom Presentations 2 Weather make up day
- Classroom Presentations 3

Grading Scheme Quizzes/ HW 100 Points

Presentations 400 Points

Exam 200 Points

Attendance / Safety 300 Points

Total possible points 1000

Unexcused Lecture Absence -50 Points

Unexcused Pool Absence -50 Points

Unexcused Pool Tardiness -25 Points

Instructor(s) Doug Marcinek, Mike Kutyna, Kille Cahill-Patray

Attendance & Make-up Yes

Accommodations Yes

UF Grading Policies for assigning Grade Points Yes

Course Evaluation Policy Yes

CALS Curriculum Committee

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SCUBA Leadership I

FAS3xxx (1 credits) Fall 2022

Course Description

This four-week course provides high-level recreational SCUBA training as well as introduces leadership level training in accordance with National Association of Underwater Instructors (NAUI) Master Diver standards. This course is taught consecutively following Master Diver and is a prerequisite for Scuba Leadership II: Research Divemaster and Instructor training.

Instructors and Qualifications

*Doug Marcinek Course Coordinator marcinek@ufl.edu 352.273.3626
Available by appointment NAUI Course Director IANTD Technical Instructor*

*Mike Kutyna Lecturer, Pool Instructor Contact via Canvas grommit@ufl.edu
Office Hours: Online by appointment*

*Katelyn Ludington Instructor
Contact via Canvas*

Prerequisites: PEN2138C or instructor approval (see qualifications section)

Student Learning Outcomes

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

- plan and conduct basic oral and in-water presentations.
- respond to instructor guidance in leading certified and uncertified divers.
- Upon the discretion of the instructor, receive NAUI and Training Assistant credentials.

Course Meeting Times and Section Instructors

<u>Lecture</u> Mike Kutyna, Katelyn Ludington	Online Lecture 5:30pm-7:30pm	Monday
<u>Lab</u> Mike Kutyna, Katelyn Ludington	Florida Pool 7:20pm-9:10pm	Thursday

Required Texts/Readings/ Equipment

1. NOAA Dive Manual, 5th or 6th edition
2. NAUI Training Assistant e-Learning (Provided by the required course fee)

3. NAUI Air Table
4. Scuba quality mask, snorkel, fins, and neoprene dive booties, timing device, dive slate w/ pencil, gear bag.
5. Provide your own wetsuit for checkout dives. Either rental or purchase.

Recommended Reading/ Equipment

1. A nitrox capable dive computer with a planning function
2. A BCD, Regulator, wetsuit, and dive computer

Class Format and Policies

FAS4932 is an intensive lecture/lab/certification course that will result in internationally accepted SCUBA certification. Due to the intrinsic risks associated with SCUBA and the rapid pace of skill and knowledge development it is essential that students attend every lecture and lab session.

Qualifications for Participation in FAS4932 Scuba Leadership I

- Age. Minimum is 18 years by the water phase of the course.
- Signed the NAUI Express Assumption of Risk and Indemnity Agreement, Release of Liability and Waiver of Claims
- Certified as a NAUI Scuba Diver or the equivalent.
- Certified as a NAUI Rescue Scuba Diver or the equivalent.
- Certified as a NAUI Nitrox Diver or equivalent.
- Certified as a NAUI First Aid for Dive Professionals or equivalent.
- A minimum of 20 logged open water scuba dives with a minimum of 10 hours bottom time. Dives shall be varied in environment, depth, and activities.

Course Fee

- \$875.00 due on September 29th.
- \$100.00 for each make-up dive if you are unable to attend any mandatory regularly scheduled dives

Due: 29 September 2020

An additional **\$50 per week late fee** will be assessed for any fees paid after this date. Failure to pay ALL course fees will result in non-certification and student records being flagged.

Payment Information:

Payments will be made online following the link to DoCE in Canvas. Make sure that you pay for the proper course- **FAS4932 Leadership 1**. VISA, Mastercard, and American Express are accepted. Bright Futures will not cover this fee.

Included in the fee:

- NAUI Active registered instructors for all water activity

- NAUI student records & e-learning for Training Assistant
- NAUI Certification fees and digital certification card
- Entrance fees for certification dives
- SCUBA equipment used for the lab and open water dives:
 - Regulator
 - Buoyancy Control Device
 - Air tanks
 - Underwater Compass

Equipment Notes:

- You must provide your own wetsuit for the checkout dives. You may either purchase your own wetsuit or rent it from one of the local dive shops.
- You will be provided an Equipment Standards of Care form which you will be required to sign. This form outlines the care we expect you to take when using the University of Florida SCUBA equipment as well as fees assessed for required repair or replacement of equipment resulting from misuse or neglect.

Lecture

Lecture will be held on Mondays from 5:30pm-7:05pm via online lecture. Students are expected to complete any readings and homework prior to lecture. Attendance is mandatory and will be taken through various methods. Known excusable conflicts must be worked out with your instructor prior to the absence. Quizzes will cover lecture and reading material. There will be no make-ups for quizzes. Quizzes missed for a valid UF excuse will be dropped. Homework turned in late will receive a zero grade and must be turned in or will result in non-certification.

Lab

Pool sessions will be held on Thursdays at Florida Pool. It is important that students attend the pool section for which they registered as allowable student to instructor ratios are set by the certification agency. Attendance is mandatory. Known excusable conflicts must be worked out with your instructor prior to the absence and when possible a make-up session should be scheduled in the same week.

Certification as Training Assistant

In order to be eligible for certifications students must:

- a. Attend all lecture and pool sessions.
- b. Score $\geq 80\%$ on the final examination and be coached up to 100% to the satisfaction of your instructor.
- c. Be coached up to 100% on the decompression portions of all quizzes and exams to the satisfaction of your instructor.
- d. Complete the class with a minimum overall grade of 70%.
- e. Score $\geq 80\%$ on all skill evaluations.
- f. Pay all fees.
- g. Successfully complete all open water proficiency dives.
 - a. Emergency procedures / Rescue
 - b. Underwater navigation
 - c. Escort dive
- h. Successfully pass required pool skills.
 - a. Scuba doff & don

- b. Buddy gear exchange
- c. 20 minute water tread
- d. Buddy rescue tow
- i. Complete NAUI e-learning materials for Training Assistant.
- j. Be recommended by your instructor as a safe and competent diver.

Lecture/Pool Topics

Lectures:

- NAUI Rubric
- Teaching Theory
- Leading Dives
- Class Presentations

Pool Sessions:

- Dive Locker Procedures
- Teaching Skills
- Escorting Divers / Assisting Divers in Distress
- Skills Evaluation 3

Evaluation of Student Learning

Quizzes/ HW	200	Points
Presentations	100	Points
Exam	200	Points
Attendance / Safety	500	Points
Unexcused Lecture Absence	-50	Points
Unexcused Pool Absence	-50	Points
Unexcused Pool Tardiness	-25	Points

Attendance / Safety Points are points that can be deducted from a student’s grade for repeated unsafe behavior or repeated abuse or misuse of University of Florida equipment, be it intentional or not.

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

A student may check their point standing at any point during the semester with their pool instructor or via e-Learning.

Grading Scale

Points:	900-1000	870-899	800-869	770-799	700-769	670-699	600-669	<600
Grade:	A	B+	B	C+	C	D+	D	E

Additional information on grading may be found at:

<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Additional References

UF SCUBA Web Site	http://sfrc.ufl.edu/class/scuba
UF Diving Science and Safety Program Web Site	www.ehs.ufl.edu/Dive
NAUI Web Site	www.naui.org
IANTD Web Site	www.iantd.com
Diver's Alert Web Site	www.dan.org

Other Information

Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities

In 1995 the UF student body enacted an [honor code](#) and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students.

<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor 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.

On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.

(Source: 2010-2011 Undergraduate Catalog)

It is assumed 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.

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.

Accommodations for students with disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Click here to get started with the Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Online Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. 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/>

Campus Resources

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or [visit the U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

University Police Department: [Visit UF Police Department website](#) 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; [Visit the UF Health Emergency Room and Trauma Center website](#).

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, [visit the GatorWell website](#) or call 352-273-4450.

Academic Resources

E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints The first point of contact for student complaints should be the Academic Coordinator for your program. For issues that remain unresolved review [the Student Complaint Policy](#).

Cover Sheet: Request 17837

4xxxC Field Ecology of Aquatic Organisms

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/27/2022 2:14:48 PM
Updated	11/7/2022 9:37:06 AM
Description of request	Create a new course number for the advanced undergraduate version of a course co-taught with FAS5276C Field Ecology of Aquatic Organisms

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Fisheries, Aquatic Sciences, and Geomatics 60469000	Terrell Baker III		10/27/2022
CALS CC Checklist_Aquatic Org.pdf					10/27/2022
FAS4932-field-ecology-aquatic-organisms.pdf					10/27/2022
FAS5276C-field-ecology-aquatic-organisms.pdf					10/27/2022
Field Ecology of Aquatic Organisms Reading List.docx					10/27/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/27/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17837

Info

Request: 4xxxC Field Ecology of Aquatic Organisms

Description of request: Create a new course number for the advanced undergraduate version of a course co-taught with FAS5276C Field Ecology of Aquatic Organisms

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 10/27/2022 1:57:17 PM

Form version: 1

Responses

Recommended Prefix FAS

Course Level 4

Course Number XXX

Lab Code C

Category of Instruction Advanced

Course Title Field Ecology of Aquatic Organisms

Transcript Title Field Ecol Aquatic Organisms

Degree Type Baccalaureate

Delivery Method(s) On-Campus

Co-Listing Yes

Co-Listing Explanation This advanced undergraduate course is co-taught with beginning graduate course FAS5276c Field Ecology of Aquatic Organisms

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

Course Type Lecture

Weekly Contact Hours 15

Course Description This field-oriented course is intended to introduce students to the diverse aquatic habitats found in Florida, their associated flora and fauna, and serve as an introduction to the management issues facing state and federal conservation agencies.

Students will gain an understanding of plant and animal community structure across a range of ponds, lakes, rivers, and nearshore coastal systems. Extensive field trips are required and comprise approximately 75% of the total class time.

Prerequisites junior or senior standing

Co-requisites n/a

Rationale and Placement in Curriculum Advanced undergraduate students in Marine Science, Natural Resource Conservation and Wildlife Ecology will learn from experts about many of the amazing aquatic ecosystems that can be found in north Florida. In addition to the primary learning topics, this course will provide examples of potential career options for students who are interested in studying or working in natural resources.

Course Objectives Upon completion of this course, students will be able to:

- Identify key flora and fauna found in Florida's ponds, lakes, streams, rivers, estuaries, and nearshore coastal waters and have a basic understanding of their ecologies
- Demonstrate familiarity with regularly used sampling gear and methods to collect flora and fauna across a broad range of habitat types
- Discuss important ecological relationships in Florida's diverse aquatic ecosystems
- Summarize the potential consequences of human activities and natural disturbance events on the structure and function of aquatic ecosystems in Florida

- Describe the priorities and role that state and federal environmental and resource management agencies have in conserving, regulating, or restoring the aquatic systems and organisms in Florida.

Course Textbook(s) and/or Other Assigned Reading • Ahrens, R. A Brief geological History of Florida. School of Forest Resources and Conservation.

- Iacarella, J.C., Barrow, J.L., Giani, A., Beisner, B.E., & Gregory-Eaves, I. (2018). Shifts in Algal Dominance in Freshwater Experimental Ponds Across Differing Levels of Macrophytes and Nutrients. *Ecosphere*.
- Martin, C.W., Reynolds, L.K., Scheffel, W.A., Tiffany, S., & Kopetan, S. (2020). Diel Variability and Influence of Artificial Light on Fish and Macroinvertebrate Communities in Gulf of Mexico Seagrass Beds. Springer.
- Purtlebsugh, C.H., Martin, C.W., & Allen, M.. (2020). Poleward Expansion of Common Snook *Centropomus undecimalis* in the northeastern Gulf of Mexico and future research needs. *Plos One*.
- Frederick, P., Pine, B., & Sturmer, L. (2020). Using Oyster Reefs to Restore Estuaries in the Big Bend of Florida. University of Florida.
- Minimum Flows and Minimum Water Levels Re-Evaluation for the Lower Santa Fe and Itchetucknee Rivers and Priority Springs. Suwannee River Water Management District.
- Heffernan, J.B., Liebowitz, D.M., Frazer, T.K., Evans, J.M., & Cohen, M.J. (2010). Algal Blooms and the Nitrogen-Enrichment Hypothesis in Florida Springs: Evidence, Alternatives, and Adaptive Management. Ecological Society of America.
- Collier, K.J, Probert, P.K., & Jeffries, M. (2016). Conservation of Aquatic Invertebrates: Concerns, Challenges, and Conundrums. Wiley Online Library.
- Vaughn, C.C., & Spooner, D.E. (2006). Unionid Mussels Influence Macroinvertebrate Assemblage Structure in Streams. The North American Benthological Society.

Weekly Schedule of Topics Date

Activity

Week 1:

May 23 – Mon Organization and Introduction to Class
Orange Lake with FWC (Travis Tuten, Patrick McCord)

May 25 – Wed GTM NERR, Northeast FL

May 26/27 – Thurs/Fri Seahorse Key overnight trip (overnight field trip) Fee: \$15-25

Week 2

May 30 – Mon NO CLASS – Memorial Day

June 1 – Wed Cedar Key, FWC fisheries independent monitoring
(FWC FWRI staff)

June 3 – Fri Lower Suwannee River with USFWS (Vic Doig)
Estuarine/Marine Flora & Fauna ID Exam (FAS
Conference Room)

Week 3:

June 6 – Mon Springs - Santa Fe River or other springs depending
on conditions with SRWMD (Sean King)

June 8 – Wed Streams and Imperiled Species (Gary Warren)

June 10 – Fri Make-up Field Day OR
Freshwater Flora & Fauna ID Exam (FAS Conference Room)

Week 4:

June 13 – Mon Final Exam (FAS Conference Room)
Graduate student Video Project Due

Grading Scheme Participation & Professionalism 50 pts

Exams

Freshwater flora and fauna field identification midterm 100 pts

Flora and fauna estuarine/marine field identification final 100 pts

Written final 100pts

Total 350pts

Grading Scale (%)

A 90-100

B+ 85-89.99

B 80-84.99

C+ 75-79.99
C 70-74.99
D+ 65-69.99
D 60-64.99

Instructor(s) Donald Behringer, Lindsey Reisinger

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.

jv 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/>.

jv 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.

jv 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.

jv 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.

jv 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.

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

na 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.

na 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>.

jv 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.

jv 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.

jv 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.

jv 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)

Field Ecology of Aquatic Organisms

FAS 4932

1 Course Overview

- 3 Credits
- Summer A Semester 2022
- Face-to-face, with canvas materials
- Monday, Wednesday, Friday - 8:00 a.m. – 5:00 p.m. (see **NOTE** under Course Schedule below)
- Fisheries & Aquatic Sciences Conference Room, Millhopper Campus or <http://elearning.ufl.edu/>

Course Prerequisites:

junior or senior standing

Course Description: This field-oriented course is intended to introduce students to the diverse aquatic habitats found in Florida, their associated flora and fauna, and serve as an introduction to the management issues facing state and federal conservation agencies. Students will gain an understanding of plant and animal community structure across a range of ponds, lakes, rivers, and nearshore coastal systems. Extensive field trips are required and comprise approximately 75% of the total class time. Enrollment includes advanced undergraduates and beginning graduate students.

Course Goals: Students will gain an appreciation for the diverse aquatic ecosystems in Florida, their complex ecology, and the role of management in conserving, regulating, or restoring these ecosystems. Regularly scheduled field trips will allow students to explore and sample freshwater ponds, lakes, streams, springs, estuaries, and nearshore coastal ecosystems. Important themes throughout the course will revolve around: ecology of aquatic ecosystems, the roles of different habitat types in structuring aquatic communities, water use implications for aquatic ecosystem structure and function, and resource management. In each field trip, we will identify prominent plants, fishes, and invertebrates that occur in the ecosystem, discuss system ecology, and the management role of applicable state and federal agencies. Students will also be introduced to some of the basic sampling methods used to study these systems.

Course Introduction: Welcome to the 2022 offering of Field Ecology of Aquatic Organisms! We are looking forward to working with each of you this semester. We expect students will not have the same backgrounds, identities, or levels of experience with the ecosystems and techniques we will be learning about, and that's okay. As with any field or lab work, open communication is key, so we highly encourage students to feel comfortable vocalizing any questions, comments, or concerns they have as they move through the course. Please feel free

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to let us know your name and gender pronoun preference. We welcome you to contact us outside of class through Canvas or the email addresses or phone numbers listed above, and we will be sure to respond to you in a timely manner.

The main focus of the course is learning from experts about many of the amazing aquatic ecosystems that can be found in north Florida. In addition to the primary learning topics, this course will provide examples of potential career options for students who are interested in studying or working in natural resources. Students are encouraged to ask questions of the instructors, teaching assistant (TA), and our guest speakers related to these potential career paths.

Instructors:

- **Charlie Martin** (he/him)
 - Email: charles.martin@ufl.edu
 - Telephone: (352) 325-6081, (256) 504-1432
 - Office: Nature Coast Biological Station; Cedar Key, FL
 - Office hours: Tuesdays 1-3pm, virtual (zoom) on request
- **Donald Behringer** (he/him)
 - Email: behringer@ufl.edu
 - Telephone: (352) 273-3634
 - Office: Fisheries & Aquatic Sciences main building, room 24.
 - Office hours: By appointment
- **Lindsey Reisinger**
 - Email: lreisinger1@ufl.edu
 - Telephone: (352) 294-1355
 - Office: Fisheries & Aquatic Sciences DeQuine Bldg
 - Office hours: By appointment

Teaching Assistant: Zoey Hendrickson zoey1996@ufl.edu, (352) 219-7104

Textbook and/or readings: None are required, although several field guides are suggested as appropriate supplemental course material. Additional reading materials will be provided by course instructors.

2 Learning Outcomes

Upon completion of this course, students will be able to:

- Identify key flora and fauna found in Florida's ponds, lakes, streams, rivers, estuaries, and nearshore coastal waters and have a basic understanding of their ecologies
- Demonstrate familiarity with regularly used sampling gear and methods to collect flora and fauna across a broad range of habitat types
- Discuss important ecological relationships in Florida's diverse aquatic ecosystems
- Summarize the potential consequences of human activities and natural disturbance events on the structure and function of aquatic ecosystems in Florida
- Describe the priorities and role that state and federal environmental and resource management agencies have in conserving, regulating, or restoring the aquatic systems and organisms in Florida.

3 Course Logistics

Students may access lectures, assignments, readings, and supporting materials through the course Canvas site as they become available.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)
- Installation of proctoring software may be required and will be provided if so.

Classes start at 8:00 am to approximately 5:00pm and meet at Fisheries and Aquatic Sciences Conference Room (located on the Millhopper campus). **NOTE:** there is no class on May 30 (Memorial Day) but an overnight trip to Cedar Key May 26-27 (Thu-Fri). The return time varies based on location of the field trip. The schedule below represents the tentative schedule for the course, but plans may be altered depending on weather or logistical constraints and one overnight trip is planned. Any changes will be clearly communicated through Canvas as soon as possible.

3.1 Description of Assessments & Activities

FIELD TRIPS

The majority of the course involves day trips in the field as well as one 2-day field trip with an overnight stay on Seahorse Key (hence participation is imperative!). At the beginning of each day, we will meet at the Fisheries and Aquatic Sciences Millhopper campus parking lot, have a short briefing on the field trip, and depart in UF vans/trucks. Information and reading material for that particular day/trip will be posted in advance on the Canvas site. Students should come prepared with adequate sun protection in the form of hats, covering clothing, and/or sunscreen. Bug spray is HIGHLY encouraged for the 2-day overnight stay on Seahorse Key (see

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handout on the Seahorse Key module for a full list). Clothing should be able to get wet and dirty (including towels and a change of clothing). Any valuables (e.g., phone, wallet) should have adequate protection from water (e.g., dry box, Ziploc bags). Students should come prepared with enough food and water for the day. Additional details and requirements for each trip will be posted on Canvas prior to the trip.

3.2 Grades & Grading Scale

Given the importance of field trips to the class participation is based on attendance. If you need to miss any classes, please let the instructors or TA know as soon as possible.

Participation & Professionalism 50 pts

Exams

Freshwater flora and fauna field identification midterm 100 pts

Flora and fauna estuarine/marine field identification final 100 pts

Written final 100pts

Total 350pts

Grading Scale (%)

A 90-100

B+ 85-89.99

B 80-84.99

C+ 75-79.99

C 70-74.99

D+ 65-69.99

D 60-64.99

For information on current UF policies for assigning grade points, see

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

And attendance policies:

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

4 Learning Content

<u>Date</u>	<u>Activity</u>	<u>Instructor(s)</u>
Week 1:		
May 23 – Mon	Organization and Introduction to Class Orange Lake with FWC (Travis Tuten, Patrick McCord)	All Behringer
May 25 – Wed	GTM NERR, Northeast FL	Behringer
May 26/27 – Thurs/Fri	Seahorse Key overnight trip (overnight field trip) Fee: \$15-25	Martin/Behringer
Week 2		
May 30 – Mon	NO CLASS – Memorial Day	
June 1 – Wed	Cedar Key, FWC fisheries independent monitoring (FWC FWRI staff)	Martin
June 3 – Fri	Lower Suwannee River with USFWS (Vic Doig) Estuarine/Marine Flora & Fauna ID Exam (FAS Conference Room)	Martin/Reisinger
Week 3:		
June 6 – Mon	Springs - Santa Fe River or other springs depending on conditions with SRWMD (Sean King)	Martin/Reisinger
June 8 – Wed	Streams and Imperiled Species (Gary Warren)	Reisinger
June 10 – Fri	Make-up Field Day OR Freshwater Flora & Fauna ID Exam (FAS Conference Room)	
Week 4:		
June 13 – Mon	Final Exam (FAS Conference Room) Graduate student Video Project Due	

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 through Canvas.

5.1 Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

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 approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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

We strive to develop and maintain a classroom that values and includes people with diverse backgrounds, beliefs, and life experiences, promote equitable opportunities through the work we conduct, and make continuous efforts to review, self-critique, adapt, and improve. 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>.

This course is taught in the historic territories of the Timucua, Seminole, and crossroads of the Native American peoples who long inhabited this land. We honor and acknowledge the land and waters themselves as well as the people who have stewarded it for generations. We are called to continue to learn about the history of the systems we study as well as consider their future.

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, <http://www.disability.ufl.edu>

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>
- SFFGS 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, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

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

Field Ecology of Aquatic Organisms

FAS 5276C

1 Course Overview

- 3 Credits
- Summer A Semester 2022
- Face-to-face, with canvas materials
- Monday, Wednesday, Friday - 8:00 a.m. – 5:00 p.m. (see **NOTE** under Course Schedule below)
- Fisheries & Aquatic Sciences Conference Room, Millhopper Campus or <http://elearning.ufl.edu/>

Course Prerequisites:

junior or senior standing

Course Description: This field-oriented course is intended to give students direct experience with the diverse aquatic habitats found in Florida, their associated flora and fauna, and serve as an exploration the management issues facing state and federal conservation agencies.

Students will gain an understanding of plant and animal community structure across a range of ponds, lakes, rivers, and nearshore coastal systems. Extensive field trips are required and comprise approximately 75% of the total class time. Enrollment includes advanced undergraduates and beginning graduate students.

Course Goals: Students will gain an appreciation for the diverse aquatic ecosystems in Florida, their complex ecology, and the role of management in conserving, regulating, or restoring these ecosystems. Regularly scheduled field trips will allow students to explore and sample freshwater ponds, lakes, streams, springs, estuaries, and nearshore coastal ecosystems. Important themes throughout the course will revolve around: ecology of aquatic ecosystems, the roles of different habitat types in structuring aquatic communities, water use implications for aquatic ecosystem structure and function, and resource management. In each field trip, we will identify prominent plants, fishes, and invertebrates that occur in the ecosystem, discuss system ecology, and the management role of applicable state and federal agencies. Students will also be introduced to some of the basic sampling methods used to study these systems.

Course Introduction: Welcome to the 2022 offering of Field Ecology of Aquatic Organisms! We are looking forward to working with each of you this semester. We expect students will not have the same backgrounds, identities, or levels of experience with the ecosystems and techniques we will be learning about, and that's okay. As with any field or lab work, open communication is key, so we highly encourage students to feel comfortable vocalizing any

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questions, comments, or concerns they have as they move through the course. Please feel free to let us know your name and gender pronoun preference. We welcome you to contact us outside of class through Canvas or the email addresses or phone numbers listed above, and we will be sure to respond to you in a timely manner.

The main focus of the course is learning from experts about many of the amazing aquatic ecosystems that can be found in north Florida. In addition to the primary learning topics, this course will provide examples of potential career options for students who are interested in studying or working in natural resources. Students are encouraged to ask questions of the instructors, teaching assistant (TA), and our guest speakers related to these potential career paths.

Instructors:

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 - Email: charles.martin@ufl.edu
 - Telephone: (352) 325-6081, (256) 504-1432
 - Office: Nature Coast Biological Station; Cedar Key, FL
 - Office hours: Tuesdays 1-3pm, virtual (zoom) on request
- **Donald Behringer** (he/him)
 - Email: behringer@ufl.edu
 - Telephone: (352) 273-3634
 - Office: Fisheries & Aquatic Sciences main building, room 24.
 - Office hours: By appointment
- **Lindsey Reisinger**
 - Email: lreisinger1@ufl.edu
 - Telephone: (352) 294-1355
 - Office: Fisheries & Aquatic Sciences DeQuine Bldg
 - Office hours: By appointment

Teaching Assistant: Zoey Hendrickson zoey1996@ufl.edu, (352) 219-7104

Textbook and/or readings: None are required, although several field guides are suggested as appropriate supplemental course material. Additional reading materials will be provided by course instructors.

2 Learning Outcomes

Upon completion of this course, students will be able to:

- Identify key flora and fauna found in Florida's ponds, lakes, streams, rivers, estuaries, and nearshore coastal waters and have a basic understanding of their ecologies
- Demonstrate proficiency with regularly used sampling gear and methods to collect flora and fauna across a broad range of habitat types
- Discuss important ecological relationships in Florida's diverse aquatic ecosystems
- Assess the potential consequences of human activities and natural disturbance events on the structure and function of aquatic ecosystems in Florida
- Evaluate the priorities and role that state and federal environmental and resource management agencies have in conserving, regulating, or restoring the aquatic systems and organisms in Florida.
- Create original educational content about the ecology of a select aquatic species in Florida incorporating field observations.

3 Course Logistics

Students may access lectures, assignments, readings, and supporting materials through the course Canvas site as they become available.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- A webcam, headset and/or microphone, and speakers.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)
- Installation of proctoring software may be required and will be provided if so.

Classes start at 8:00 am to approximately 5:00pm and meet at Fisheries and Aquatic Sciences Conference Room (located on the Millhopper campus). **NOTE:** there is no class on May 30 (Memorial Day) but an overnight trip to Cedar Key May 26-27 (Thu-Fri). The return time varies based on location of the field trip. The schedule below represents the tentative schedule for the course, but plans may be altered depending on weather or logistical constraints and one overnight trip is planned. Any changes will be clearly communicated through Canvas as soon as possible.

3.1 Description of Assessments & Activities

FIELD TRIPS

The majority of the course involves day trips in the field as well as one 2-day field trip with an overnight stay on Seahorse Key (hence participation is imperative!). At the beginning of each day, we will meet at the Fisheries and Aquatic Sciences Millhopper campus parking lot, have a short briefing on the field trip, and depart in UV vans/trucks. Information and reading material

Original file: FAS5276C-field-ecology-aquatic-organisms.pdf

for that particular day/trip will be posted in advance on the Canvas site. Students should come prepared with adequate sun protection in the form of hats, covering clothing, and/or sunscreen. Bug spray is HIGHLY encouraged for the overnight stay on Seahorse Key (see handout on the Seahorse Key module for a full list). Clothing should be able to get wet and dirty (including towels and a change of clothing). Any valuables (e.g., phone, wallet) should have adequate protection from water (e.g., dry box, Ziploc bags). Students should come prepared with enough food and water for the day. Additional details and requirements for each trip will be posted on Canvas prior to the trip.

Video Project

The final product for this project will be a short 3-5 minute video on the ecology of an organism (plant, invertebrate, fish, bird, etc.) discussed in the class or observed during a virtual visit. The video is **due on the last day of class Aug 13** and should be sent to instructors as either a link or video file. Each student is expected to work on their own topic. At a minimum your video need to contain:

- A description of the species taxonomy (scientific name and common name). Note that some species have a number of common names.
- A description of the physical and morphological features used to identify your species (color variation, sexual dimorphism, major characteristics).
- The geographic range of your species and habitats used.
- The environmental envelope of preferred environmental characteristics as well as environmental limits (temperature, salinity, pH, etc.).
- Describe the main prey items found in your species diet and the main predators.
- Describe the spawning behavior, ontogeny, and/or other life history characteristics of your species.

Videos can be created using any platform and proper attribution should be given for content including images and videos.

3.2 Grades & Grading Scale

Given the importance of field trips to the class participation is based on attendance. If you need to miss any classes, please let the instructors or TA know as soon as possible.

Participation & Professionalism 50 pts

Exams

Freshwater flora and fauna field identification midterm 100 pts

Flora and fauna estuarine/marine field identification final 100 pts

Written final 100pts

Video Project 100 pts

Total 450pts

Grading Scale (%)

A 90-100

B+ 85-89.99

B 80-84.99

C+ 75-79.99

C 70-74.99

D+ 65-69.99

D 60-64.99

For information on current UF policies for assigning grade points:

<https://catalog.ufl.edu/UGRD/previous-catalogs/2020-2021/graduate/regulations/>

4 Learning Content

<u>Date</u>	<u>Activity</u>	<u>Instructor(s)</u>
Week 1:		
May 23 – Mon	Organization and Introduction to Class Orange Lake with FWC (Travis Tuten, Patrick McCord)	All Behringer
May 25 – Wed	GTM NERR, Northeast FL	Behringer
May 26/27 – Thurs/Fri	Seahorse Key overnight trip (overnight field trip) Fee: \$15-25	Martin/Behringer
Week 2		
May 30 – Mon	NO CLASS – Memorial Day	
June 1 – Wed	Cedar Key, FWC fisheries independent monitoring (FWC FWRI staff)	Martin
June 3 – Fri	Lower Suwannee River with USFWS (Vic Doig) Estuarine/Marine Flora & Fauna ID Exam (FAS Conference Room)	Martin/Reisinger
Week 3:		
June 6 – Mon	Springs - Santa Fe River or other springs depending on conditions with SRWMD (Sean King)	Martin/Reisinger
June 8 – Wed	Streams and Imperiled Species (Gary Warren)	Reisinger
June 10 – Fri	Make-up Field Day OR Freshwater Flora & Fauna ID Exam (FAS Conference Room)	
Week 4:		
June 13 – Mon	Final Exam (FAS Conference Room) Graduate student Video Project Due	

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 through Canvas.

5.1 Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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/previous-catalogs/2020-2021/graduate/regulations/>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues MUST be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

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 approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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

We strive to develop and maintain a classroom that values and includes people with diverse backgrounds, beliefs, and life experiences, promote equitable opportunities through the work we conduct, and make continuous efforts to review, self-critique, adapt, and improve. 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>.

This course is taught in the historic territories of the Timucua, Seminole, and crossroads of the Native American peoples who long inhabited this land. We honor and acknowledge the land and waters themselves as well as the people who have stewarded it for generations. We are called to continue to learn about the history of the systems we study as well as consider their future.

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, <http://www.disability.ufl.edu>

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>
- SFFGS 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, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

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

Differentiation Summary – Field Ecology of Aquatic Organisms

Student Learning Objectives

FAS4932

Upon completion of this course, students will be able to:

- Identify key flora and fauna found in Florida's ponds, lakes, streams, rivers, estuaries, and nearshore coastal waters and have a basic understanding of their ecologies
- Demonstrate familiarity with regularly used sampling gear and methods to collect flora and fauna across a broad range of habitat types
- Discuss important ecological relationships in Florida's diverse aquatic ecosystems
- Summarize the potential consequences of human activities and natural disturbance events on the structure and function of aquatic ecosystems in Florida
- Describe the priorities and role that state and federal environmental and resource management agencies have in conserving, regulating, or restoring the aquatic systems and organisms in Florida.

FAS5276C

Upon completion of this course, students will be able to:

- Identify key flora and fauna found in Florida's ponds, lakes, streams, rivers, estuaries, and nearshore coastal waters and have a basic understanding of their ecologies
- Demonstrate proficiency with regularly used sampling gear and methods to collect flora and fauna across a broad range of habitat types
- Discuss important ecological relationships in Florida's diverse aquatic ecosystems
- Assess the potential consequences of human activities and natural disturbance events on the structure and function of aquatic ecosystems in Florida
- Evaluate the priorities and role that state and federal environmental and resource management agencies have in conserving, regulating, or restoring the aquatic systems and organisms in Florida.
- Create original educational content about the ecology of a select aquatic species in Florida incorporating field observations.

Grading

FAS4932

Participation & Professionalism 50 pts

Exams

Freshwater flora and fauna field identification midterm 100 pts

Flora and fauna estuarine/marine field identification final 100
pts

Written final 100pts

Total 350pts

FAS5276C

Participation & Professionalism 50 pts

Exams

Freshwater flora and fauna field identification midterm 100 pts

Flora and fauna estuarine/marine field identification final 100
pts

Written final 100pts

Video Project 100 pts

Total 450pts

Field Ecology for Aquatic Organisms

Reading List

- Ahrens, R. *A Brief geological History of Florida*. School of Forest Resources and Conservation.
- Iacarella, J.C., Barrow, J.L., Giani, A., Beisner, B.E., & Gregory-Eaves, I. (2018). *Shifts in Algal Dominance in Freshwater Experimental Ponds Across Differing Levels of Macrophytes and Nutrients*. Ecosphere.
- Martin, C.W., Reynolds, L.K., Scheffel, W.A., Tiffany, S., & Kopetan, S. (2020). *Diel Variability and Influence of Artificial Light on Fish and Macroinvertebrate Communities in Gulf of Mexico Seagrass Beds*. Springer.
- Purtlebsugh, C.H., Martin, C.W., & Allen, M.. (2020). *Poleward Expansion of Common Snook *Centropomus undecimalis* in the northeastern Gulf of Mexico and future research needs*. Plos One.
- Frederick, P., Pine, B., & Sturmer, L. (2020). *Using Oyster Reefs to Restore Estuaries in the Big Bend of Florida*. University of Florida.
- *Minimum Flows and Minimum Water Levels Re-Evaluation for the Lower Santa Fe and Itchetucknee Rivers and Priority Springs*. Suwannee River Water Management District.
- Heffernan, J.B., Liebowitz, D.M., Frazer, T.K., Evans, J.M., & Cohen, M.J. (2010). *Algal Blooms and the Nitrogen-Enrichment Hypothesis in Florida Springs: Evidence, Alternatives, and Adaptive Management*. Ecological Society of America.
- Collier, K.J, Probert, P.K., & Jeffries, M. (2016). *Conservation of Aquatic Invertebrates: Concerns, Challenges, and Conundrums*. Wiley Online Library.
- Vaughn, C.C., & Spooner, D.E. (2006). *Unionid Mussels Influence Macroinvertebrate Assemblage Structure in Streams*. The North American Benthological Society.

Cover Sheet: Request 17822

Establish new Natural Resource Conservation Capstone course

Info

Process	Course New Ugrad/Pro
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Timothy Martin tamartin@ufl.edu
Created	10/25/2022 12:25:12 PM
Updated	11/8/2022 2:30:38 PM
Description of request	Establish new Natural Resource Conservation Capstone course that provides students an opportunity to plan and complete a capstone internship or independent study to meet the Capstone requirement for the Natural Resource Conservation major.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Forest Resources and Conservation 60460000	Terrell Baker III		10/25/2022
CALS CC Checklist - FNRXXXX.pdf					10/25/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/25/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|New for request 17822

Info

Request: Establish new Natural Resource Conservation Capstone course

Description of request: Establish new Natural Resource Conservation Capstone course that provides students an opportunity to plan and complete a capstone internship or independent study to meet the Capstone requirement for the Natural Resource Conservation major.

Submitter: Timothy Martin tamartin@ufl.edu

Created: 10/25/2022 12:07:46 PM

Form version: 1

Responses

Recommended Prefix FNR

Course Level 4

Course Number XXX

Lab Code L

Category of Instruction Advanced

Course Title Natural Resource Conservation Capstone

Transcript Title Nat Res Conservation Capstone

Degree Type Baccalaureate

Delivery Method(s) On-Campus, Off-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? Yes

Contact Type Directed Individual Studies

Course Type Independent Study

Weekly Contact Hours 0.5

Course Description Provides students in the Natural Resource Conservation (NRC) major with an opportunity to plan and carry out a capstone experience which integrates the knowledge and expertise that they have gained through their undergraduate curriculum.

Prerequisites Senior Standing

Co-requisites N/A

Rationale and Placement in Curriculum The NRC degree currently requires a capstone experience which may be fulfilled by taking FNR4623C OR by completing a 3-hour independent study or internship which meets specified objectives for a capstone experience. The proposed course formalizes and centralizes the independent study and internship options into one course, streamlining process for both advising staff and for students.

Course Objectives • Identify and define a natural resource-related problem or issue

- Summarize and interpret existing literature/state of our knowledge
- Create a timeline and approach to solving the problem
- Collect relevant data or design a program to support developing a solution
- Analyze and summarize the data, or assess the program
- Discuss analysis of and recommendations for tradeoffs associated with various solutions or programs
- Present results using an appropriate communication medium

Course Textbook(s) and/or Other Assigned Reading There is no required text for the course. Readings will be provided as needed by internship or independent study advisors.

Weekly Schedule of Topics By noon on Friday of the third week of the semester, submit a required planning outline.

By noon on the final day of classes, submit a required final paper.

Throughout the semester: carry out internship or independent study activities, guided by an associated advisor.

Grading Scheme 30% of grade. On or before noon on the Friday of the third week of the semester, submit a 3-5 page, double-spaced outline which briefly summarizes:

- Description of the natural resource-related problem or issue addressed during the capstone
- A brief literature review and reference to course content from the student's curriculum which is pertinent to the problem or question
- A timeline of the work to be done to address the problem or question
- Summary of planned data collection and analysis
- Summary of how the capstone work integrates the student's curriculum

Course instructors will provide feedback on the summary outline to ensure the plan meets the capstone objectives

70% of grade. On or before noon on the final day of classes for the semester, submit a 10-15 page, double-spaced paper which includes:

- Description of the natural resource-related problem or issue addressed during the capstone
- A brief literature review and reference to course content from the student's curriculum which is pertinent to the problem or question
- A timeline of the work that was done to address the problem or question
- Summary of data analysis results done as part of the capstone
- Discussion of the research or work done in the capstone relative to both the students' curriculum, as well as broader associated natural resource issues or problem

Students will be assigned a grade of Satisfactory / Unsatisfactory based on instructor assessment of deliverables and in consultation with internship or independent study advisors. Total course score of 70.0% or greater will be assigned a "satisfactory" grade. Total course scores of 69.9% or less will be assigned an "unsatisfactory" grade.

Instructor(s) Timothy Martin
Scott Sager

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.

TM 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/>.

TM 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.

TM Submission of a course modification requires both the current version of the course syllabus and the proposed version.

NA Joint course submissions must include 1.) both graduate and undergraduate syllabuses and 2.) a separate document 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.

TM 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.

TM 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.

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

NA 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.

NA 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://approval.ufl.edu/policies/external-consultations/>.

TM 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.

TM 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.

TM 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.

TM 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)

Natural Resource Conservation Capstone - FNR

1 Course Overview

Course description:

Provides students in the Natural Resource Conservation (NRC) major with an opportunity to plan and carry out a capstone experience which integrates the knowledge and expertise that they have gained through their undergraduate curriculum.

- 3 Credits
- Fall, Spring, or Summer (A, B, or C) Semester
- Format: online submission of deliverables resulting from an independent study or internship

Course Prerequisites: Senior Standing

Instructors:

Dr. Timothy Martin
359 Newins-Ziegler Hall
tamartin@ufl.edu
352-846-0866

Scott Sager
130 Newins-Ziegler Hall
sasager@ufl.edu
352-846-0846

- Please use email for fastest response.
- Office hours: in-person or virtual (Zoom) office hours Mondays noon-1:00 p.m. or by appointment

Textbook(s) and/or readings: There is no required text for the course. Readings will be provided as needed by internship or independent study advisors.

2 Learning Outcomes

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

- Identify and define a natural resource-related problem or issue
- Summarize and interpret existing literature/state of our knowledge
- Create a timeline and approach to solving the problem
- Collect relevant data or design a program to support developing a solution
- Analyze and summarize the data, or assess the program

- Discuss analysis of and recommendations for tradeoffs associated with various solutions or programs
- Present results using an appropriate communication medium

3 Course Logistics

Students carry out an independent study guided by a UF faculty advisor, or an internship. Course instructors will assess each student’s capstone plan, and will assign deliverables specific to each student’s activity which will be used to assess completion of course learning outcomes. While the independent study or internship are generally done in coordination with others, capstone deliverables are submitted to course instructors through Canvas.

Technology Requirements:

- A computer or mobile device with high-speed internet connection.
- Latest version of web browser. Canvas supports only the two most recent versions of any given browser. [What browser am I using?](#)

3.1 Description of Assessments & Activities

30% of grade. On or before noon on the Friday of the third week of the semester, submit a 3-5 page, double-spaced outline which briefly summarizes:

- Description of the natural resource-related problem or issue addressed during the capstone
- A brief literature review and reference to course content from the student’s curriculum which is pertinent to the problem or question
- A timeline of the work to be done to address the problem or question
- Summary of planned data collection and analysis
- Summary of how the capstone work integrates the student’s curriculum

Course instructors will provide feedback on the summary outline to ensure the plan meets the capstone objectives

70% of grade. On or before noon on the final day of classes for the semester, submit a 10-15 page, double-spaced paper which includes:

- Description of the natural resource-related problem or issue addressed during the capstone
- A brief literature review and reference to course content from the student’s curriculum which is pertinent to the problem or question
- A timeline of the work that was done to address the problem or question
- Summary of data analysis results done as part of the capstone
- Discussion of the research or work done in the capstone relative to both the students’ curriculum, as well as broader associated natural resource issues or problem

3.2 Grades & Grading Scale

Students will be assigned a grade of Satisfactory / Unsatisfactory based on instructor assessment of deliverables and in consultation with internship or independent study advisors. Total course score of 70.0% or greater will be assigned a “satisfactory” grade. Total course scores of 69.9% or less will be assigned an “unsatisfactory” grade.

For information on current UF policies for assigning grade points, see Ugrad

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

Grad <https://catalog.ufl.edu/graduate/regulations/#text>

4 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 through Canvas.

4.1 Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues **MUST** be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 2).

4.2 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.

4.3 Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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/>.

4.4 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>.

4.5 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>.

4.6 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, <http://www.disability.ufl.edu>

4.7 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.

5 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>
- SFFGS Academic Hub <https://ufl.instructure.com/courses/303721>
- Student Success Initiative, <http://studentsuccess.ufl.edu>

5.1 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.

5.2 Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

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

- <https://distance.ufl.edu/getting-help/>
- <https://registrar.ufl.edu/complaint.html>

Cover Sheet: Request 17773

FAS4933 repeatable credit

Info

Process	Course Modify Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/18/2022 12:31:24 PM
Updated	10/18/2022 12:43:06 PM
Description of request	Make the 1-credit FAS4933 Seminars in Fisheries and Aquatic Sciences repeatable for up to 2 credits in total

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Fisheries, Aquatic Sciences, and Geomatics 60469000	Terrell Baker III		10/18/2022
CALS CC Checklist_FAS4933 Seminar.pdf					10/18/2022
FAS 4933 SYLLABUS - Fall 2022.pdf					10/18/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/18/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|Modify for request 17773

Info

Request: FAS4933 repeatable credit

Description of request: Make the 1-credit FAS4933 Seminars in Fisheries and Aquatic Sciences repeatable for up to 2 credits in total

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 10/18/2022 12:27:54 PM

Form version: 1

Responses

Current Prefix FAS

Course Level 4

Number 933

Lab Code None

Course Title Seminar in Fisheries and Aquatic Sciences

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

Course Type Seminar

Change Rotating Topic Designation? No

Change Repeatable Credit? Yes

Repeatable Credit From Non-repeatable to Repeatable

Maximum Repeatable Credits 2

Multiple Offerings in a Single Semester No

Change Course Description? No

Change Prerequisites? No

Change Co-requisites? No

Rationale This 1-credit seminar course can be repeated once for an additional credit up to 2 credits as it offers different topics and presenters each time it is scheduled,

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)

FAS 4933 - SEMINAR IN FISHERIES AND AQUATIC SCIENCES**SYLLABUS – Fall 2022****Instructors:**

Lindsey Reisinger
7922 NW 71st Street

Anna Braswell
7922 NW 71st Street

Andrew Carlson
7922 NW 71st Street

Email: lreisinger1@ufl.edu

Email: a.braswell@ufl.edu

Email: andrew.carlson@ufl.edu

Office Hours: Tuesday 8:30 - 10am, Reisinger

Textbook: None

Credit: 1

Prerequisites: Junior or senior standing

Meeting Times: Most Fridays 3:30 – 4:30 pm

Meeting location: All meetings will be held in-person in the Fisheries conference room at the Millhopper facility (AWAX0023) and via Zoom (Live streaming only, not recorded; please mute your microphones and turn off your camera as soon as you connect; works better in Internet Explorer or Chrome).

Course description:

Introduce undergraduate students to contemporary topics in fisheries and aquatic sciences, as well as contributing to their listening and writing skills. The speakers are different every semester, and so students may be authorized to take this course multiple times, if approved by the instructors and the academic staff of FFGS.

Objective:

This course is targeted at undergraduates, including those pursuing a minor in Fisheries and Aquatic Sciences, with the objective of exposing students to contemporary topics in this field of study and contributing to their listening and writing skills.

Course requirements:

The primary requirement for this course is that you attend (in person or via live streaming) at least eight (8) seminars and provide us with written summaries following the guidelines below. Ideally, they all will be from the seminar series in Fisheries and Aquatic Sciences. However, you have the option to attend up to four (4) seminars in other academic units at UF, as long as those seminars deal with fisheries or marine/aquatic sciences-related topics. Students can look at the seminar lists on the web sites of the following UF units to find possible alternates if they plan on doing this: Biological Sciences, UF Water Institute, Soil and Water Sciences, Wildlife Ecology and Conservation, Agricultural and Biological Engineering, Geology, Center for Wetlands, and School of Natural Resources and the Environment.

Format:

Students will submit a single-spaced typewritten summary of each seminar (about 1 page), including an evaluation of the presentation style and a brief narrative describing at least one thing they learned that might be of value in their future career development. **Each summary is due within one (1) week of occurrence of the seminar. The title, presenter, date, and location of each seminar must at the top of the summary. All summaries must have been turned in by the last day of classes.**

Guidelines for written summaries of seminars:

Written summaries must be directly uploaded to Canvas under the proper assignment **within one week of attending the seminar**, as .doc or .docx files (if there is a problem with this please let us know). Follow this format exactly in preparing your summaries.

FORMAT

Your Name:**Title of Seminar Attended:****Name of speaker and his/her affiliation:****Date of seminar:****Department where seminar was presented:****SUMMARY**

Submit a single-spaced typewritten summary of the seminar (about 1 page). Include the following sections in your summary (1) Content, (2) Presentation Style, and (3) How It Relates to You.

Grading System:

Grades will be assigned based on completion of the eight (8) written narratives on time and following the instructions provided. **Each summary is worth 15 possible points (5 points per section). Summaries are to be independent works. Group efforts are not permitted and will be viewed as a violation of the UF academic honesty policy. Grades will be based on the percentage of points achieved out of the total possible (8 X 15pts = 120pts).**

UF Grading policies: <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

Accommodations for students with disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center. [Click here to get started with the Disability Resource Center](#). It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Online Course Evaluation Process

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. 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

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 Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. [Click here to read the Conduct Code](#). If you have any questions or concerns, please consult with the instructor in this class.

Campus Resources**Health and Wellness**

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or [visit the U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).

University Police Department: [Visit UF Police Department website](#) 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; [Visit the UF Health Emergency Room and Trauma Center website](#).

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, [visit the GatorWell website](#) or call 352-273-4450.

Academic Resources

E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: [Visit the Student Honor Code and Student Conduct Code webpage](#) for more information.

Students Complaints: <https://registrar.ufl.edu/complaint.html>.

Cover Sheet: Request 17768

FNR4623C add prereq

Info

Process	Course Modify Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/18/2022 10:48:20 AM
Updated	10/18/2022 10:51:34 AM
Description of request	Add prerequisite

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Forest Resources and Conservation 60460000	Terrell Baker III		10/18/2022
CALS CC Checklist_FNR4623c.pdf					10/18/2022
syllabus FNR4623 2022.pdf					10/18/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/18/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|Modify for request 17768

Info

Request: FNR4623C add prereq
Description of request: Add prerequisite
Submitter: Jennifer Vogel alpha32605@ufl.edu
Created: 10/18/2022 8:37:55 AM
Form version: 1

Responses

Current Prefix FNR
Course Level 4
Number 623
Lab Code C
Course Title INTEGRATED NATURAL RESOURCE MANAGEMENT
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

Course Type Lecture

Change Rotating Topic Designation? No

Change Repeatable Credit? No

Multiple Offerings in a Single Semester No
Change Course Description? No

Change Prerequisites? Yes

Current Prerequisites junior or senior standing
Proposed Prerequisites FOR3162C
Change Co-requisites? No

Rationale FNR4623 is a project centered capstone course in land management planning. FOR3162C Silviculture Concepts will give students the foundation needed for planning, inventory and sampling plans for landowners

CALS Curriculum Committee

Submission Checklist

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jv 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.

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jv 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.

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

jv__ 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.

na 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>.

jv 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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INTEGRATED NATURAL RESOURCE MANAGEMENT
Lecture: Tuesdays 8:30 a.m. – 10:25 a.m. (222 Newins-Ziegler Hall)
Lab: Wednesdays 10:40 a.m. - 4:55 p.m. (Austin Cary Forest)

Course Syllabus

Instructors: Tim Martin (tamartin@ufl.edu), Scott Sager (sasager@ufl.edu)

Office hours: Tim Martin, Tuesdays 10:30 – noon | Scott Sager Wednesday 10:00 – 10:40am

Course Website: <http://lss.at.ufl.edu>. We will use the UF e-Learning in Canvas website, through which you can send e-mails to classmates or to the instructors, check your grades, check class announcements, access the syllabus, etc. *Check the Canvas website regularly for due dates and assignment descriptions.*

Course Communications: The Canvas email system is the best way to get in touch with us about any class-related questions, concerns, etc. during the semester.

Required Text and Additional Readings:

There is no required textbook. Readings and resources will be distributed in class and on Canvas.

Prerequisite:
FOR3162C

Course Description and Objectives: Integrated natural resource management deals with providing the right mix of natural resource commodities, functions, and services in the most desirable and sustainable way possible over time, incorporating biological, social, and economic principles and constraints.

This “capstone” course is most likely unlike any other you have taken. This course is project focused. The principle aim of the course is to give you the opportunity to apply the knowledge gained during your curriculum to design an integrated natural resource management plan (or “multiple-use” management plan) for a landowner (private and/or public). Besides providing the basic framework, the instructors will help steer you towards the data and tools you need to complete the task. The course also incorporates subject matter relevant to land management planning that may not be widely known or available in the standard curriculum.

In this course students will:

- apply the knowledge gained during your curriculum to capstone problems
- practice professional time accounting and billing
- Perform and document cost analysis for sample clients
- design an integrated natural resource management plan (or “multiple-use” management plan) for a landowner (private and/or public).

Instructor Expectations: In this class, your group will be expected to rely on your efforts to bring together the information requested for the management plan, which is the ultimate focus of the class. Instructors will give you their best advice and help you as much as they can, but *this is not a “canned” course where you will be given everything in class to complete your plan.* Substantial independent research on your part is expected, but you will be provided with clear guidance on requirements for presentations, reports, etc.

You should rely on other faculty, outside experts, internet, etc. if you have data or other information needs. PowerPoint presentations will be used in class as an enhancement to the lecture, but are not a substitute for good note taking. PowerPoint presentations may be provided via Canvas *at the discretion of the instructors*. Take notes and DO NOT rely on the PowerPoint presentations in their entirety.

Evaluation of Student Learning (Grades):

Weight	Item	Due date and time
25%	Weekly quizzes on lecture material (attendance required for quiz credit)	Sundays at 11:59 p.m.
20%	Homework (3)	2/20, 3/13, 4/10 at 11:59 p.m.
5%	Weekly entries into “Billable Hours” log on Google Sheets	by 11:59 p.m. each Sunday
5%	Check point #1 - oral group presentation summarizing landowner objectives, property, context, conceptual management plan; submit PowerPoint file on Canvas by due date	1/26, 10:00 a.m.
5%	Check point #2 - oral group presentation of inventory plan, inventory status and issues; adjustments to plan anticipated based on inventory; proposed data analysis; submit PowerPoint file on Canvas by due date	2/16, 10:00 a.m.
5%	Check point #3 - First draft plan using the full report template	3/6, 11:59 p.m.
5%	Check point #4 Second draft plan using the full report template	3/27, 11:59 p.m.
20%	Final written project report	4/17, 11:59 p.m.
7%	Final project presentation; submit PowerPoint file on Canvas before your scheduled presentation time	variable
3%	Individual reflection document	4/28, 11:59 p.m.

Details of each assignment can be found on the Canvas website under the Assignments tab.

Grading Scale (%): 89.5-100 A, 86.7-89.4 B+, 83.4-86.6 B, 79.5-83.3% B-, 76.7-79.4 C+, 73.4-76.6 C, 69.5-73.3 C-, 66.7-69.4 D+, 63.4-66.6 D, 59.5-63.3 D-, < 59.5 E

Brief Description of Assignments:

Detailed descriptions and rubrics available on Canvas under "Assignments"

Weekly quizzes

One quiz per week will be given based on the Tuesday lecture material. Students who have an unexcused absence for a lecture will not be given credit for the associated quiz. Quizzes are offered on Canvas, and open at 12:01 a.m. on Fridays, and close at 11:59 p.m. on Sundays. The two lowest quiz scores will be dropped.

Billable Hours entries

Each week, each student will enter the number of hours they worked on "Office" and "Field" tasks, and provide brief notes on the nature of the work done that week. The entries will be on a Google Sheet available to everyone in class. This provides an opportunity for students to practice time accounting, which is required by many employers.

Homework (3 assignments)

Each student will receive a forest inventory data set, and should work INDEPENDENTLY to carry out each homework assignment based on that dataset.

- 1: Report averages and 95% confidence intervals for specified tree-level and stand-level attributes.
- 2: Report current mean and 95% confidence interval for merchantable wood weight using provided weight equations or a properly sourced and justified equation that you specify. Use a growth and yield model to grow your stand to age 30, and report weight and value by product class.
- 3: Economic analysis, calculate NPV of simulation in #2 using management inputs, timing, and costs specified in the assignment.

Check point #1

A ten-minute group PowerPoint presentation presenting:

- Summary of landowner objectives
- Overview of parcel, including a map, description of stand types, local context of the parcel
- Consensus conceptual management plan. Include rationale for each major approach, and how biophysical, economic, and policy/social constraints were taken into account.
- General inventory plan. What will you need to measure to get the information you need to make recommendations? What type of sampling plan may be appropriate for the different parts of your property?

Check point #2

Oral presentation of inventory status and issues; adjustments to plan anticipated based on inventory; proposed data analysis

Check point #3

First full report draft based on the final template. You will likely have limited field data collected/analyzed, limited financial analysis completed, limited management timeline, etc.; however, you will need to show clear evidence that all sections of the report are underway. All draft and final work on the written report must take place on the assigned Google Docs template.

Check point #4

Second full report draft based on the final template. Must include full analysis of inventory data; rationale for each management decision.

Final written project report

Final report fully incorporating previous feedback.

Final presentation

Presentation based on PowerPoint template presenting overview of property, landowner objectives, prescriptions, and rationale.

Individual reflection document

A short (2-3 pages) reflection essay covering:

- A summary of your project
- What skills and/or knowledge were most important for you in this course
- A constructive description of group dynamics, both positive and negative
- Topics that you wish you had known more about

Course Policies:

Late assignments and quizzes: Due dates for all assignments and quizzes are listed in the syllabus and on Canvas at the start of the semester. Quizzes are left open for 72 hours, and the two lowest quiz grades are dropped. For this reason, no late assignments or quizzes will be accepted. Accordingly, make sure to leave room in your schedule for unexpected issues that inevitably arise.

Lab Periods: Lab periods are a part of the course schedule and run from 10:40 a.m. – 4:55 p.m. every Wednesday. Unless otherwise noted, lab periods are to be used to collect and analyze data, prepare presentations, and produce reports. Students should plan to be available for group work and project work during this time each week. No one should use the excuse that they cannot meet during lab periods.

Field Visits: If you are prone to irritations or allergies by mosquitoes, fire ants, wasps, chiggers, ticks and poisonous plants, it is strongly recommended that you always use repellents (not supplied by instructor) and take precautions during and after each laboratory session. If you are allergic to insect bites, or if you have other medical conditions for which emergency treatment may be required, it is your responsibility to: (1) inform the instructors about the condition during the first day of class, (2) tell them where you keep your medicine; and (3) how to administer emergency treatment should the situation arise. Lyme disease, which may be contracted through tick bites, is a condition that all natural resource professionals should be knowledgeable of. While not fatal, it can be very painful and even debilitating. Therefore, it is your personal responsibility to wear protective clothing and repellents that will minimize your chances of contracting this disease -- even with these precautions, you should conduct a self- examination for ticks after each field session.

Attendance: Attendance is required. You are expected to fully engage all class meetings and group meetings, stay current with all assigned readings, and actively participate in class. Participation helps synthesize material, improves critical social skills (important regardless of career path), and allows you to draw from other people's diverse experiences, backgrounds, and insights. Active participation includes sharing thoughts, asking relevant questions, summarizing information in a way that informs discussion, and engaging in a professional manner. Students who are absent from a particular lecture will be assigned a zero for the quiz associated with that lecture. Students who attend all scheduled class meetings will receive a 2% increase in their overall course 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/>

Individual contributions to the group and professionalism

Because the final project is a group project, and a large portion of the final grade is dependent upon the successful completion of this task, each individual's contribution to the final product will be taken into account with respect to the final grade, with adjustments up to and including a full letter grade. Students will be asked to assess each other's contribution towards the final project. All students are expected to behave professionally: to fully engage with their group, communicate in a timely manner and always with civility, and carry their weight at every stage of the project.

UNIVERSITY OF FLORIDA POLICIES YOU NEED TO KNOW:

Late Submissions & Make-up Requests

It is the responsibility of the student to participate in all course activities and to maintain satisfactory progress in the course. 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>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352- 392-4357 (option 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.

Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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/>.

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>.

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>.

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, disability.ufl.edu

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

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>
- SFFGS Academic Hub <https://ufl.instructure.com/courses/303721>

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.

Student Complaint Process

The School of Forest, Fisheries, & Geomatics Sciences cares about your experience and we will make every effort to address course concerns. We request that 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. You can also [submit feedback anytime](#).

If you have a more urgent concern, your first point of contact should be the Academic Coordinator or the Graduate/Undergraduate Coordinator for the program offering the course. You may also submit a complaint directly to UF administration: <https://www.sfa.ufl.edu/pub/StudentComplaintPolicy.pdf>

Course Schedule

Week	Tuesday Lecture period 2-3, 8:30-10:25	Wednesday Lab period 4-9, 10:40-4:55	Assignment Due *
1... 4-5 Jan	NO CLASS January 4	IN CLASSROOM: Course overview, group assignments (TM, SS) Management planning, purpose and intent, structure of a good plan, (TM)	Quizzes: Sunday 11:59 p.m. Enter billable hours each week: Sunday 11:59 p.m.
2... 11-12 Jan	Group dynamics: teamwork, collaboration, addressing conflict, how to disagree without being disagreeable (TM) Introduction to ACF GIS (SS)	Using the map given to your group, travel to ACF and survey the property on your own at the beginning of lab period. Then meet the instructors at the scheduled time and location to ask questions.	
3... 18-19 Jan	Inventory primer: plot arrangement, plot type, basics of variability and sampling intensity (SS)	Groups in field	
4... 25-26 Jan	How to Speak Landowner: questions to ask, interpreting answers, and translating them into actions (SS)	Check Point #1 based at ACF... Group conceptual management plan. Summary of landowner objectives, overview of parcel, consensus conceptual management plan (20 minute time slots to be assigned)	Checkpoint 1 PPT file: 1/26 10:00 a.m.
5... 1-2 Feb	Guest Speaker: Managing for recreation (Taylor Stein, SFFGS)	Inventory workshop with Dr. Johnson and Dr. Vogel in Newins-Ziegler classroom. By group, 40 minute slots, times to be assigned. Brief focus on timber inventory, detailed discussion on other measurements like habitat, game cams, etc.	
6... 8-9 Feb	Analysis of basic tree inventory data (TPA vs. BAA, mean DBH, mean height) (TM) Guest Speakers: Wildlife Management focused on single species management (John Dooner and Austin Carroll, Southern Forestry Consultants)	Groups in field	
7... 15-16 Feb	Statistical analysis: measures of central tendency, variability, confidence intervals (SS) Wildlife management practices (SS)	Groups in field or analyzing data	Homework 1 - 2/20 11:59 p.m.
8... 22-23 Feb	Guest Speaker: Determining the market value of timber with a focus on conceptual drivers of price stumpage vs gatewood (Chris Demers, SFFGS) Predicting biological growth using growth-and-yield models (TM)	Check Point #2 at ACF... oral presentation of inventory status and issues, adjustment of plan based on data collected, proposed data analysis	Checkpoint 2 PPT: 2/23 10:00 a.m.

Week	Tuesday Lecture	Wednesday Lab	Assignment due
9... 1-2 Mar	Guest Speaker: Economic analyses (Tamara Cushing, SFFGS)	Groups in field or analyzing data	Checkpoint 3: 3/6 11:59 p.m.
10 8-9 Mar	SPRING BREAK		Homework 2: 3/13 11:59 p.m.
11... 15-16 Mar	Developing Ecosystem Service Markets... Carbon, Wildlife, Water (SS) Guest Speaker: Wetland Mitigation (Sarah Nelson, Environmental Consulting and Design)	Groups analyzing data or preparing documents	
12... 22-23 Mar	Guest Speaker: Conservation Easements (Charlie Houder, Alachua County) Guest Speaker: Forest Certification (Laura Bosworth, Florida Fish and Wildlife Conservation Commission)	Groups analyzing data or preparing documents	Checkpoint 4: 3/27 11:59 p.m.
13... 29-30 Mar	Flex Day	Groups analyzing data or preparing documents	
14... 5-6 Apr	Analysis of and planning for risk: identifying risks, quantifying risks, risk tolerance, accounting for risk tolerance in planning (TM) Ethics (TM)	Groups analyzing data or preparing documents	Homework 3, 4/10 11:59 p.m.
15... 12-13 Apr	Licensing/Registration, Forest Practices Acts (SS)	Groups preparing documents	Final report: 4/17 11:59 p.m.
16... 19-20 Apr	Groups preparing presentations	Groups preparing presentations	
Finals week... 25-29 April	Final Plan presentations on Zoom		Individual Reflection Document: 4/28 11:59 p.m.

TM=Tim Martin, SS=Scott Sager

*For exact due dates and times for assignments, confirm on Canvas

Reading List

- Siry (2015). *Forest Plans of North America*.
- Demers, C. & Long, A. & Clausen, R. *What is in a Natural Resource Management Plan?*
- Zobrist (2012). *Basic Forest Inventory Techniques for Family Forest Owners*.
- Maggard & Barlow (2017). *Making Sense of the Genetics Market*. Forest Landowner.
- Long, A. & Jokela, E. (2000). *Using SOils to Guide Fertilizer Recommendations for Southern Pines*. UF IFAS.
- Dickens, D. & Moorhead, D. & Morris, L. & Bargeron (2018). *Pine Straw Yields and Economic Benefits when added to Traditional Wood Products in Loblolly, Longleaf, and*

Cover Sheet: Request 17772

FOR4621 change to 3 credits

Info

Process	Course Modify Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/18/2022 12:19:28 PM
Updated	11/8/2022 9:27:48 AM
Description of request	Change this offering from 4 credits to 3 credits to better reflect workload and curriculum needs.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Forest Resources and Conservation 60460000	Terrell Baker III		10/18/2022
CALs CC Checklist_FOR4621.pdf					10/18/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/18/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|Modify for request 17772

Info

Request: FOR4621 change to 3 credits

Description of request: Change this offering from 4 credits to 3 credits to better reflect workload and curriculum needs.

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 11/8/2022 11:48:29 AM

Form version: 2

Responses

Current Prefix FOR

Course Level 4

Number 621

Lab Code None

Course Title Forest Economics & Management

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? Yes

Current Credit Hours 4

Proposed Credit Hours 3

Change Variable Credit? No

Change S/U Only? No

Change Contact Type? No

Course Type Lecture

Change Rotating Topic Designation? No

Change Repeatable Credit? No

Multiple Offerings in a Single Semester No

Change Course Description? No

Change Prerequisites? No

Change Co-requisites? No

Rationale Revision by the FRC curriculum committee to better align credit load with workload and (1) increase flexibility in the curriculum and (2) harmonize the relative weights of different subject areas with both our learning outcomes, and with common practice in similar peer programs.

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.

jv 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/>.

jv 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.

na 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.

jv 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.

jv 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.

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

na 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.

jv 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>.

jv 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.

jv 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.

jv 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.

jv 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)

FOR 4621/ Forest Economics & Management
School of Forest, Fisheries, and Geomatics Sciences
University of Florida
Fall 2022, 3 credits

- Instructor: Dr. Tamara L. Cushing
208 Newins-Ziegler Hall
Office Phone: (846)294-9117
tcushing@ufl.edu
- Office Hours: 9-1 Tuesday & Thursday, other times by appointment or drop-in.
I check email often even while not at the office and after hours.
- Schedule: Lecture: 9:35-10:25, Mon. 219 Newins-Ziegler Hall
Lecture: 9:35-10:25. Weds. Newins-Ziegler Hall(1 credit)
Teacher-led student forum: 9:35-10:25. Friday, 215 Rinker Hall
- Course Description: Principles of forest management for timber, non-timber and timberland valuation: decision analysis, management plans, forest regulation and harvest scheduling.
- Prerequisites: FOR 4162C (Silviculture), ECO 3023 (Microeconomics)
- Specific Objectives: For students to be able to accomplish the following over the course of the semester:
1. predict, interpret, and explain future timber inventory information using formulas or software
 2. differentiate between the types of landowners common to the United States and compare and contrast their objectives
 3. calculate, select and justify appropriate management action based on criteria
 4. calculate and select the appropriate optimal rotation age dependent on objectives of landowner
 5. list taxes impacting forestry and provisions of benefit to landowners
 6. calculate value of land and timber
- Text: None required
- Other Required Tools: Business-type calculator (cell phones will not be allowed on quiz or exam).

Grading:	Quizzes:	25%
	Assignments:	15%
	Current Event & Letter:	15%
	Project:	20%
	Final Exam:	25%

Grade scale:	A	90-100
	B	80-89.99
	C	70-79.99
	D	60-69.99
	E	59.99 and lower

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

Quizzes: There will be six quizzes during the term. There will be no make-up quizzes but each student will be allowed to drop the lowest quiz grade. Quizzes allow both you and I to see if the material is clear and correct areas that aren't clear before getting too far. The questions may be analytical or just require you to tell me how you would handle a situation.

Current Event: Students will locate a current event related to forestry and economics which they will present. (10%) Later in the term, students will prepare a letter to the editor responding to an article (5%)

Assignments: My intention is for these assignments to allow you to work through the concepts we have been discussing. These are meant to be learning experiences to prepare you for dealing with these questions in the future. You may work with others but must submit your own work.

Project: This case study utilizes skills learned in class to analyze a forest management question and communicate the results.

Final Exam: The final exam is cumulative and will gauge your understanding of the material presented throughout the semester. You will not have the option to skip the final. I do give partial credit so be sure to show your work.

Course 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/>

Cell Phones: Do not use cell phones in class. They must be put on vibrate while in class.

Late assignments: All assignments are due at the time specified for each assignment on the due date. Ten percent will be taken off the grade for every day late (beginning immediately).

Missed quizzes: Missed quizzes may not be made up; you may drop the lowest quiz grade.

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."

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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.

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

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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: <https://www.sfa.ufl.edu/pub/StudentComplaintPolicy.pdf>

If you need help, ASK! I'm committed to doing my best to foster an environment in which you can learn and explore these topics.

Important Dates:

September 5	No class – Labor Day
October 7	No class – Homecoming
November 11	No class – Veteran’s Day
November 23-26	Thanksgiving Holidays – No classes
December 15, 7:30-9:30 a.m.	Final Exam

Weekly Topics and Assignments

Week	Topic	Assignments
1	Intro: Why forest econ & mgmt	
2	Current & Future Forest Conditions	
3	Projecting the Future	
4	Time Value of Money	Assignment 1 due, Quiz Fri.
5	Annuity Formulas	
6	Financial Decision Criteria	Assignment 2 due, Quiz Fri.
7	Forest Ownership	
8	LEV & Input Effects	Assignment 3 due, Quiz Fri.
9	Optimal Rotation Age, Marginal Analysis	
10	Taxation	Assignment 4 due, Quiz Fri.
11	Classical Forest Management / Regulation	
12	Certification & Nontimber Products	Assignment 5 due
13	Valuation & Appraisal	Quiz
14	Inflation	
15	Finding inputs	Assignment 6 due, Quiz Fri.
16	Wrap Up & Review	

Cover Sheet: Request 17760

SUR4912 change prerequisite

Info

Process	Course Modify Ugrad
Status	Pending at CALS - College of Agricultural and Life Sciences
Submitter	Jennifer Vogel alpha32605@ufl.edu
Created	10/17/2022 8:39:54 AM
Updated	11/8/2022 2:46:01 PM
Description of request	Change prerequisites for SUR4912 Senior project to require SUR4911 Supervised Research

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	SFRC - Geomatics 60466000	Terrell Baker III		10/17/2022
CALs CC Checklist_SUR4912.pdf					10/17/2022
College	Pending	CALS - College of Agricultural and Life Sciences			10/17/2022
No document changes					
University Curriculum Committee					
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Catalog					
No document changes					
Student Academic Support System					
No document changes					
College Notified					
No document changes					

Course|Modify for request 17760

Info

Request: SUR4912 change prerequisite

Description of request: Change prerequisites for SUR4912 Senior project to require SUR4911 Supervised Research

Submitter: Jennifer Vogel alpha32605@ufl.edu

Created: 10/17/2022 8:32:53 AM

Form version: 1

Responses

Current Prefix SUR

Course Level 4

Number x

Lab Code None

Course Title SUR4912 Senior Project

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

Course Type Lecture

Change Rotating Topic Designation? No

Change Repeatable Credit? No

Multiple Offerings in a Single Semester No

Change Course Description? No

Change Prerequisites? Yes

Current Prerequisites Geomatics major of senior standing.

Proposed Prerequisites SUR4911

Change Co-requisites? No

Rationale This foundational course is intended as the second of a two course sequence for senior Geomatics students to develop an experiential learning project focused on a self-selected surveying and mapping problem.

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.

jv 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/>.

jv 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.

na 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.

jv 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.

jv 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.

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

na 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.

na 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>.

jv 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.

jv 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.

jv 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.

jv 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)

Senior Project

SUR 4912 (1 credit) - Spring semester

Prerequisite: SUR4911 Supervised Research in Geomatics

Course Description:

Laboratory, equipment, or literature investigations of surveying and mapping problems and concepts of current interest resulting in a written work.

This foundational course is the second of a two course sequence for senior Geomatics students to develop an experiential learning project focused on a self-selected surveying and mapping problem.

Instructor: Dr. Bon A. Dewitt
Room 305 Reed
Laboratory 352-392-6010
bon@ufl.edu

Office Hours: Period 4 - Monday, Wednesday, Friday

Course Objectives/Outcomes:

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

- Apply the methodology behind developing and delivering a comprehensive scientific research project
- Synthesize scientific research into a literature review
- Enhance public speaking skills through class presentations

Course Meeting Times: 6:00PM on selected Wednesdays

Required Text: None

Class Format, Make-up and Attendance Policies:

The class meetings are non-uniformly scheduled throughout the semester. Students are expected to attend **all** class meetings. It is very important to keep up with your project work in this class in order for you to finish on time. Periodic assignments or status reports are scheduled to guide you through to completion. Excused absences and make up work will conform with UF policies.

<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

Late assignments may be assessed a penalty of up to 25% per business day.

Assignments

- **Status Summary from SUR4911:** Up to one page summary giving current status of your project (literature read, data collected, initial analyses, etc.)
- **Outline of Paper:** Detailed outline about 3 or 4 levels deep, that illustrates the structure of your paper.
- **Class Presentation on Initial Findings:** Give a 3 to 5 minute presentation of the initial findings of your study to the class.
 - **1st Draft of Paper** includes a complete draft of all elements of your Final Paper. These drafts will

Original file: SUR4912_Senior_Project_Syllabus.pdf

be graded on format and completeness.

- **Final Paper**
 - **1st Draft of PPT** includes a completed draft of all elements of your Final Presentation. These drafts will be graded on format and completeness.
- **Final Presentation to SUR4912** includes a complete run through of your final presentation (15-18 slides) discussing the critical elements of your project. Emphasis is placed on providing the audience with a narrative (i.e., not reading from your slides) and answering questions thoughtfully and completely. Your grade will also reflect your interaction and feedback with your colleagues during their presentations including insightful questions and ideas on how to improve a student's existing presentation.
- **Final PPT**
- **Final Presentation to Geomatics Program.** See Final Presentation to SUR 4912 for description of expectations.

Evaluation of Student Learning

Status Summary from SUR4911	5%
Outline of Paper	10%
Class Presentation on Initial Findings	5%
1 st Draft of Paper	20%
Final Paper (including Advisor's Grade)	30%
1 st Draft of PPT	5%
Final Presentation to SUR4912	5%
Final PPT	10%
<u>Final Presentation to Geomatics Program</u>	<u>10%</u>
	100%

Grading Scale

Course grades will **approximately** follow a scale of: >89.99% = A, >79.99% = B, >69.99% = C, <60% = D. However, in order to avoid cases where letter grade groups are separated by a small fraction of a percent, the grade cutoff percentages will be adjusted (up or down) so that distinct percentage gaps will separate the letter grades. In addition, plus (+) or minus (-) grades will also be used as a further refinement of the grading scale.

For an explanation of the UF letter grade scale, see:

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

Policies & Other Information

Late Submissions & Make-up Requests

It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course. 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>

Computer or other hardware failures, except failure of the UF e-Learning system, will not excuse students for missing assignments. Any late submissions due to technical issues **MUST** be accompanied by the ticket number received from the Helpdesk when the problem was reported to them. The ticket number will document the time and date of the problem. You **MUST** e-mail your instructor within 24 hours of the technical difficulty if you wish to request consideration.

For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352-392-4357 (option 2).

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.

Semester Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning.

At approximately the mid-point of the semester, the School of Forest, Fisheries, & Geomatics Sciences will request anonymous feedback on student satisfaction on various aspects of this course. These surveys will be sent out through Canvas and are not required but encouraged. This is not the UF Faculty Evaluation!

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/>.

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>.

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>.

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, <http://www.disability.ufl.edu>

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

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>
- SFFGS Academic Hub <https://ufl.instructure.com/courses/303721>

Spring 2022

Monday	Tuesday	Wednesday	Thursday	Friday
1/3	1/4	1/5	1/6	1/7
1/10	1/11	1/12	1/13	1/14
1/17 M.L. King, Jr. Birthday	1/18	1/19 Organizational Meeting	1/20	1/21
1/24 Status Report from SUR4911 due	1/25	1/26	1/27	1/28
1/31	2/1	2/2 Data Analysis & Synthesis of Info	2/3	2/4 No Class
2/7 Outline of Paper due	2/8	2/9	2/10	2/11
2/14	2/15	2/16	2/17	2/18
2/21	2/22	2/23	2/24	2/25
2/28	3/1	3/2 Class Presentation of Initial Findings*	3/3	3/4
3/7 Spring Break	3/8 Spring Break	3/9 Spring Break	3/10 Spring Break	3/11 Spring Break
3/14 1st Draft of Paper due	3/15	3/16	3/17	3/18
3/21	3/22	3/23 Presentations	3/24	3/25
3/28	3/29	3/30	3/31	4/1
4/4 Final Paper due	4/5	4/6	4/7	4/8
4/11 1st Draft PPT due	4/12	4/13 Presentation to SUR4912 Class*	4/14	4/15
4/18 Final PPT due	4/19	4/20	4/21 Reading Day Final Presentation	4/22 Reading Day
4/25	4/26	4/27 Final Presentation	4/28	4/29