CALS Curriculum Committee Meeting  
September 12, 2014  
2:00 p.m.  
1031A McCarty Hall D


Agenda and Index for Materials

Speaker – Toby Shorey (General Education Program Changes)

Approve Minutes from May 16, 2014

Dr. Brendemuhl: Update from UCC

Information item: Microbial Physiology name change

Graduate New Course Proposals

1. FAS 6XXX – Algae Biology and Ecology
2. BSC 5XXX – Fundamentals of Bioinformatics

Graduate Course Change Proposals

3. FAS 6154 – Aquatic Invertebrate Physiology
4. IPM 5305 – Principles of Pesticides
5. FYC 6320 – Community Development

Graduate Certificates

6. Aquaculture and Fish Health Graduate Certificate Revision

Graduate Curriculum

7. New graduate concentration in Geographic Information Science
Undergraduate New Course Proposals

8. FAS 4XXX – Marine Adaptations

9. PEN 2XXX – Advanced SCUBA Diving

10. FAS 4XXX – Science Diver

11. FAS 4XXX – Algae Biology and Ecology

Undergraduate Course Change Proposal

12. FNR 4070 – Environmental Education Program Development

Undergraduate Curriculum

13. Modification to FRC specialization Environmental Pre-Law

14. Termination of FRC specialization Forest Informatics
General Education Program Changes

This is a description of the new GEP that incorporates the Statewide Core effective 2015 and the UF Core effective 2016. An outline of the process for making curriculum changes is also included.

Current GEP
Composition: 3 CR
Mathematics: 6 CR*
HUM 2305: 3 CR
Humanities: 3-9 CR
Natural Sciences: 6-12 CR
Social Sciences: 6-12 CR

*Humanities + Natural Sciences + Social Sciences: 24 CR
3 CR of GE courses must also be Diversity
3 CR of GE courses must also be International
*3 CR must be “Pure Math”, i.e. have prefix MAC, MAP, MAS, MGF or MHF

Recommended Change Process
Create new eight semester plans for the 2015 and 2016 catalogs at the same time.
Submit the following:
1. Catalog copy of the 2015 plan in Word document using tracked changes on the current 8 semester plan for approval by the UCC.
2. Document in 1. without track changes; i.e. with all changes accepted.
These should reach the UCC level by the Dec. meeting.

GEP 2015
1. Statewide Core: 15 CR
2. Composition: 3 CR (in addition to 3 CR in State core)
3. Mathematics: 3 CR (In addition to 3 CR in State core)*
4. What is the Good Life (GE - H) (3 CR)
5. Humanities: 0 – 6 CR**
6. Natural Sciences: 3 – 9 CR**
7. Social Sciences: 3 – 9 CR**
   *3 of the 6 CR must be Pure Math
   **Humanities + Natural Sciences + Social Sciences: 12 CR
   **Diversity: 3 CR; **International: 3 CR

GEP 2016
1. Statewide Core: 15 CR
2. Composition: 3 CR
3. Mathematics: 3 CR* (* 3 of the 6 CR must be Pure Math)
4. What is the Good Life (GE – H)
5. UF Core (GE – B/P)
6. UF Core (GE – S)
7. Humanities: 0 – 6 CR**
8. Natural Sciences: 0 – 6 CR**
9. Social Sciences: 0 – 6 CR**
   **Humanities + Natural Sciences + Social Sciences: 6 CR
   **Diversity: 3 CR; **International: 3 CR
8 Semester Plans 2015

Notation: E.g. GE - H - T

- C, H, M, B/P, S = Subject areas
- T = Statewide Core (Tallahassee)

1. One course per subject area from statewide list (15 CR)
   Course number and code: AMH 2020 (GE - S - T)
   Non-specific statewide core S course: GE - S - T

2. One additional GE - C course (3 CR)

3. One additional GE - M course (3 CR)
   (One of the two GE - M must be Pure Math)

4. What is the Good Life, IUF 1000 (GE - H) (3 CR)

5. Total 12 CR of GE - H (0 – 6 CR), S (3 – 9 CR), B/P (3 – 9 CR)
   E.g. (H,N,B/P) = (0,3,9), (0,9,3), (3,6,3), (6,3,3).
   These are not the only valid distributions.

8 Semester Plans 2016

1. One course per subject area from statewide list (15 CR)
   Course number and code: AMH 2020 (GE - S - T)
   Non-specific statewide core S course: GE - S - T

2. One additional GE - C course (3 CR)

3. One additional GE - M course (3 CR)
   (One of the two GE - M must be Pure Math)

4. What is the Good Life, IUF 1000 (GE - H) (3 CR)

5. UF Core (GE – B/P) (3 CR)

6. UF Core (GE – S) (3 CR)

7. Total 6 cr of GE – H (0 – 6 CR), S (0 – 6 CR), B/P (0 – 6 CR)
   Distributions: 0/3/3 or 0/0/6 (in any order)

Statewide Core

One from each of the following lists - (En) means n,000 words

Composition: (All E6)
  - ENC 1101, ENC 1102, ENC 2210, ENC 3246, ENC 3254, ENC 3453, ENC 3464, ENC 3465

Mathematics:
  - MAC 1105, MAC 1140, MAC 1147, MAC 2311, MAC 2312, MAC 2233, MGF 1106, MGF 1107, STA 2023
    (All of these are “Pure Math” except for STA 2023)

Humanities:
  - ARH 2000 (D), LIT 2000, MUL 2010 (N, E2), PHI 2010 (E6), THE 2000 (D)

Social Sciences:

Natural Sciences (B/P):
  - AST 1002 (P), AST 3018 (P), AST 3019 (P), BOT 2011 (B), BSC 2005 (B), BSC 2010 (P), CHM 1020 (P), CHM 1031 (P),
    CHM 2045 (P), CHM 2046 (P), CHM 2051 (P), CHM 2056 (P), ESC 1000 (P), MCB 3020 (B), PHY 2020 (P), PHY 2048 (P),
    PHY 2049 (P), PHY 2053 (P), PHY 2054 (P), PHY 2061 (P), PHY 3054 (P)
CALS Curriculum Committee Meeting
May 16, 2014
Submitted by James Fant


Substitutes: Scott Sager (for M. Andreu)
Jennifer Grogan (for J. Clark)

Visitor: Adegbola Adesogan

Call to Order: The College of Agricultural and Life Sciences Curriculum Committee met on May 16, 2014 in Rm. 1031A McCarty Hall D. Dr. Wendell Porter called the meeting to order at 2:03 p.m.

Previous agenda items and supporting material can be found on the CALS Curriculum Committee homepage under archived information:
http://www.cals.ufl.edu/faculty_staff/curriculum_committee.shtml

Approval of Minutes: A motion was made by Dr. Stedman to approve the minutes from the April 11, 2014 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.


Update from UCC: Dr. Telg said only two submissions for the Grand Challenge courses were accepted for immediate implementation: “The Challenge of Climate Change” (Natural Science) and “An Informed Life: People and Data” (Social Science). The courses will be developed this summer, with small sections being taught in the next academic year. Full rollout of the courses will take place in 2016.

Dr. Wysocki mentioned that Canvas will be the new course management system at UF. Sakai will be phased out over the next two years. All new online course development should be done on Canvas.

Graduate New Course Proposal

1. AEC 6932 – Special Topics in AEC (Template)
A motion was made by Dr. Kolaczkowski to approve this item with a minor update requested. The motion was approved. The repeatable credit allowed section on the UCC1 form needs to be completed.

2. FOR 6XXX – Analysis of Forest Ecosystems
   A motion was made by Dr. Lucky to approve this item with a minor change. The motion was approved. The word “forest” needs to be added before “ecosystem” in the course description on both the UCC1 form and the syllabus.

3. ANS 6XXX – Supervised Extension in the Animal Sciences
   (Item previously submitted 3/14/2014 – Submitted late for 5/16/2014)
   A motion was made by Dr. Kolaczkowski to approve this item as submitted. The motion was approved.

4. ANS 6XXX – Microbial Physiology
   (Item previously submitted 11/15/2013 – Submitted late for 5/16/2014)
   A motion was made by Dr. Kolaczkowski to approve this item as submitted pending an external consult from Microbiology. The motion was approved.

**Graduate Course Change Proposals**

5. ANS 6940 – Supervised Teaching in the Animal Sciences
   (Item previously submitted 3/14/2014 – Submitted late for 5/16/2014)
   A motion was made by Scott Sager to approve this item as submitted. The motion was approved.

6. AGG 5504 – Critical and Creative Thinking in Problem Solving and Decision Making
   A motion was made by Scott Sager to approve this item with changes requested. The motion was approved. In the syllabus: It needs to be clarified if absences will impact the student’s grade. The point scale for assignments should be changed to 0-100 to match the percentages on the grading scale. The sentence above the scale should have an “E” instead of an “F.” The paragraph on Late Assignments should begin with “Barring” instead of “Baring.” Under the Course Requirements section there are two paragraphs that are almost identical. A suggestion would be to bold “educational experience” and “innovative discovery” or combine these two into one paragraph at the end of the section.

**Graduate Certificate Proposal**

7. Sustainable Agroecosystems
   A motion was made by Dr. Stedman to approve this item with changes requested. The motion was approved. In the prerequisite section it should say that a bachelor’s degree from and accredited institution is required. Clarify whether or not a student has to pass the on-line exam to receive the certificate.

**Undergraduate New Course Proposals**
8. EVS 4905 – Individual Study in Environmental Science
   A motion was made by Dr. Kolaczkowski to approve this item as submitted. The motion was approved.

9. XXX 4932 – Special Topics in ____________ (Template)
   A motion was made by Scott Sager to approve this item as submitted. The motion was approved.

Undergraduate Course Change Proposal

10. XXX 4905 – Individual Study in ____________ (Template)
    A motion was made by Dr. Kolaczkowski to approve this item as submitted. The motion was approved.

Discussion

11. CALS CC Operating Code
    An updated version of the CALS Curriculum Committee Operating Code was presented to the committee for final approval. A motion was made by Scott Sager to approve this document as submitted. The motion was approved.

Conclusion
    The meeting was adjourned at 3:05 p.m.
ucc1–FAS6XXX Algae Biology and Ecology

This request is in progress.

Info

Process: Graduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Sager, Scott A
Created: 8/21/2014 7:50:28 AM
Updated: 8/21/2014 1:30:50 PM
Description: new grad course

Get updates  Edit request  Add document

Documents

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Decision

Set status to:
June 24th, 2014

RE: Undergraduate/graduate differentiation in dual-enrolled FAS 4XXX/6XXX Algae Biology and Ecology

Dear Curriculum Committee,

Thank you for your consideration of Algae Biology and Ecology for formal approval and assignment of course numbers. The course is intended for upper division (junior or senior) undergraduates or early stage graduate students. The course will be rigorous for both, although there will be higher expectations for graduate students. There are several clear distinctions between the undergraduate and graduate requirements notable in the syllabi for each course. These are:

**Prerequisites**

Undergraduates are required to have taken BSC 2010 and 2011 (or equivalent).

Graduate is graduate student status, including a fundamental knowledge of basic biology.

**Required Reading**

Undergraduate students will be expected to read primary literature provided with each major topical area covered in the class. The required primary literature may be used as part of required reference material for the special project reports.

Graduate students will also be required to read primary literature provided with each major topical area covered in the class. Some of the concepts presented in the primary literature may be used in the formulation of some of the essay questions in the three exams.

**Special Projects**

Undergraduate students will be required to submit two special projects during the semester. For each project, students will find a short video (i.e. < 4 minutes in `.flv` file format) or a still image (jpeg format) which illustrates a concept or principle covered during the course to that date. The student will be required to write and submit a paragraph (approximately half a page single spaced...
text) describing the video or image and its significance, along with three references from the primary literature on the subject.

**Graduate** students will be required to submit one project similar in format to the first undergraduate project. The second special project will involve the development of a 20-25 minute voice over PowerPoint presentation on a special topic of the students choosing. The PowerPoint presentation should include a list of at least five references from the primary literature.

**Exams**

**Graduate** students will receive more complex exams, with an emphasis on essay-type questions. They will be expected to provide answers that synthesize the information they have learned in a more advanced manner than **undergraduates**.

Please contact me should any of this information require clarification.

Sincerely,

Edward J. Phlips
Professor
School of Forest Resources & Conservation
UF UNIVERSITY OF FLORIDA

UCC1: New Course Transmittal Form

Department Name and Number: SFRC-FAS - 541946003

Recommended SCNS Course Identification

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Effective Term and Year: Spring 2015

| Amount of Credit | 3 |
| Contact Hour: Base | 3 |
| or Headcount | |
| S/U Only | |

Repeatability: No

| Repeatable Credit | Yes |
| Variable Credit | Yes |

Course Description (50 words or less)

Covers the biology and ecology of aquatic algae, including evolution, classification, structure, photosynthesis, growth, and reproduction. Emphasis on the ecological role of algae in different aquatic ecosystems (e.g. open ocean, estuaries, coral reefs, rocky intertidal), their impacts (e.g. harmful algae blooms, food webs), and their applications (e.g. food, biochemical).

Prerequisites

Co-requisites

Degree Type (mark all that apply)

| Baccalaureate | Yes |
| Graduate | Yes |
| Professional | No |
| Other | |

Category of Instruction

| Introductory | No |
| Intermediate | Yes |
| Advanced | |

Rationale and place in curriculum

Intermediate course designed for grad students interested in aquatic algae. Co-taught with undergrad section.

Department Contact

Name: Scott A. Sager
Phone: 352.317.7675
Email: sasager@ufl.edu

College Contact

Name: Al Wysocki
Phone: 352.392.1963
Email: wysocki@ufl.edu
UCC: Syllabus Checklist

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

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

**It is recommended that syllabi contain the following information:**
1. Critical dates for exams and other work
2. Class demeanor expected by the professor (e.g., tardiness, cell phone usage)
3. UF’s honesty policy regarding cheating, plagiarism, etc. Suggested wording: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of TAs in this class.
4. Phone number and contact site for university counseling services and mental health services: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx
   University Police Department: 392-1111 or 9-1-1 for emergencies.

**The University’s complete Syllabus Policy can be found at:** http://www.aa.ufl.edu/Data/Sites/18/media/policies/syllabi_policy.pdf
FAS6XXX: ALGAE BIOLOGY AND ECOLOGY

Instructor: Professor Edward Phlips

7922 NW 71st Street, Gainesville FL 32653
352-273-3603
phlips@ufl.edu

Office Hours: Mondays 4pm-5pm

Course Description: Covers the biology and ecology of aquatic algae, including evolution, classification, structure, photosynthesis, growth, and reproduction. Emphasis on the ecological role of algae in different aquatic ecosystems (e.g. open ocean, estuaries, coral reefs, rocky intertidal), their impacts (e.g. harmful algae blooms, food webs), and their applications (e.g. food, biochemical).

Prerequisites: Foundational biology coursework, as determined by instructor

Time and Place:
Lectures (Online): Lecture modules will be posted on the e-Learning web site for the course on Monday of each week, along with required reading and supplemental information. Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See http://distance.ufl.edu/student-complaints for more details.

Course Objectives: After completing the course, students will:
- be able to apply the principles of algal biology and ecology to solve problems, or identify opportunities;
- be able to identify algae management schemes which will address issues of eutrophication, human health, and global climate change;

Course Communication: This course will take advantage of e-Learning support to post course information and to allow you day-to-day access to your grades. Please visit http://lss.at.ufl.edu to access the course via the e-Learning link and for information on how use the e-Learning site (Please use the help desk as your first course of action if you have any difficulties). Lectures are based on PowerPoint presentations to facilitate the use of figures and visual aids. Not all the information for the class will be on the PowerPoint slides, therefore it is your responsibility to take notes and complete reading assignments.

Participation and Attendance: Participation and attendance is expected for all lectures, discussions, and special project presentations. Contact me as early as possible if you must legitimately miss a scheduled exam. If an emergency situation arises immediately before an exam, notify me as soon as the emergency is resolved. Make-up exams will not be given except for an excused absence with written substantiation (e.g., official University event, illness, family emergency, etc.).
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.

**Required Readings:** Course reading material will be composed of several foundational scientific papers, as well as recently published scientific and technical papers. These are five examples:


**Course Format and Grading:** This course is offered for three (3) credits in the spring semester. Exams will be based on material presented in the lectures and the required readings. Required readings will be provided on line for each major topical area.

Ten short quizzes will be administered during the term. The quizzes will involve five multiple choice or true/false questions. Seven minutes will be allowed for each quiz. The quizzes will be based on lecture materials. Each quiz will count for up to 2 points. Two points will be awarded for exams with 0-1.5 wrong answers. One point will be awarded for exams with 2-2.5 wrong answers.

The course will also involve two special projects during the semester. For the first project students will be required to find a short video (i.e. < 4 minutes in ‘.flv’ file format) or a still image (jpeg format) which illustrates a concept or principle covered during the course to that date. The student will be required to write and submit a paragraph (approximately half a page single spaced text) describing the video or image and its significance (titled with student name and assignment number, e.g. ‘John Smith Special Project 1’). Image files should be imbedded in the pdf file. Video files can be submitted as separate flv files labeled with the students name and assignment number (e.g. ‘John Smith Video Special Project 1’). The visual material with text will be posted on the e-Learning web site. All 6000 level students in the class will be asked to grade the presentations of a specified sub-set of other 6000 students in the class on a scale of 1-3 (1 - below average, 2 - average, 3 - above average). During the grading students will be asked to enter a brief comment on the presentation (e.g. strong point and/or weak point). The average grades of the students will be averaged with the grade of the instructor for a final grade. Students will receive five points for submitting the project and two additional points per project based on the average peer/instructor grade of 2 or higher. Students will get 3 points per project for participating in grading of the projects.

The second special project will involve the development of a 20-25 minute voice over Power Point presentation on a special topic. The PowerPoint presentation should include a list of at least five references from the primary literature. A list of example special topics will be provided, but students are encouraged to select their own topic in communication with the
instructor. The presentations will be placed online for viewing by all students in Week 15 of the course. All 6000 level students and the instructor will provide brief evaluations of the presentations by the end of Week 16 using the discussion section of the course website.

Detailed instructions on how to submit projects and participate in grading will be provided on the e-Learning website at the beginning of the semester.

Three exams will be administered online during the course. Each will be worth up to 20% of the grade. The exams will not be cumulative in terms of the material covered. Exam questions will emphasize lecture materials, but may also include general concepts presented in the required reading. The exams will be an hour and a half in length and will be available online Wednesday-Sunday of exam week. Exam questions may include multiple-choice and essay. The essay questions may incorporate concepts presented in the required reading material.

The grade point allocation is: A (93-100%), A- (90-92), B+ (86-89%), B (82-85%), B- (78-81%), C+ (74-77%), C (67-73%), C- (63-66%), D+ (59-62%), D (55-58%), D- (51-54%), and E <50%.

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

Basis for grade:

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**Course Outline**

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Reading assignments
Quiz 2

Week 4
Algae structure & function – by division – continued

Reading assignments
Quiz 3

Week 5
Plankton sampling methods
Benthic algae sampling methods
Taxonomic methods

Reading assignments
Quiz 4

Week 6
Exam 1

Week 7
Photosynthesis – Structures, processes, methodologies
Growth – Dynamics, physical limiting factors, methodologies

Reading assignments
Quiz 5

Week 8
Growth – Chemical limiting factors, methodologies
Freshwater algae toxins

First Special Project due by Wednesday
Reading assignments
Quiz 6

Week 9
Spring break

Week 10
Marine algae toxins
Other harmful effects of algae

Peer Grades for Special Project 1 due
Reading assignments
Quiz 7

Week 11
Exam 2

Week 12
Ecological principles – e.g. eutrophication, hydrologic factors,
food webs, climatic factors

Reading assignments
Quiz 8
Week 13  
Examples of ecosystem types  
Reading assignments  
Quiz 9

Week 14  
Examples of ecosystem types - continued  
Quiz 10

Week 15  
Algal applications  

Second special project due by Wednesday

Week 16  
Exam 3  
Peer Grades for Special Project 2 due

**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. These evaluations are conducted online at [https://evaluations.ufl.edu](https://evaluations.ufl.edu). Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at [https://evaluations.ufl.edu/results](https://evaluations.ufl.edu/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/sscr/process/student-conduct-honor-code](http://www.dso.ufl.edu/sscr/process/student-conduct-honor-code).

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- **University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)**
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Wellness Coaching

- **Career Resource Center, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)**

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0001 Reid Hall, 352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)

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Fundamentals of Bioinformatics

This request is in progress.

Info

Process: Graduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: De Crecy-Lagarde, Valerie
Created: 7/22/2014 9:35:59 AM
Updated: 7/24/2014 8:55:57 AM
Description: Online bioinformatics class for graduate students in the life sciences

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Decision

Set status to: 

http://apps.aa.ufl.edu/Approval/Requests/Info/9470
Recommended SCNS Course Identification
Prefix: B
SC: C
Level: 5
Course Number: X
X
X
Lab Code

Full Course Title: Fundamentals of Bioinformatics
Transcript Title (please limit to 21 characters): Fund Bioinfo

Effective Term and Year: Fall 2015
Rotating Topic: □ yes □ no

Amount of Credit: 2
Contact Hour: Base: 2
or Headcount: _______________
S/U Only: □ yes □ no

Repeatability: □ yes □ no
If yes, total repeatable credit allowed: _______________

Variable Credit: □ yes □ no
If yes, minimum and maximum credits per semester: _______________

Course Description (50 words or less)
This an online course with emphasis on freely available web-based resources that analyze gene and protein sequences geared for graduate students in the life sciences who have not had an undergraduate bioinformatics class.

Prerequisites
None

Co-requisites
None

Degree Type (mark all that apply)
□ Baccalaureate □ Graduate □ Professional □ Other _______________

Category of Instruction
□ Introductory □ Intermediate □ Advanced

Rationale and place in curriculum
Many graduate students in various life sciences graduate programs begin their graduate training with little or no bioinformatics training. This course will teach them basic bioinformatic tools by studying specific examples where computational biology tools are critical in modern life science research. This is similar in content to the first two months of the current BSC4434c (Introduction to Bioinformatics) course. However, in addition to this content, the graduate students will read and discuss a paper from the original literature every week. This course will require a written component and an online conference discussion component.

Department Contact
Name: Valerie de Crecy-Lagarde
Phone: 392 9416
Email: vcrecy@ufl.edu

College Contact
Name: Joel Brendemuhl
Phone: 392 1963
Email: brendj@ufl.edu
# UCC: Syllabus Checklist

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

**Syllabus MUST contain the following information:**

- ✔ Instructor contact information (and TA if applicable)
- ✔ Course objectives and/or goals
- ✔ A weekly course schedule of topics and assignments
- ✔ Required and recommended textbooks
- ✔ Methods by which students will be evaluated and their grades determined
- ✔ A statement related to class attendance, make-up exams and other work such as: “Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.”
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**It is recommended that syllabi contain the following information:**

1. Critical dates for exams and other work
2. Class demeanor expected by the professor (e.g., tardiness, cell phone usage)
3. UF’s honesty policy regarding cheating, plagiarism, etc. Suggested wording: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of TAs in this class.
4. Phone number and contact site for university counseling services and mental health services: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx
   University Police Department: 392-1111 or 9-1-1 for emergencies.

**The University’s complete Syllabus Policy can be found at:** http://www aa.ufl.edu/Data/Sites/18/media/policies/syllabi_policy.pdf
BSC5XXX: Fundamentals of Bioinformatics, Section XXX-Fall 2015 (2 credits)

BSC5XXX (Section XXX) is an online course with emphasis on freely available web-based resources that analyze gene and protein sequences geared for graduate students in the life sciences who have not had an undergraduate bioinformatics class.

**Student Learning Outcomes** – After successful completion of this course, students will be able to:

1) Retrieve information on genes and proteins from biological and genomic databases.
2) Predict genes from DNA sequences.
3) Identify promoters and regulatory elements in DNA sequences
4) Analyze protein sequences
5) Compare protein and DNA sequences
6) Visualize and analyze protein structures
7) Construct and interpret simple phylogenies

**Lectures/Computer Lab**
Online course

**Instructor:** Dr. Valérie de Crécy-Lagarde

**WebPage:** Canvas course link

**Contact Information:**
- **Email (the most efficient):** Use the Canvas e-mail in priority. (If you do not have access to e-learning platform and if emergency, use vcredcy@ufl.edu).
- **Phone:** 392 9416 (please leave a message).
- **Office hours:** Two 1H online conferencing (times TBA)

**TAs:** TBA


Additional book of reference:

"Understanding Bioinformatics" 2008 by Marketa Zvelebil and Jeremy O. Baum Publisher: Garland Science, ISBN: 9780815340249

**Evaluation of learning**

- **Assignments**
  - Each lecture will have linked assignments (10%)
  - Weekly Journal Club assignments and discussion (30%)
  - 3 mini-projects will be given to prepare for the exams (15%)

- **Quizzes and Exams**
  - End of module quizzes (15%)
  - Final at home Exam (30%)

- **Make-up policy.** Late assignments will be penalized by deducting -25% of the grade for each late
day. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: 


- **Grading:** Straight scale, follows the policies described here
  https://catalog.ufl.edu/ugrad/current/regulations/info/grades.asp

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<tr>
<td>&lt;60%</td>
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The grading scale may be adjusted slightly, based on class performance

---

**Course organization**

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<tr>
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<td>EB5-7</td>
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EB= Essential Bioinformatics
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ucc2-FAS6154 Marine Adaptations

This request is in progress.

Info

Process: Graduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Sager, Scott A
Created: 8/26/2014 10:19:25 AM
Updated: 8/27/2014 11:36:19 AM
Description: revise course title and description

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Decision

Set status to:  

http://apps.aa.ufl.edu/Approval/Requests/Info/9519  
9/4/2014
UCC2: Course Change Transmittal Form

Department Name and Number: School of Forest Resources & Conservation - 541946003

Current SCNS Course Identification
Prefix: F, A, S
Course Title: Aquatic Invertebrate Physiology
Level: 6
Course Number: 1, 5, 4
Lab Code:

Effective Term and Year: Fall 2015
Terminate Current Course: □
Other Changes (specify below): □

Change Course Identification to:
Prefix: □ □ □ □
Level: □ □ □ □
Course Number: □ □ □ □
Lab Code: □ □ □ □
Full Course Title: Marine Adaptations
Transcript Title (please limit to 21 characters): MARINE ADAPTATIONS

Credit Hours: From □ □ □ □ To □ □ □ □
Contact Hours: □ Base or □ Headcount From □ □ □ □ To □ □ □ □

Rotating Topic: From □ yes □ no To □ yes □ no
S/U Only: From □ yes □ no To □ yes □ no
Variable Credit: From □ yes □ no To □ yes □ no
If yes, minimum and □ maximum credits/semester
Repeateable Credit: From □ yes □ no To □ yes □ no
If yes, □ total repeatable credit allowed

Prerequisites
From undergraduate course in animal physiology
To <none>

Co-requisites
From
To

Course Description (50 words or less; if requesting a change, please attach a syllabus)
From Biochemical, physiological, behavioral, and ecological adaptations that allow animals to survive in particular environments.
To Examines and compares the physiological adaptations of marine, estuarine, and freshwater invertebrates to environmental conditions. The processes examined will span several levels of organization, from ecological and organismal to cellular and molecular. Examples will be drawn from freshwater, rocky intertidal, salt marsh, coral reef, and deep sea habitats, among others.

Rationale/Place in Curriculum/Impact on Program
Title and description better cover course content.

Department Contact
Name: Scott A. Sager
Phone: 352.846.0846
Email: sasager@ufl.edu

College Contact
Name: Al Wysocki
Phone: 352.392.1963
Email: wysocki@ufl.edu

Rev. 7/13
# UCC: Syllabus Checklist

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   University Police Department: 392-1111 or 9-1-1 for emergencies.

## The University’s complete Syllabus Policy can be found at:

http://www.aa.ufl.edu/Data/Sites/18/media/policies/syllabi_policy.pdf
Course Description
Examines and compares the physiological adaptations of marine, estuarine, and freshwater invertebrates to environmental conditions. The processes examined will span several levels of organization, from ecological and organismal to cellular and molecular. Examples will be drawn from freshwater, rocky intertidal, salt marsh, coral reef, and deep sea habitats, among others.

Prerequisites: courses in animal physiology and ecology are recommended; graduate student status

Instructor
Dr. Shirley Baker
Email: sbaker25@ufl.edu
Telephone: 352-273-3627
Office: Fisheries and Aquatic Sciences, 7922 NW 71st St
Office hours: Thursdays 1-2pm in McCarty B G099, or by appointment

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

- Describe the basic principles and key mechanisms of physiological adaptation in invertebrate phyla
- Compare the physiology of invertebrates adapted to marine, estuarine and freshwater environments
- Apply critical thinking in evaluating classical and contemporary literature of the discipline
- Analyze the underlying importance of physiology in ecological patterns observed in communities and ecosystems

Course Meeting Times T 5-6 (11:45-1:40), R 5 (11:45-12:35)

Required Texts/Readings

1. There is no required textbook for this course. However, the following textbook is highly recommended; reading appropriate sections before the corresponding lecture will help clarify the topics discussed. This book can be purchased new, used, as an e-book, or as a rental, from a variety of online vendors.

2. Relevant readings from journals or other media will be posted on selected Tuesdays. These articles will supplement lecture material and will form the basis of discussion on the following Tuesday (see Assignments section).

Class Format, Policies on Attendance and Make-up Exams

Course format:
This course will consist primarily of lecture and discussion periods. Students are expected to have read assigned materials prior to corresponding class sessions.

Attendance policy:
Regular attendance and participation in lecture and discussion periods is expected. Absent students are responsible for acquiring missed materials, assignments, and lecture notes. 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.

Make-up policy:
Make-up exams, assignments, or discussion sessions will be considered on a case-by-case basis and will only be given under exceptional circumstances. Students must request permission to make-up an exam, assignment, or discussion session prior to the exam or due date, with no exceptions. Without prior permission, a missed exam/discussion session or late assignment will receive a score of “0”.

Assignments

Critical Thinking Assignments: Five critical thinking activities will be assigned throughout the semester. Assignments will be posted on selected Thursdays and responses must be submitted to the e-learning platform by 5pm on the following Friday (see schedule). A grading rubric will be provided; assignments will be evaluated on interpretation, detail, use of supporting evidence, clarity, and mechanics. Graduate students are expected to provide answers synthesizing information in an advanced manner.

Literature Discussion: During most Tuesday class sessions (eleven sessions – see schedule), we will devote 20-30 minutes to discussion of assigned papers from the primary literature. A grading rubric will be provided; discussion participation will be evaluated on comment quality, reference to the literature, and active listening. Students will be expected to actively participate in every discussion. Unexcused absences will result in a score of zero for that day’s discussion session. Of the eleven possible sessions, the lowest score will be dropped.

In addition, graduate students will be expected to lead and moderate two discussion sessions during the semester. A grading rubric will be provided; discussion leadership will be graded on preparation, knowledge of the material, organization, and moderation of the discussion.
Reusable Learning Object (graduate only): Graduate students will work in groups (2-3) to create and present a Reusable Learning Object to the class. Reusable Learning Objects (RLOs) are short (<15 min), self-contained, digital learning activities that are stored online. A portion of one discussion period will be spent brainstorming RLO topics (September 5). Groups must select a topic by September 13 and turn in a draft by October 4. Groups must turn in their RLOs by November 15 and the class will view the RLOs on November 21. Detailed instructions and examples will be provided. A grading rubric will be provided; presentations will be evaluated on the value of the learning objective, content, organization, visual aids, and collaboration.

Exams: Each of three exams will primarily cover the material since the last exam. Exams will consist of short answer questions and short essays. Questions will require critical thinking, integration, and application of interdisciplinary concepts. Examples will be provided. Graduate student exams will include a high proportion of essay questions and students will be expected to provide answers that synthesize information in an advanced manner.

### Evaluation of Student Learning

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>100</td>
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<td>Exam 2</td>
<td>100</td>
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<tr>
<td>Exam 3</td>
<td>100</td>
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<tr>
<td>Critical Thinking Assignments (5 @ 25 points each)</td>
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<tr>
<td>Literature Discussion Participation (10 @ 3 points each)</td>
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<td>Literature Discussion Leadership (2 @ 10 points each)</td>
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<tr>
<td>Reusable Learning Object</td>
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<td><strong>Total</strong></td>
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### Grading Scale

Final grades will be assigned based on the percentage of total points earned. For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

- A = 90-100% = 522-575 points
- B+ = 85-89% = 493-521 points
- B = 80-84% = 464-493 points
- C+ = 75-79% = 436-464 points
- C = 70-74% = 406-460 points
- D = 60-69% = 348-406 points
- F = < 60% = <348 points
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<tr>
<th>Week</th>
<th>Date</th>
<th>Weekly Topic, Reading, Activities</th>
<th>Assignments</th>
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<tr>
<td>1</td>
<td>Thursday August 22</td>
<td>Introduction, overview, expectations</td>
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<tr>
<td>2</td>
<td>Tuesday August 27</td>
<td><strong>BASIC PRINCIPLES</strong></td>
<td>Paper for Sept 3</td>
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<td></td>
<td></td>
<td>Adaptation</td>
<td>Literature Discussion posted</td>
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<td></td>
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<td>Willmer et al 2005: <em>Chapter 1, p 3-16</em></td>
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<td>Thursday August 29</td>
<td>Critical Thinking Assignment 1 posted</td>
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<td>3</td>
<td>Tuesday September 3</td>
<td><strong>Mechanisms of Adaptation</strong></td>
<td>Paper for Sept 10</td>
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<td>Willmer et al 2005: <em>Chapter 2, p 17-35</em></td>
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<td></td>
<td>Reusable Learning Object topic brainstorming</td>
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<td>Thursday September 5</td>
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<td>Friday Sept 6, 5pm</td>
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<td>Tuesday September 10</td>
<td><strong>Size and Scale</strong></td>
<td>Paper for Sept 17</td>
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<td>Willmer et al 2005: <em>Chapter 3, p 36-48</em></td>
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<td>Friday Sept 13, 5pm</td>
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<td>5</td>
<td>Tuesday September 17</td>
<td><strong>Life in Fluid</strong></td>
<td>Critical Thinking Assignment 2</td>
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<td>Levinton 2009: <em>Chapter 5, p 109-122</em></td>
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<td>Reusable Learning Object proposal discussion</td>
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<td>Thursday September 19</td>
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<td><strong>EXAM I</strong></td>
<td>Paper for Oct 1</td>
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<td>Thursday September 26</td>
<td><strong>CENTRAL ISSUES</strong></td>
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<td>Water, Ions, and Osmotic Physiology</td>
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<td>Willmer et al 2005: <em>Chapter 4, p 51-75</em></td>
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<td><strong>Water Balance, Osmoregulation and Excretion</strong></td>
<td>Paper for Oct 8 Literature Discussion posted</td>
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<td>October 1</td>
<td>Willmer et al 2005: Chapter 5, p 76-111</td>
<td>Reusable Learning Object draft due Friday Oct 4, 5pm</td>
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<td>Thursday</td>
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<td>8</td>
<td>Tuesday</td>
<td><strong>Metabolism and Energy Supply</strong></td>
<td>Paper for Oct 15 Literature Discussion posted</td>
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<td>October 8</td>
<td>Willmer et al 2005: Chapter 6, p 112-140</td>
<td>Critical Thinking Assignment 3 posted</td>
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<td>Reusable Learning Object draft discussion</td>
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<td>October 10</td>
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<td>9</td>
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<td><strong>Respiration and Circulation</strong></td>
<td>Paper for Oct 22 Literature Discussion posted</td>
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<td>Willmer et al 2005: Chapter 7, p 141-174</td>
<td>Critical Thinking Assignment 3 due Friday October 18, 5pm</td>
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<td><strong>Thermal Biology</strong></td>
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<td>Willmer et al 2005: Chapter 8, p 175-222</td>
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<td>11</td>
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<td><strong>EXAM II</strong></td>
<td>Paper for Nov 5 Literature Discussion posted</td>
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<td><strong>ENVIRONMENT</strong></td>
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<td>October 31</td>
<td><strong>Marine environments</strong></td>
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<td>Willmer et al 2005: Chapter 11, p 393-443</td>
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<td><strong>Shores and estuaries</strong></td>
<td>Paper for Nov 12 Literature Discussion posted</td>
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<td>November 5</td>
<td>Willmer et al 2005: Chapter 12, p 444-486</td>
<td>Critical Thinking Assignment 4 due Friday November 8, 5pm</td>
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<td><strong>Freshwater environments</strong></td>
<td>Willmer et al 2005: Chapter 13, p 487-525</td>
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<td>Tuesday</td>
<td><strong>Extreme Environments</strong></td>
<td>Willmer et al 2005: Chapter 14, p 526-540</td>
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<td><strong>Symbioses</strong></td>
<td>Nybakken &amp; Bertness 2005: Chapter 10 p 475-499</td>
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<td>16 Nov</td>
<td>Tuesday</td>
<td><strong>Exam III</strong></td>
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### Additional References

Background material for two of the lectures, *Life in Fluid* and *Symbioses*, is not available in the recommended Willmer et al. text book. Therefore, it is suggested that the following materials be read before the corresponding lectures to help clarify the topics. These books can be purchased new, used, as an e-book, or as a rental, from a variety of online vendors. Older editions may be available in the UF library.

**Other Information**

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

It is assumed that you will complete all work independently in 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, www.dso.ufl.edu/drc/

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

- **Career Resource Center**, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)
IPM5305

This request is in progress.

Info

Process: Graduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Pons, Sheila
Created: 8/7/2014 12:33:39 PM
Updated: 8/8/2014 8:34:10 AM
Description: Prerequisites change: "Must have graduate standing or instructor's permission to register for this course."

Documents

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<td>IPM5305 Syllabus.pdf</td>
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Decision

Set status to: 

Submit decision
## UCC2: Course Change Transmittal Form

**Department Name and Number** Agronomy 5147908000

**Current SCNS Course Identification**
- **Prefix**: I  
- **Level**: 5  
- **Course Title**: Principles of Pesticides
- **Course Number**: 3 0 5  
- **Lab Code**:  

**Effective Term and Year** Spring 2015

**Change Course Identification to:**
- **Prefix**:  
- **Level**:  
- **Course Number**:  
- **Lab Code**:  
- **Full Course Title**:  
- **Transcript Title (please limit to 21 characters)**:  

**Credit Hours:** From [ ] To [ ]

**Contact Hours:**
- **Base or Headcount**: [ ]
- **From**: [ ] To [ ]

**Rotating Topic:**
- **From**: [ ] To [ ]
- **Yes**: [ ]
- **No**: [ ]

**S/U Only:**
- **From**: [ ] To [ ]
- **Yes**: [ ]
- **No**: [ ]

**Variable Credit:**
- **From**: [ ] To [ ]
- **Yes**: [ ]
- **No**: [ ]

**Repeatable Credit:**
- **From**: [ ] To [ ]
- **Yes**: [ ]
- **No**: [ ]

**If yes, minimum and maximum credits/semester**

**Prerequisites**
- **From**: None
- **To**: Must have graduate standing or instructor's permission to register.

**Course Description (50 words or less; if requesting a change, please attach a syllabus)**

**Rationale /Place in Curriculum/Impact on Program**

**Department Contact**
- **Name**: Dr. Fred Fishel
- **Phone**: 352-392-4721
- **Email**: weeddr@ufl.edu

**College Contact**
- **Name**: Dr. Joel Brendemuhl
- **Email**: brendj@ufl.edu

*Rev. 7/13*
IPM 5305
PRINCIPLES OF PESTICIDES
Spring 2014
Three (3) credit hours – Spring semesters

Instructor: Dr. Fred Fishel
Professor, Dept. of Agronomy
Pesticide Information Office, Bldg. 164, Box 110710
Gainesville, FL 32611
Phone: (352) 392-4721
Email: weeddr@ufl.edu

OFFICE HOURS: I am in my office most days. While I do not set aside dedicated office
hours, I am readily available to make appointments. To arrange an appointment, email
or call me on the telephone as listed above. Please do not text me. I do not
communicate by texting, and will not respond to you.

COURSE MEETINGS: Asynchronous – UF Elearning (Sakai) System.

COURSE DESCRIPTION
Principles of Pesticides will provide opportunities for students to gain a basic knowledge
of pesticides and their use. The course is not designed for students to memorize
chemical structures, but to gain a practical working knowledge of all types of pesticides
used primarily in agricultural and horticultural settings. Emphasis will be placed upon
major classes of agricultural pesticides used on commodities grown in Florida. Students
are expected to be able to associate common names of pesticide active ingredients with
chemical families, modes of action, and use patterns.

COURSE OBJECTIVES
➢ To have a thorough knowledge of the history of pest management, particularly
  the specific role pesticides have served in the development of management
  strategies.
➢ To have a knowledge of pesticide families and be able to differentiate among
  families based on their specific modes of activity.
➢ To evaluate specific pest scenarios caused by arthropods, nematodes,
  pathogens and weeds in order to develop appropriate pesticide management
  strategies.
➢ To be knowledgeable of the laws and regulations governing the proper use of
  pesticides.
➢ To obtain a working knowledge of the equipment used to apply pesticides and to
  understand the factors involved in calibrating application equipment for pesticide
  applications and be able to make accurate calculations for these purposes.
➢ To understand the potential hazards to humans, wildlife, and the environment by
  the use of pesticides.

COURSE PREREQUISITES: None
REQUIRED TEXTBOOKS: None

SUGGESTED TEXTBOOKS (not required):


RECOMMENDED GENERAL REFERENCES
Students are advised to review assigned reading materials (see listings of lectures and required readings). Material from assigned readings and class lectures is considered fair game for exams. A list of helpful references is provided for your own information. Some of my lecture material is taken from these references.

GRADING CRITERIA
The course grade will be determined from:
- 3 semester exams
- A final comprehensive exam
- A project PowerPoint presentation

The following is a breakdown of how the final course grade is calculated by total available points:

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<th>Activity</th>
<th>Points</th>
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<tbody>
<tr>
<td>Exam 1 (Module 01)</td>
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<td>Exam 2 (Module 02)</td>
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<td>Exam 3 (Module 03)</td>
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<td>Final Exam (Comprehensive)</td>
<td>200</td>
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<tr>
<td>Project Presentation</td>
<td>200</td>
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<td><strong>Total</strong></td>
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</table>

**Project Presentation:** the presentation will be a comprehensive pest management plan for an agricultural commodity. Instructions will be posted in the IPM 5305 Sakai course management system under the “Assignments” tab.

**Learning Activities:** some weeks I will post a learning activity. For several of these, you will be asked to post your response into the Discussion Forum. Although not required, your learning of relevant material will be enhanced with your participation and interaction with your classmates. My hope is that these activities will foster an interactive environment and be driven by you, the students. Typically in the past, those students who actively participate do well in IPM 5305.

**Due Dates:** all exam and project presentation due dates are strictly adhered.
Grading (% of total points): 93 to 100 A; 90 to 92 A-; 87 to 89 B+; 83 to 86 B; 80 to 82 B-; 77 to 79 C+; 73 to 76 C; 70 to 72 C-; 67 to 69 D+; 63 to 66 D; 60 to 62 D-; <60 E.

ACADEMIC HONESTY, SOFTWARE USE, SERVICES FOR STUDENTS WITH DISABILITIES, UF COUNSELING SERVICES

The University of Florida Honor Code may be found in the Regulations of the University of Florida under section 6C1-4.041.

Preamble: 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. Student and faculty support are crucial to the success of the Honor Code. The quality of a University of Florida education is dependent upon the community acceptance and enforcement of the Honor Code.

The University of Florida requires all members of its community to be honest in all endeavors. Cheating, plagiarism, and other acts diminish the process of learning. When students enroll at UF they commit themselves to honesty and integrity. Your instructor fully expects you to adhere to the academic honesty guidelines you signed when you were admitted to UF.

As a result of completing the registration form at the University of Florida, every student has signed the following statement:

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 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."

Reminder: you have signed the following statement:

"I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."
It is to be assumed all work will be completed independently unless the assignment is defined as group project, in writing by the professor.

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 crisis or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The University Counseling and Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are also available at the Career Resource Center on campus for students having personal or lacking clear career and academic goals, which interfere with their academic performance.

1. *University Counseling and Wellness Center*, 3190 Radio Road, (352) 392-1575; personal and career counseling: [http://www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)

2. *Sexual Assault Recovery Services (SARS), University Counseling and Wellness Center*, 3190 Radio Road, (352) 392-1575; sexual assault counseling: [http://www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)


**Students with Disabilities**
The Dean of Students Office coordinates the needed accommodations of students with disabilities. This includes the registration of disabilities, academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services, and mediating faulty-student disability related issues.

0001 Reid Hall, 352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)

***The Sakai Course Management System***

We will be utilizing the Sakai course management system ([http://lss.at.ufl.edu](http://lss.at.ufl.edu)) to communicate relevant course-related material, due dates, etc. You will login with your GatorLink username and password. Students must have an active GatorLink ID to access E-Learning. Should you encounter problems or you cannot remember your
GatorLink login information, visit the GatorLink website (http://gatorlink.ufl.edu) or the UF Computing Help Desk: (352) 392-HELP for assistance.

***Listings of lectures and required readings***

Readings are also found in the "Lessons" tab of the course Sakai management system. Upon entering the weekly lesson, select "Readings." I suggest that you print and read these.

**Module 01 (The Foundation of Principles of Pesticides)**

01.01.01_Introduction to IPM 5305 (Review course syllabus)
01.01.02_What is a Pesticide and Why Use Pesticides?
01.01.03_Pest Management and Pesticides – A Historical Perspective

**Weekly readings:**
2. What is and isn't a Pesticide? http://edis.ifas.ufl.edu/PL133
4. Why Do We Use Pesticides? http://edis.ifas.ufl.edu/PL140

01.02.01_Pesticide Laws and Regulations
01.02.02_Understanding Pesticide Labels and the MSDS
01.02.03_Pesticide Formulations and The Farm Family Exposure Study

**Weekly readings:**
1. Restricted Use Pesticides http://edis.ifas.ufl.edu/PL073
2. Agricultural and Related Pest Control Applicator License Classifications under the Florida Department of Agriculture and Consumer Services http://edis.ifas.ufl.edu/PL095
3. Federal Regulations Affecting Use of Pesticides http://edis.ifas.ufl.edu/pi168
4. Interpreting Pesticide Label Wording http://edis.ifas.ufl.edu/PL071
5. Understanding Material Safety Data Sheet Language http://edis.ifas.ufl.edu/PL072
6. Pesticide Formulations http://edis.ifas.ufl.edu/pi231
7. Glyphosate Biomonitoring for Farmers and Their Families: Results from the Farm Family Exposure Study http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241861/

01.03.01_Personal Protective Equipment
01.03.02_Pesticides in the Environment: Part 1
01.03.03_Pesticides in the Environment: Part II

**Weekly readings:**
1. Personal Protective Equipment for Handling Pesticides  
   http://edis.ifas.ufl.edu/pi061
2. Pesticide-Organism Interactions http://edis.ifas.ufl.edu/Pl080
3. Pesticide Effects on Nontarget Organisms http://edis.ifas.ufl.edu/pi122
4. Protecting Water Resources from Agricultural Pesticides  
   http://edis.ifas.ufl.edu/pi1001
5. Pesticide Residues http://edis.ifas.ufl.edu/Pl106
6. What is the Significance of a Part per Million? http://edis.ifas.ufl.edu/Pl116

01.04.01_The Critical Role of IR-4 in Specialty Crop Pest Management
01.04.02_Pesticide Drift
01.04.03_Pesticide Resistance

Weekly readings:
1. National Economic Impact of the IR-4 Project  
   http://ir4.rutgers.edu/Other/IR4EconomicImpact.pdf
3. Florida’s Organo-Auxin Herbicide Rule - 2012 http://edis.ifas.ufl.edu/wg051
4. Pest Resistance to Pesticides Pest Resistance to Pesticides
5. A Dresser Drawer Method of Managing Insect and Mite Resistance in  
   Ornamentals http://edis.ifas.ufl.edu/in773

End of material for Exam I  
Exam I must be completed by 5:00 p.m. Friday, February 7, 2014.

Modules 02a and 02b (Fungicides and Insecticides)

02a.01.01_Introduction to Fungicides I
02a.01.02_Introduction to Fungicides II
02a.01.03_Introduction to Fungicides III

Weekly readings:
1. Fungicide Resistance Action Committee’s (FRAC) Classification Scheme of  
   Fungicides According to Mode of Action http://edis.ifas.ufl.edu/pi131
2. Control of Bacterial Spot of Pepper Initiated by Strains of Xanthomonas  
   campestris pv. vesicatoria That Differ in Sensitivity to Copper  
   icles/PlantDisease67n07_779.pdf

02a.02.01_Introduction to Fungicides IV
02a.02.02_Introduction to Fungicides V
02a.02.03_Introduction to Fungicides VI

Weekly readings:
1. Fungicide Resistance Action Committee’s (FRAC) Classification Scheme of  
   Fungicides According to Mode of Action http://edis.ifas.ufl.edu/pi131
2. Management of Early Leaf Spot of Peanut with Pyraclostrobin as Affected by Rate and Spray Interval
   http://www.plantmanagementnetwork.org/pub/php/research/pyraclostrobin/

02b.01.01_Introduction to Insecticides I
02b.01.02_Introduction to Insecticides II
02b.01.03_Introduction to Insecticides III

Weekly readings:
1. IRAC's Insecticide Mode of Action Classification (Students should focus on the IRAC Code List for all lectures of this section) http://www.irac-online.org/content/uploads/MoA-classification.pdf

02b.02.01_Introduction to Insecticides IV
02b.02.02_Introduction to Insecticides V
02b.02.03_Introduction to Insecticides VI

Weekly readings:
1. IRAC's Insecticide Mode of Action Classification (Students should focus on the IRAC Code List for all lectures of this section) http://www.irac-online.org/content/uploads/MoA-classification.pdf
2. Genetically Modified Food http://edis.ifas.ufl.edu/fs084
3. Insects Find Crack in Biotech Corn's Armor pdf
4. Water pH and the Effectiveness of Pesticides http://edis.ifas.ufl.edu/pi193
5. Natural Products for Insect Pest Management http://edis.ifas.ufl.edu/IN197

End of material for Exam II
Exam II must be completed by 5:00 p.m. Friday, March 14, 2014.

Module 3 (Herbicides and Miscellaneous Pesticides)

03.01.01_Herbicides – Why Use Herbicides?
03.01.02_Herbicide Processes
03.01.03_Herbicide Families I

Weekly readings:
1. The Herbicide Resistance Action Committee's Classification of Herbicides (Students should focus on the HRAC Code List for all lectures of this section)  
2. ACCase Inhibitors http://psted.ifas.ufl.edu/pdfs/ACCase_Inhibitors.pdf
3. ALS Inhibitors http://psted.ifas.ufl.edu/pdfs/ALS_Inhibitors.pdf

03.02.01_Herbicide Families II
03.02.02_Herbicide Families III
03.02.03_Herbicide Families IV

Weekly readings:
1. The Herbicide Resistance Action Committee's Classification of Herbicides (Students should focus on the HRAC Code List for all lectures of this section)  
2. Specifically Regulated Pesticides in Florida – Bromacil http://edis.ifas.ufl.edu/PI112
3. Photosystem Inhibitors http://psted.ifas.ufl.edu/pdfs/Photosystem_Inhibitors.pdf

03.03.01_Herbicide Families V
03.03.02_Plant Growth Regulators, Acaricides, and Molluscicides
03.03.03_Soil Fumigants and Nematicides

Weekly readings:
1. The Herbicide Resistance Action Committee’s Classification of Herbicides (Students should focus on the HRAC Code List for all lectures of this section)  
2. Synthetic Auxins http://psted.ifas.ufl.edu/pdfs/scans/24d.pdf
3. MSMA http://psted.ifas.ufl.edu/pdfs/scans/msma.pdf
4. Plant Growth Regulators http://edis.ifas.ufl.edu/PI139
5. Movement and Toxicity of Nematicides in the Root Zone  
   http://edis.ifas.ufl.edu/ng002
7. Fumigants and Nematicides  
   http://psted.ifas.ufl.edu/pdfs\Fumigants_and_Nematicides.pdf

End of material for Exam III
Exam III must be completed by 5:00 p.m. Friday, April 4, 2014.

Module 4 (Application of Pesticides)
Weekly readings:
1. Boom Sprayer Nozzle Performance Test http://edis.ifas.ufl.edu/PL015
2. Calibration of Herbicide Applicators http://edis.ifas.ufl.edu/WG013
3. Calibration Practice Calculations
   http://sted.ifas.ufl.edu/pdfs/scans/IPM5305_Calibration_Practice_Calculations.doc
4. Nozzle Tip Selection Chart
   http://sted.ifas.ufl.edu/pdfs/scans/IPM5305_Calibration_Tip_Guide.pdf
5. View the video, Calibrating and Using Backpack Sprayers (listed under “Videos” in the Lessons tab)
6. Adjuvants http://edis.ifas.ufl.edu/wg050
7. Pesticide Interactions http://edis.ifas.ufl.edu/pi182

End of class material (Last day of class: April 23)
Final Exam Must Be Completed by 5:00 p.m., Wednesday, April 30, 2014.

List of helpful references (Note: not required reading)

Crop Data Management Systems. (Pesticide product labels)
http://www.cdms.net/LabelsMsds/LMDefault.aspx?l=


EXTOXNET (Extension Toxicology Network provides detailed toxicology data for many pesticide active ingredients) http://extoxnet.orst.edu/

Florida Department of Agriculture and Consumer Services. Division of Agricultural Environmental Services. (Licensing and regulatory information) http://www.flaes.org/


TeeJet Technologies. (Sprayer equipment manufacturer and retailer)

Use and Management of Insecticides, Acaricides, and Transgenic Crops. 2006. Entomological Society of America. (Good reference for insecticides) http://entsoc.org
Academic Approval Tracking
UNIVERSITY of FLORIDA

FYC6320

This request is in progress.

Info

Process: Graduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Forthun, Larry F
Created: 7/1/2014 3:59:21 PM
Updated: 7/1/2014 4:41:27 PM
Description: Revision of course title and description

Documents

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<td>FYC 6320 syllabus 2015.pdf</td>
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Decision

Set status to: [ ]
UCC2: Course Change Transmittal Form

Department Name and Number: Family, Youth and Community Sciences 514932000

Current SCNS Course Identification
Prefix: F  Y  C  Level: 6  Course Number: 3  2  0  Lab Code: ___
Course Title: Community Development

Effective Term and Year: Spring 2015
Terminate Current Course: □  Other Changes (specify below): □

Change Course Identification to:
Prefix: F  Y  C  Level: 6  Course Number: 3  2  0  Lab Code: ___
Full Course Title: Community Development and Civic Engagement
Transcript Title (please limit to 21 characters): Comm Dev&Civic Engmnt

Credit Hours: From ___ To ___  Contact Hours: □ Base or □ Headcount From ___ To ___

Rotating Topic: From □ yes To □ yes  S/U Only: From □ yes To □ yes
□ no  □ no

Variable Credit: From □ yes To □ yes  Repeatable Credit: From □ yes To □ yes
□ no  □ no
If yes, _____ minimum and _____ maximum credits/semester
If yes, _____ total repeatable credit allowed

Prerequisites
From
To

Co-requisites
From
To

Course Description (50 words or less; if requesting a change, please attach a syllabus)
From Process and methods for community development. Develops skills for managing change in communities.
To Examines the process and methods for community development with an emphasis on research related to civic engagement and public participation. Students will develop skills for managing change in communities.

Rationale /Place in Curriculum/Impact on Program
The request to change the title and description of FYC 6620 is to help clarify the specific content that will be covered in the course, further differentiating it from other community development courses in FYCS. The essence of the course will not change. The new title and description will better reflect the research that is presented in the course and reduce confusion among students and advisors.

Department Contact
Name: Larry Forthun
Phone: 273-3528
Email: lforthun@ufl.edu

College Contact
Name
Phone
Email
FYC 6320 Community Development and Civic Engagement
3 credits
Spring 2015
Location/Time: TBD

Instructor: Mike Spranger
Email: spranger@ufl.edu    Phone: 352-273-3557
Office: 3028 McCarty Hall D

Office Hours and Consultation Policy: Office hours are Tuesdays, periods 8-9 (3 – 5 pm). Check on my availability and to make an appointment by e-mail. You can also contact me if you have a question or just want to discuss something.

Course Description: This course will examine the process and methods for community development with an emphasis on research related to civic engagement and public participation. Students will develop skills for managing change in communities.

Community development, as a discipline and profession, promotes democratic practices that build the capacity of citizens and decision-makers of local institutions to make sound decisions about community challenges, to recognize their diverse resources, and to align their efforts to put community, governmental, and private resources into action. What role do or should community residents have in determining a community’s future? The concept and role of public participation and civic engagement is not that straight-forward in community development. Some researchers do not feel increased citizen participation leads to better decisions. Others maintain we have a “civic crisis” in the United States with declining interest among the populace to be engaged in public decision-making activities. Others contend that citizens are often compromised in the local decision-making process. Finally, state and local government managers are often mandated to involve citizens in the decision-making process, but do not have the adequate training or resources to do so effectively.

Students will review the basic concepts of asset-based community development and explore the evolution of the historical concept of public participation from ancient time to its evolution in the United States. We will investigate some of the creative tensions that exist today, such as the role of citizen versus the role of the government in community development activities and the issue of the role of the citizen versus the role of the technical expert in complex, “wicked” issues that individuals and communities face today. Students will also learn about different approaches, techniques, processes that may lead to more active public participation and civic engagement at the local level.

Course Format and Instructional methods: This course includes lectures, discussions, group activities, outside speakers, in-class exercises, written assignments, case study project and final examination.

Course Goal: Students will gain knowledge on the concepts and theories of community development and will be able to apply public participation processes, methods and techniques that will assist in managing for change in local communities.
**Course Objectives**
After completing this course students will be able to:

1. Identify and explain the key concepts of asset-based community development to other professionals and to citizen groups;
2. Incorporate critical elements of the historic context of democratic citizenship into planning and implementing community development projects;
3. Analyze processes of citizen participation and how these affect the relationships between citizens and government and citizens and technical experts and professionals;
4. Evaluate and make recommendations to citizens and citizen groups about which tools, techniques and methods of citizen mobilization are most likely to succeed in specific contexts and/or development processes;
5. Provide leadership to citizen organizations to plan and implement programs that create lasting and meaningful citizenship participation in addressing the needs, issues and problems of local communities.
6. Develop a comprehensive public participation plan on a contemporary community development issue.

**Textbooks:**


**Optional Text:**

**Assignments**
1. **Weekly Assignments:** Read assigned materials for seminar-type discussion in class.

2. **Weekly Assignments:** Identify and be prepared to present an issue (from newspapers, magazines, journal articles, web, etc.) where citizen participation and engagement are a part of the issue. (Submit a short 1-page synopsis of issue and citizen engagement in AP format).

3. **Class Project Assignment:** Identify a community issue that you will use as a study for development of a public participation plan that actively involves citizens into the decision-making framework. This will be presented in class orally to the class, and a final written plan will be provided to the instructor during the last two weeks of the course.

4. **Final examination:** There will be a written take-home examination that will address critical concepts, theories and applications in the course.
**Class participation:** Students are expected to demonstrate their understanding of course material through active participation in group discussions. Your participation is very important to your learning and that of other students in this class.

**Class Schedule:** The following lists the general topics of discussion and readings for each week, but are subject to revision as interests develop during the course.

<table>
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<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Readings</th>
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<tr>
<td>1</td>
<td>1/6</td>
<td>Introductions, Expectations, Objectives</td>
<td>Green &amp; Haines (2012), Ch. 1, 2</td>
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<td>What is Community Development?</td>
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<td>The Role of Community Assets</td>
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<td>History of Community Development</td>
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<td>Understanding Democracy and Citizenship</td>
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<td>Sustainability and Community Development</td>
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<td>The Community Development Process</td>
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<td>Wicked issues and Community Development</td>
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<td>The Role of the Public</td>
<td>Creighton, Ch. 1, 2, Arnstein (1969)</td>
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<td>Citizen Participation and Civic Engagement</td>
<td>Caviller, pp 28-69</td>
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<td>History of Citizenship in the U.S.</td>
<td>Nishishba, Banyan, &amp; Morgan (2012)</td>
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<td>The Land Grant University in the 21st Century</td>
<td>Martin (2001)</td>
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<td>The Role of Citizen</td>
<td>Irvin and Stansbury (2004)</td>
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<td>Citizenship and Democracy</td>
<td>Boyte (2005), Fung (2006),</td>
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<td>Citizen versus Expert</td>
<td>Boyte (2009), Caviller, pp 70-77</td>
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<td>Public Deliberation</td>
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<td>The Public Participation Process</td>
<td>Creighton, Ch. 3-5. Get Engaged (2013)</td>
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<td>Public Participation and Meeting Tools</td>
<td>Creighton, Ch. 6-11 (skim)</td>
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<td>McComas (2011), Adams (2004),</td>
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<td>General Purpose Tools, Online Tools, Analysis and Evaluation</td>
<td>Creighton, Ch. 12-14</td>
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Social and Political Capital
Power and Public Deliberation
Navigating Power Dynamics

Role of Community-Based Organizations
Business Retention and Development

Physical Capital
Housing/Community Flow

Disaster Planning for hazards
Community Resiliency
The Experience of Katrina
The experience of Live Oak, FL

Natural Resource and Cultural Assets
Future of Community Development

Project Presentations

Final Written Citizen Participation Plans Due: Final class project (written participation plan) due following class discussions and critique. Wednesday, April 29th, 2015 (5:00 pm).

FINAL EXAMINATION DUE: Take-home examination that will address critical concepts, theories and applications in the course. Wednesday, April 29th, 2015 (5:00 pm).

Grading Scale

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General Grading Criteria

1. **Application of concepts learned in class.** Applications of concepts, theories and methodologies learned in class are important to demonstrate that you understand the concepts and know how to apply the concepts. Critical thinking involves how you can synthesize and see how differing concepts can be utilized in community development activities. Your understanding and application should be evident in class discussions, class project and final examination.

2. **Independent learning.** Assigned readings are only a starting point toward an understanding of community development and the role that citizen participation and civic engagement plays in the process. It is the expectation that you will explore and utilize additional materials in your areas of interest in your weekly assignments and class project. Document all materials (books, journals, newspapers, internet, videos, etc.) that you will explore during the course, and be prepared to bring these to the attention of the class, when appropriate. At the end of the semester, you will provide me with a bibliography of all the materials you have found useful during your course of study.

Specific Grading Criteria

1. **Class Preparation and Participation (15 points).** As a graduate student, it is the expectation that you will be prepared to participate in class activities. This not only involves the assigned readings, but other readings that you may explore on your own. You also bring in a wealth of experiences that can be useful in the class discussions and activities. Our class discussions and activities should be seen as collaborative learning opportunities that will build upon and extend your competencies in the topics covered. The ability to assess your current knowledge, present and prior experiences and synthesize these with new information is an integral part of critical thinking.

2. **Leadership in Class Discussions and Exercises (15 points).** This will consist of several parts. First, each week you will be asked to bring in an example of a contemporary event or issue that you read about that has a citizen participation component. You will be prepared to provide a brief oral summary of the issue, the citizen participation components (or lack thereof) and any application to the core tenets of the course. Second, you will each present presentation of your class project (citizen participation plan) during the last two weeks of class. In addition the basic information, you will lead discussion on your project for input and constructive criticism on how the plan might be improved. All written materials need to be in AP format.

3. **Peer Assessment of Class Participation and Leadership (5 points).** Peer review of your work in class is another important way of providing feedback to you and the instructor. Each class member will be asked to assess your contributions to the course during the year on a 1-5 point scale following the last scheduled class.

4. **Bibliography Used for Class Discussions and Class Project (10 points).** As you delve into the topics in this course, you will find much rich information on citizen participation and
civic engagement. You further will find additional sources of information as you develop your class project. You should cite and reference all these assigned sources of information that you find useful, as well as others that have not been assigned that you feel useful to you and your classmates. You will submit this body of knowledge in standard APA style. This will be due the last week of class. Title the email and the document as: YourLastName_6320_Bibliography.

5. Course Project (Citizen Participation Plan (30 points)). You will identify a community development issue that you will use as a case study to develop a public participation plan that actively involves citizen into the decision-making framework. The template for developing your plan will be found in The Public Participation Handbook by J. Creighton (2005). The plan will be written so individuals without knowledge about the topic can understand the issue, why citizen participation is needed, and the logic that you took in selecting the activities that were used, as well as how you will evaluate the success of the project. This plan will be presented orally to the class during the last two class sessions. A final written plan will be due, no later than Wednesday, April 30th, 2014 5:00 pm.

6. Final Take Home Examination (25 points). A written take-home examination will address critical concepts, theories and applications in the course. You will be asked provide short answers to questions that will allow you the ability to demonstrate your understanding of the concepts, as well as how you synthesize them in differing community development issues. Make sure this is in AP format, and with citations to back up your answers. The written exam will be due, no later than Wednesday, April 30th, 2014 5:00 pm.

Attendance Policy and class assignments: It is expected that students will attend all sessions. If you are cannot attend a session for any reason, you need to notify the instructor by telephone or email prior to start of class, if possible. If you have any extenuating situations that may hinder you from completing any assignments by designated deadlines, please discuss with instructor prior to the deadline.

Teaching Philosophy: I have been influenced by the writings of Dewey and Kolb. Learning is best achieved when it is dynamic and when the student is fully engaged in the process. It also is beneficial if the student can reflect on what has been learned and discover how this new knowledge might be applied to different settings. This approach can be facilitated through readings, class discussions, in-class activities and reflection through questions, team exercises and written assignments. Upon completion of the course, the student will have an increase in subject matter expertise and gained new critical thinking skills as well. The student will also have a better appreciation and understanding of independent learning that may eventually lead to a quest for lifelong learning.

I have a collaborative learning approach to teaching. I see the teacher as both a provider of knowledge and experience, and as a facilitator to help the student develop and take an independent approach that can lead to lifelong learning. In graduate courses, the student needs to take an active approach in learning the subject matter area. This should also include activities where the students become providers of knowledge and experience as well. Lectures should be mixed with group assignments, class discussions on assigned readings from books and research articles, and exploration of case studies.
UF Policies:

**University Policy on Accommodating Students with Disabilities:** Students requesting accommodation for disabilities must first register with the Dean of Students Office (https://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**Academic honesty:** Academic honesty and integrity are fundamental values of the University community. Failure to uphold the standards of honesty will result in the appropriate disciplinary action by the University of Florida. As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the university."

**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 against university policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

**Counseling Services:** Resources are available on campus for students having personal problems or lacking clear career and academic goals which interfere with their academic performance. These resources include: (1) University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling; (2) Student Mental Health, Student Health Care Center, 392-1171, personal counseling; (3) Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling; and (4) Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

**Disclaimer:** This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.
certificate revision—Aquaculture and Fish Health

This request is in progress.

Info

Process: Graduate Certificate Programs
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Sager, Scott A
Created: 5/15/2014 8:00:59 AM
Updated: 8/25/2014 6:53:24 AM
Description: minor revision to requirements - replace one elective course

Documents

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Decision

Set status to: 

http://apps.aa.ufl.edu/Approval/Requests/Info/9380

9/4/2014
### Certificate Change Transmittal Form

**Department Name and Number** 60460000  
**CIP Code** 03.0301

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<tr>
<td><strong>Name</strong></td>
<td>Scott A. Sager</td>
</tr>
<tr>
<td><strong>Phone</strong></td>
<td>352.846.0846</td>
</tr>
<tr>
<td><strong>Email</strong></td>
<td><a href="mailto:sasager@ufl.edu">sasager@ufl.edu</a></td>
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<tr>
<td><strong>Name</strong></td>
<td>Ricky Telg</td>
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<tr>
<td><strong>Phone</strong></td>
<td>352.392.1963</td>
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<tr>
<td><strong>Email</strong></td>
<td><a href="mailto:nwtelg@ufl.edu">nwtelg@ufl.edu</a></td>
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Rev. 07/13
Thursday 22 May 2014

To: Dr. Ricky Telg
   Associate Dean, College of Agricultural and Life Sciences

From: Drs. Taylor Stein and William Lindberg
       Graduate Coordinators, School of Forest Resources & Conservation

We are requesting approval of a new, graduate-level concentration in Geographic Information Science to be offered to students within SFRC starting Spring 2015. Specifically, this concentration would be available to students majoring in Forest Resources and Conservation (FRC) or Fisheries and Aquatic Sciences (FAS), through the PhD, Master of Science (thesis and non-thesis), Masters of Fisheries and Aquatic Sciences (MFAS), or Master of Forest Resources and Conservation (MFRC) degrees.

This concentration will recognize the academic focus of students who, as part of their degree program, complete a significant amount of coursework in Geographic Information Systems (GIS) based data analysis, management, and customization. Specifically, students must complete the following two required courses and three of the following seven elective courses (a minimum of 15 credits total):

- GIS6116 Geographic Information Systems Analysis – 3 credits, letter-graded (required). This course has been offered for several years through the SFRC, by Drs. Hartwig Hochmair and Amr Abd-Elrahman. A number and prefix change recently received UCC2 approval.
- SUR5386 Image Processing – 3 credits, letter-graded (required). This course has been offered for the past few years through the SFRC, by Dr. Amr Abd-Elrahman. The course recently received UCC2 approval.

Elective Courses (select at least three of seven courses)

- FOR5435 Forest Information Systems – 3 credits, letter-graded. This course has been taught for several years through the SFRC by Drs. Amr Abd-Elrahman and Scot Smith.
- GIS6103 GIS Programming and Customization – 3 credits, letter-graded. This course has been offered since 2010 through the SFRC, by Dr. Hartwig Hochmair. The course recently received UCC2 approval.
- SUR5365 Digital Mapping – 3 credits, letter-graded. This course has been taught for several years by Dr. Hartwig Hochmair through the SFRC.
- SUR6395 Topics in GIS – 3 credits, letter-graded. This course has been taught for several years by Dr. Scot Smith through the SFRC.
- SUR6905 Independent Study Project – 3 credits, letter-graded. This course has been taught for several years through the SFRC by all Geomatics faculty. Non-thesis students will be encouraged to take a SUR6905 course focused on a GIS project.
- SUR6934 Topics in Geomatics (Geodesy and Geodetic Positioning) – 3 credits, letter-graded. This course has been taught for several years through the SFRC. Dr. Hartwig Hochmair will be submitting a UCC1 request for this course.
SUR6934 Topics in Geomatics (Field Skills for Forest Conservation) – 3 credits, letter-graded. This course has been taught for several years through the SFRC. Dr. Grenville Barnes will be submitting a UCC1 request for this course.

This Geographic Information Science concentration was created to address the educational needs of students who wish to focus a majority of their academic work on GIS-centric courses and projects within the SFRC. Further, demand for our graduate Geospatial Analysis certificate has prompted the creation of this proposed concentration satisfying students’ desire for a wide range of Geographic Information Science courses related closely to fisheries, forestry, and Geomatics. Eight of the nine above listed courses are already offered online, which gives distance education SFRC students the ability to complete the necessary concentration coursework. As opposed to the Geomatics concentration, which already exists in the SFRC, the Geographic Information Science concentration will require two core GIS related courses to be taken, besides the set of GIS related electives, providing a more solid GIS background for graduates.

Please do not hesitate to contact either one of us with questions.

Dr. Taylor Stein
tstein@ufl.edu

Dr. William Lindberg
wjl@ufl.edu

Direct responses to: Scott A. Sager, Education/Training Coordinator sasager@ufl.edu 352.846.0846
ucc1–FAS4XXX Marine Adaptations

This request is in progress.

**Info**

- **Process**: Undergraduate Courses
- **Status**: Pending at CALS - College of Agricultural and Life Sciences
- **Submitter**: Sager, Scott A
- **Created**: 8/26/2014 1:43:50 PM
- **Updated**: 8/27/2014 11:35:40 AM
- **Description**: new course, co-taught with FAS6154

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**Decision**

Set status to:  

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http://apps.aa.ufl.edu/Approval/Requests/Info/9525  
9/4/2014
June 5, 2014

RE: Undergraduate/graduate differentiation in dual-enrolled FAS 4XXX/6154 Marine Adaptations

Dear Curriculum Committee,

Thank you for your consideration of the undergraduate-version of Marine Adaptations for formal course numbering. The course is intended for upper division (junior or senior) undergraduates/early stage graduate students. The course will be rigorous for both, although there will be higher expectations for graduate students. There are several clear distinctions between the undergraduate and graduate requirements notable in the syllabi for each course. These are:

**Prerequisites**

**Undergraduate**: Undergraduates are required to have taken BSC2010 and BSC2011, or equivalent (at instructor’s discretion). Coursework in in animal physiology and ecology is recommended, but not required.

**Graduate**: Students are required to have graduate student status.

**Critical Thinking Assignments**

**Undergraduate** students will be assigned five critical thinking activities throughout the semester. Assignments will be graded on interpretation, detail, use of supporting evidence, clarity, and mechanics.

**Graduate** students will also be assigned five critical thinking activities throughout the semester. Graduate students will be expected to provide answers that synthesize the information they have learned in a more advanced manner than undergraduates.

**Literature Discussions**

**Undergraduate** students will be expected to participate (e.g., comment, question, or answer) in discussions of primary literature that we will have in class. Discussion participation will be evaluated on comment quality, reference to the literature, and active listening.

**Graduate** students will be required to lead and moderate the discussion of two primary literature papers during the semester. They will be graded on preparation, knowledge of the material, organization, and moderation of the discussion.

**Reusable Learning Objects**

**Undergraduate** students will be the audience for graduate Reusable Learning Object presentations. They will be required to fill out evaluations and provide feedback to the graduate students using a scoring rubric.

**Graduate** students will work in groups to develop a Reusable Learning Object and present it to the undergraduates and other graduates. Presentations will be evaluated on the value of the learning objective, content, organization, visual aids, and collaboration.

**Exams**
**Undergraduate** students will receive be given three exams consisting of short answer questions and short essays. Questions will require critical thinking, integration, and application of interdisciplinary concepts.

**Graduate** students will receive more complex exams with a greater proportion of essay questions. They will be expected to provide answers that synthesize the information they have learned in a more advanced manner than undergraduates.

Please contact me should any of this information require clarification.

Sincerely,

[Signature]

Shirley Baker, PhD  
Associate Professor  
School of Forest Resources & Conservation
**UCC1: New Course Transmittal Form**

**Department Name and Number:** School of Forest Resources & Conservation - 541946003

**Recommended SCNS Course Identification**
- Prefix: F
- Level: 4
- Course Number: __ __ __
- Lab Code: __ __ __
- Full Course Title: Marine Adaptations
- Transcript Title (please limit to 21 characters): MARINE ADAPTATIONS

**Effective Term and Year:** Fall 2015

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**Course Description (50 words or less):**
Examines and compares the physiological adaptations of marine, estuarine, and freshwater invertebrates to environmental conditions at various organizational levels. Habitats discussed include freshwater, rocky intertidal, salt marsh, coral reef, and deep sea.

**Prerequisites:**
- BSC2010 and BSC2010L

**Degree Type (mark all that apply):**
- Baccalaureate
- Graduate
- Professional
- Other

**Category of Instruction:**
- Introductory
- Intermediate
- Advanced

**Rationale and place in curriculum:**
New undergraduate course. Will be co-taught with existing graduate course (FAS6154).

**Department Contact**
- Name: Scott A. Sager
- Phone: 352.846.0846
- Email: sasager@ufl.edu

**College Contact**
- Name: Al Wysocki
- Phone: 352.392.1963
- Email: wysocki@ufl.edu
All UCC1 forms and each UCC2 form that proposes a change in the course description or credit hours must include this checklist in addition to a complete syllabus. Check the box if the attached syllabus includes the indicated information.

**Syllabus MUST contain the following information:**

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

**It is recommended that syllabi contain the following information:**

1. Critical dates for exams and other work
2. Class demeanor expected by the professor (e.g., tardiness, cell phone usage)
3. UF’s honesty policy regarding cheating, plagiarism, etc. Suggested wording: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (http://www.dso.ufl.edu/scrc/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of TAs in this class.
4. Phone number and contact site for university counseling services and mental health services: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx
   University Police Department: 392-1111 or 9-1-1 for emergencies.

**The University’s complete Syllabus Policy can be found at:** http://www.aac.ufl.edu/Data/Sites/18/media/policies/syllabi_policy.pdf
Course Description
Examines and compares the physiological adaptations of marine, estuarine, and freshwater invertebrates to environmental conditions at various organizational levels. Habitats discussed include freshwater, rocky intertidal, salt marsh, coral reef, and deep sea.

Prerequisites: BSC2010 and BSC2011, or equivalent (at instructor's discretion). Coursework in in animal physiology and ecology are recommended, but not required.

Instructor
Dr. Shirley Baker
Email: sbaker25@ufl.edu
Telephone: 352-273-3627
Office: Fisheries and Aquatic Sciences, 7922 NW 71st St
Office hours: Thursdays 1-2pm in McCarty B Go99, or by appointment

Student Learning Outcomes
At the end of this course, each student will be able to:
- Describe the basic principles and key mechanisms of physiological adaptation in invertebrate phyla.
- Compare the physiology of invertebrates adapted to marine, estuarine, and freshwater environments.
- Evaluate classical and contemporary literature of the discipline.
- Analyze the underlying importance of physiology in ecological patterns observed in communities and ecosystems.

Course Meeting Times T 5-6 (11:45-1:40), R 5 (11:45-12:35)

Required Texts/Readings
1. There is no required textbook for this course.
2. Readings from the following textbook are highly recommended, and may be useful in clarifying lecture topics discussed.

2. Relevant readings from journals or other media will be posted on selected Tuesdays. These articles will supplement lecture material and will form the basis of discussion on the following Tuesday (see Assignments section).

Class Format, Policies on Attendance and Make-up Exams
Course format:
This course will consist primarily of lecture and discussion periods. Students are expected to have read assigned materials prior to corresponding class sessions.

Attendance policy:
Regular attendance and participation in lecture and discussion periods is expected. Absent students are responsible for acquiring missed materials, assignments, and lecture notes.

Make-up policy:
Make-up exams, assignments, or discussion sessions will be considered on a case-by-case basis and will only be given under exceptional circumstances. Students must request permission to make-up an exam, assignment, or discussion session prior to the exam or due date, with no exceptions. Without prior permission, a missed exam/discussion session or late assignment will receive a score of "0".

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.

Assignments

Critical Thinking Assignments: Five critical thinking activities will be assigned throughout the semester. Assignments will be posted on selected Thursdays and responses must be submitted to the e-learning platform by 5pm on the following Friday (see schedule). A grading rubric will be provided; assignments will be evaluated on interpretation, detail, use of supporting evidence, clarity, and mechanics.

Literature Discussion: During most Tuesday class sessions (eleven sessions – see schedule), we will devote 20-30 minutes to discussion of assigned papers from the primary literature. A grading rubric will be provided; discussion participation will be evaluated on comment quality, reference to the literature, and active listening. Students will be expected to actively participate in every discussion. Unexcused absences will result in a score of zero for that day's discussion session. Of the eleven possible sessions, the lowest score will be dropped.

Exams: Each of three exams will primarily cover the material since the last exam. Exams will consist of short answer questions and short essays. Questions will require critical thinking, integration, and application of interdisciplinary concepts. Examples will be provided.

Evaluation of Student Learning

<table>
<thead>
<tr>
<th>Exam 1</th>
<th>100 points</th>
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</thead>
<tbody>
<tr>
<td>Exam 2</td>
<td>100 points</td>
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</tbody>
</table>
Exam 3                                                                                       100 points
Critical Thinking Assignments (5 @ 25 points each)                                         125 points
Literature Discussion Participation (10 @ 3 points each)                                   30 points
Total                                                                                       455 points

**Grading Scale**

Final grades will be assigned based on the percentage of total points earned. For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

A = 90-100% = 410-455 points
B+ = 85-89% = 387-409 points
B = 80-84% = 364-486 points
C+ = 75-79% = 341-363 points
C = 70-74% = 319-340 points
D = 60-69% = 273-318 points
F = < 60% = <273 points
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<tr>
<th>Week</th>
<th>Date</th>
<th>Weekly Topic, Reading, Activities</th>
<th>Assignments</th>
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<tr>
<td>1</td>
<td>Thursday August 22</td>
<td><strong>Introduction, overview, expectations</strong></td>
<td></td>
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<tr>
<td>2</td>
<td>Tuesday August 27</td>
<td><strong>BASIC PRINCIPLES</strong></td>
<td>Paper for Sept 3</td>
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<td></td>
<td>Adaptation</td>
<td>Literature Discussion posted</td>
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<td>Willmer et al 2005: <em>Chapter 1, p 3-16</em></td>
<td>Critical Thinking Assignment 1 posted</td>
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<td>Thursday August 29</td>
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<td>3</td>
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<td><strong>Mechanisms of Adaptation</strong></td>
<td>Paper for Sept 10</td>
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<td>Willmer et al 2005: <em>Chapter 2, p 17-35</em></td>
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<td>Reusable Learning Object topic brainstorming</td>
<td>Friday Sept 6, 5pm</td>
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<td>Thursday September 5</td>
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<td>4</td>
<td>Tuesday September 10</td>
<td><strong>Size and Scale</strong></td>
<td>Paper for Sept 17</td>
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<td>Willmer et al 2005: <em>Chapter 3, p 36-48</em></td>
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<td>Thursday September 12</td>
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<td>5</td>
<td>Tuesday September 17</td>
<td><strong>Life in Fluid</strong></td>
<td>Critical Thinking Assignment 2</td>
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<td></td>
<td>Levinton 2009: <em>Chapter 5, p 109-122</em></td>
<td>posted</td>
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<td>Thursday September 19</td>
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<td>6</td>
<td>Tuesday September 24</td>
<td><strong>EXAM 1</strong></td>
<td>Paper for Oct 1</td>
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<td></td>
<td>Literature Discussion posted</td>
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<tr>
<td></td>
<td>Thursday September 26</td>
<td><strong>CENTRAL ISSUES</strong></td>
<td>Critical Thinking Assignment 2 due</td>
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<td>Water, Ions, and Osmotic Physiology</td>
<td>Friday Sept 27, 5pm</td>
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<td></td>
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<td>Willmer et al 2005: <em>Chapter 4, p 51-75</em></td>
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<td>Day</td>
<td>Date</td>
<td>Topic</td>
<td>Assignment Details</td>
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</table>
| 7    | Tuesday       | **Water Balance, Osmoregulation and Excretion**  
Willmer et al 2005: Chapter 5, p 76-111  
Literature Discussion | Paper for Oct 8  
Literature Discussion posted |
|      | October 1     |                                            |                                                        |
|      | Thursday      |                                            |                                                        |
| 8    | Tuesday       | **Metabolism and Energy Supply**  
Willmer et al 2005: Chapter 6, p 112-140  
Literature Discussion  
Reusable Learning Object draft discussion | Paper for Oct 15  
Literature Discussion posted |
|      | October 8     |                                            |                                                        |
|      | Thursday      |                                            |                                                        |
| 9    | Tuesday       | **Respiration and Circulation**  
Willmer et al 2005: Chapter 7, p 141-174  
Literature Discussion | Paper for Oct 22  
Literature Discussion posted |
|      | October 15    |                                            |                                                        |
|      | Thursday      |                                            |                                                        |
| 10   | Tuesday       | **Thermal Biology**  
Willmer et al 2005: Chapter 8, p 175-222  
Literature Discussion |                                                        |
|      | October 22    |                                            |                                                        |
|      | Thursday      |                                            |                                                        |
| 11   | Tuesday       | **EXAM II**                                | Paper for Nov 5  
Literature Discussion posted |
|      | October 29    |                                            |                                                        |
|      | Thursday      |                                            |                                                        |
| 12   | Tuesday       | **Environment**  
Marine environments  
Willmer et al 2005: Chapter 11, p 393-443 | Paper for Nov 12  
Literature Discussion posted |
<p>|      | November 5    |                                            |                                                        |
|      | Thursday      |                                            |                                                        |
|      | November 7    |                                            |                                                        |</p>
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<tr>
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<tr>
<td>13 Nov 12</td>
<td>Tuesday</td>
<td>Freshwater environments</td>
<td>Willmer et al. 2005: Chapter 13, p 487-525</td>
<td>Paper for Nov 19 posted</td>
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<td>Literature Discussion</td>
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<td>Thursday</td>
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<td>14 Nov 19</td>
<td>Tuesday</td>
<td>Extreme Environments</td>
<td>Willmer et al. 2005: Chapter 14, p 526-540</td>
<td>Paper for Nov 26 posted</td>
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<td>Literature Discussion</td>
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<td></td>
<td>Thursday</td>
<td>Reusable Learning Object presentations by grad students</td>
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<td>Critical Thinking Assignment 5 posted</td>
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<tr>
<td>15 Nov 26</td>
<td>Tuesday</td>
<td>Symbioses</td>
<td>Nybakken &amp; Bertness 2005: Chapter 10 p 475-499</td>
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<td>Thursday</td>
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<td>Critical Thinking Assignment 5 due</td>
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<tr>
<td>16 Dec 3</td>
<td>Tuesday</td>
<td>Exam III</td>
<td></td>
<td>Friday November 29, 5pm</td>
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</tbody>
</table>

**Additional References**

Background material for two of the lectures, *Life in Fluid* and *Symbioses*, is not available in the recommended Willmer et al. text book. Therefore, it is suggested that the following materials be read before the corresponding lectures to help clarify the topics. These books can be purchased new, used, as an e-book, or as a rental, from a variety of online vendors. Older editions may be available in the UF library.


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. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/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/sscr/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, www.dso.ufl.edu/drc/

Campus Helping Resources
Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Wellness Coaching

- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/
Marine Adaptations
FAS 6154 (3 credits) Fall, 2015

Course Description
Examines and compares the physiological adaptations of marine, estuarine, and freshwater invertebrates to environmental conditions. The processes examined will span several levels of organization, from ecological and organismal to cellular and molecular. Examples will be drawn from freshwater, rocky intertidal, salt marsh, coral reef, and deep sea habitats, among others.

Prerequisites: courses in animal physiology and ecology are recommended; graduate student status

Instructor
Dr. Shirley Baker
Email: sbaker25@ufl.edu
Telephone: 352-273-3627
Office: Fisheries and Aquatic Sciences, 7922 NW 71st St
Office hours: Thursdays 1-2pm in McCarty B G099, or by appointment

Student Learning Outcomes
At the end of this course, each student will be able to:
- Describe the basic principles and key mechanisms of physiological adaptation in invertebrate phyla
- Compare the physiology of invertebrates adapted to marine, estuarine and freshwater environments
- Apply critical thinking in evaluating classical and contemporary literature of the discipline
- Analyze the underlying importance of physiology in ecological patterns observed in communities and ecosystems

Course Meeting Times T 5-6 (11:45-1:40), R 5 (11:45-12:35)

Required Texts/Readings

1. There is no required textbook for this course. However, the following textbook is highly recommended; reading appropriate sections before the corresponding lecture will help clarify the topics discussed. This book can be purchased new, used, as an e-book, or as a rental, from a variety of online vendors.

2. Relevant readings from journals or other media will be posted on selected Tuesdays. These articles will supplement lecture material and will form the basis of discussion on the following Tuesday (see Assignments section).

Class Format, Policies on Attendance and Make-up Exams

Course format:
This course will consist primarily of lecture and discussion periods. Students are expected to have read assigned materials prior to corresponding class sessions.

Attendance policy:
Regular attendance and participation in lecture and discussion periods is expected. Absent students are responsible for acquiring missed materials, assignments, and lecture notes. 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.

Make-up policy:
Make-up exams, assignments, or discussion sessions will be considered on a case-by-case basis and will only be given under exceptional circumstances. Students must request permission to make-up an exam, assignment, or discussion session prior to the exam or due date, with no exceptions. Without prior permission, a missed exam/discussion session or late assignment will receive a score of “0”.

Assignments

Critical Thinking Assignments: Five critical thinking activities will be assigned throughout the semester. Assignments will be posted on selected Thursdays and responses must be submitted to the e-learning platform by 5pm on the following Friday (see schedule). A grading rubric will be provided; assignments will be evaluated on interpretation, detail, use of supporting evidence, clarity, and mechanics. Graduate students are expected to provide answers synthesizing information in an advanced manner.

Literature Discussion: During most Tuesday class sessions (eleven sessions – see schedule), we will devote 20-30 minutes to discussion of assigned papers from the primary literature. A grading rubric will be provided; discussion participation will be evaluated on comment quality, reference to the literature, and active listening. Students will be expected to actively participate in every discussion. Unexcused absences will result in a score of zero for that day’s discussion session. Of the eleven possible sessions, the lowest score will be dropped.

In addition, graduate students will be expected to lead and moderate two discussion sessions during the semester. A grading rubric will be provided; discussion leadership will be graded on preparation, knowledge of the material, organization, and moderation of the discussion.
Reusable Learning Object (graduate only): Graduate students will work in groups (2-3) to create and present a Reusable Learning Object to the class. Reusable Learning Objects (RLOs) are short (<15 min), self-contained, digital learning activities that are stored online. A portion of one discussion period will be spent brainstorming RLO topics (September 5). Groups must select a topic by September 13 and turn in a draft by October 4. Groups must turn in their RLOs by November 15 and the class will view the RLOs on November 21. Detailed instructions and examples will be provided. A grading rubric will be provided; presentations will be evaluated on the value of the learning objective, content, organization, visual aids, and collaboration.

Exams: Each of three exams will primarily cover the material since the last exam. Exams will consist of short answer questions and short essays. Questions will require critical thinking, integration, and application of interdisciplinary concepts. Examples will be provided. Graduate student exams will include a high proportion of essay questions and students will be expected to provide answers that synthesize information in an advanced manner.

**Evaluation of Student Learning**

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<th>Points</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>100</td>
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<tr>
<td>Exam 2</td>
<td>100</td>
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<tr>
<td>Exam 3</td>
<td>100</td>
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<tr>
<td>Critical Thinking Assignments (5 @ 25 points each)</td>
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<tr>
<td>Literature Discussion Participation (10 @ 3 points each)</td>
<td>30</td>
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<td>Literature Discussion Leadership (2 @ 10 points each)</td>
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<td>Reusable Learning Object</td>
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<td><strong>Total</strong></td>
<td><strong>580</strong></td>
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**Grading Scale**

Final grades will be assigned based on the percentage of total points earned. For information on current UF policies for assigning grade points, see [https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx](https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx)

A = 90-100% = 522-575 points  
B+ = 85-89% = 493-521 points  
B = 80-84% = 464-493 points  
C+ = 75-79% = 360-464 points  
C = 70-74% = 406-360 points  
D = 60-69% = 348-406 points  
F = < 60% = <348 points
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<th>Weekly Topic, Reading, Activities</th>
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<td>1</td>
<td>Thursday August 22</td>
<td><strong>Introduction, overview, expectations</strong></td>
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<td><strong>BASIC PRINCIPLES</strong></td>
<td>Paper for Sept 3</td>
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<td>Literature Discussion</td>
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<td><strong>Critical Thinking</strong></td>
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<td>3</td>
<td>Tuesday September 3</td>
<td><strong>Mechanisms of Adaptation</strong></td>
<td>Paper for Sept 10</td>
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<td>Willmer et al 2005: <em>Chapter 2, p 17-35</em></td>
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<td>Assignment 1 due</td>
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<td><strong>Friday Sept 6, 5pm</strong></td>
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<td>4</td>
<td>Tuesday September 10</td>
<td><strong>Size and Scale</strong></td>
<td>Paper for Sept 17</td>
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<td>Willmer et al 2005: <em>Chapter 3, p 36-48</em></td>
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<td><strong>Water, Ions, and Osmotic Physiology</strong></td>
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Other Information

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

It is assumed that you will complete all work independently in 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, www.dso.ufl.edu/drc/

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

• Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/
ucc1-PEN2XXX Advanced SCUBA Diving

This request is in progress.

Info

Process: Undergraduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Sager, Scott A
Created: 8/20/2014 9:37:48 AM
Updated: 8/25/2014 9:23:30 AM
Description: new course

Documents

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Decision

Set status to:  

82 of 130

**UCC1: New Course Transmittal Form**

Department Name and Number: **SFRC-FAS - 541946003**

**Recommended SCNS Course Identification**

Prefix: **P**  
Level: **2**  
Course Number:  
Lab Code: Combined (C)

**Full Course Title**: Advanced SCUBA Diving  
**Transcript Title (please limit to 21 characters)**: ADV SCUBA DIVING

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**Repeatable Credit**: ☐ yes  
**If yes, total repeatable credit allowed**: ___

**Variable Credit**: ☐ yes  
**If yes, minimum and maximum credits per semester**: ___

**Course Description (50 words or less)**

*Provides advanced level recreational SCUBA training and experience in accordance with National Association of Underwater Instructors (NAUI) standards.*

**Prerequisites**

**Permission of Instructor**

**Co-requisites**

**Degree Type (mark all that apply)**

* Baccalaureate  
* Graduate  
* Professional  
* Other __________

**Category of Instruction**

* Introductory  
* Intermediate  
* Advanced

**Rationale and place in curriculum**

*Course provides students advanced skills in SCUBA diving.*

**Department Contact**

Name: **Scott A. Sager**  
Phone: **352.317.7675**  
Email: **sasager@ufl.edu**

**College Contact**

Name: **Al Wysocki**  
Phone: **352.392.1963**  
Email: **wysocki@ufl.edu**
# UCC: Syllabus Checklist

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

**Syllabus MUST contain the following information:**

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

**It is recommended that syllabi contain the following information:**

1. Critical dates for exams and other work
2. Class demeanor expected by the professor (e.g., tardiness, cell phone usage)
3. UF’s honesty policy regarding cheating, plagiarism, etc. Suggested wording: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of TAs in this class.
4. Phone number and contact site for university counseling services and mental health services: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx
   University Police Department: 392-1111 or 9-1-1 for emergencies.

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

Rev. 7/13
Course Description
Provides advanced level recreational SCUBA training and experience in accordance with National Association of Underwater Instructors (NAUI) standards.

Instructors and Qualifications

<table>
<thead>
<tr>
<th>DougMarcinek</th>
<th>KenSallot</th>
<th>CherylThacker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Coordinator&lt;br&gt;<a href="mailto:marcinek@ufl.edu">marcinek@ufl.edu</a>&lt;br&gt;352.273.3626&lt;br&gt;Available by appointment&lt;br&gt;NAUI Course Director&lt;br&gt;NAUI Technical Instructor&lt;br&gt;IANTD Technical Instructor</td>
<td>Lecture coordinator, Pool Instructor&lt;br&gt;<a href="mailto:kens@ufl.edu">kens@ufl.edu</a>&lt;br&gt;352.273.3626&lt;br&gt;Available by appointment&lt;br&gt;NAUI Technical Instructor&lt;br&gt;SDI/TDI Technical Instructor</td>
<td>Lecture, Pool Instructor&lt;br&gt;<a href="mailto:cthacker@ehs.ufl.edu">cthacker@ehs.ufl.edu</a>&lt;br&gt;352.392.1661&lt;br&gt;Available by appointment&lt;br&gt;UF Diving Safety Officer&lt;br&gt;NAUI Course Director</td>
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<tr>
<th>MikeKutyna</th>
<th>IanSegebarth</th>
<th>MikeEngle</th>
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<td>Lecture, Pool Instructor&lt;br&gt;<a href="mailto:mikutyna@gmail.com">mikutyna@gmail.com</a>&lt;br&gt;352.273.3626&lt;br&gt;Available by appointment&lt;br&gt;NAUI Instructor</td>
<td>Lecture, Pool Instructor&lt;br&gt;352.273.3626&lt;br&gt;Available by appointment&lt;br&gt;NAUI Instructor</td>
<td>Pool Instructor&lt;br&gt;352.273.3626&lt;br&gt;Available by appointment&lt;br&gt;SDI Instructor&lt;br&gt;NAUI Emeritus</td>
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Objectives
Upon successful completion of this course, each student will:

- Have a working knowledge of the science and technology applicable to SCUBA.
- Be able to safely plan and execute complex SCUBA dives independently.
- Complete NAUI First Aid (includes CPR, AED and O2 administration).

Course Meeting Times and Locations
Lecture
Location: MCCA 2186
Meeting time: Wednesdays, periods 11-E1 (6:15-8:10)
Lab
Location: Florida Pool
Meeting time: Thursdays, periods E1-E2 (7:20-9:10)

Required Texts / Readings / Equipment
1. NAUI Rescue Diver eLearning Kit (*required by 2nd week of class)
2. NAUI First Aid Student Kit (*required by 2nd week of class)
3. NAUI Master Scuba Diver Textbook (*recommended)
4. NAUI Nitrox Diver Student Kit (*required by 5th week of class) which includes:
   a. NAUI Nitrox Textbook
   b. NAUI Nitrox 32 Dive Tables
   c. NAUI Nitrox 36 Dive Tables
   d. NAUI OceanX Calculator
5. NAUI Dive Tables (*required by 2nd week of class, standard AIR tables)
6. Mask, Snorkel, Fins and neoprene dive booties (by 1st week of pool)
7. Watch – Water resistant to 50 meters (required by 1st week of pool)
8. Dive Slate w/Pencil (required by 1st week of pool)
9. Line Cutting Device (required for openwater dives)
10. Dive light and clylume stick for night dive
11. Surface Marker Buoy and Reel/Spool (by Pompano Trip, may be purchased at time of dives)

Class Format and Policies
Attendance Policy
Attendance is mandatory.

PEN2XXX is an intensive lecture/lab/certification course that will result in internationally accepted Advanced Scuba Diver 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.

Lecture: If you are sick, please contact the lecture coordinator prior to the class in order to get a copy of the notes and readings. Some sessions may use lecture capture technology (mediasite), and may be made up by watching the capture.
Lab: Because the skills used in the open water dives are first taught and practiced in the pool, a missed lab section may mean that a student is unable to participate in a check-out dive. Missed lab sections may be made up on a Tuesday night at the discretion of the instructor.

Check-out dives: In order to earn certification students must complete all of the scheduled check-out dives. A missed check-out dive may be made up at the discretion of the instructor for an additional fee.

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.

Prerequisite to Participation in Advanced Open Water SCUBA
Students must already hold a Basic Open Water SCUBA certification from a recognized certification agency. Students must bring a copy of their certification card(s) (both front and back) to the first class for inclusion in their student records folder. Students must bring their SCUBA log books for review of recent diving activity.

Skills Evaluation
The first lab session will consist of a swim evaluation, as required for the Scientific Diver rating, and completion of a medical history questionnaire. Students must successfully complete the swim evaluation and not have any medical contraindications to participation in SCUBA activities in order to continue in the course.

The swim evaluation consists of the following:
- Swim 400 yards. Students seeking Scientific Diver status must complete the 400 yard swim in under 12 minutes.
- 25 yard underwater swim in one breath.
- Tow another swimmer 25 yards.
- Tread water for 10 minutes with the last two minutes keeping hands out of water.

The diving medical history questionnaire and information on contraindications to participation in SCUBA diving activities can be found at: http://www.nau.org/PDFfiles/Commonly%20Used%20Forms/NAUI%20Medical%20Evaluation%20and%20Physician%20Approval%20Form.pdf

One of the first lab sessions will consist of a basic SCUBA skills evaluation to verify basic SCUBA competency. The basic SCUBA skills evaluation consists of the following:
- Correctly assemble SCUBA equipment.
• Giant stride entry into the water and establishment of neutral buoyancy.
• Flooding and removal and replacement of mask.
• Removal, recovery, and clearing of the primary second stage regulator.
• Removal and replacement of the SCUBA unit while underwater (doff-n-don).
• Alternate Air Share with ascent.
• Buddy Breathing (will be taught).
• Neutral buoyancy.
• Proper exit from the water and break-down of SCUBA equipment.

On the first open water checkout dive a SCUBA competency evaluation will take place. The competency evaluation consists of the following:
• Proper gear assembly and entry.
• Mask removal/replace and clearing.
• Regulator, recovery, and clearing of the primary second stage regulator.
• Controlled Emergency Swimming Ascent (ESA)
• Neutral buoyancy.
• Alternate Air Share with ascent as both a donor and receiver.
• Doff-n-Don.
• Buddy Breathing (stationary).

**SCUBA Knowledge Evaluation**
Students will be assigned the standard NAUI Open Water Diver Examination through eLearning in order to assess their level of basic SCUBA knowledge. As different training agencies have different standards, the sole purpose of the assignment is to gauge the depth of student knowledge. The evaluation will be scored as either “complete” or “incomplete.” Complete means the student has finished the test to the best of their ability, and that is worth 100 points towards their final grade. Incomplete means the student did not complete the exam, and will miss out on 100 points from their final grade. Failure to complete the exam will also result in a one point deduction from the classroom participation grade.

**FAILURE TO COMPLETE THE PRE-ASSESSMENT EXAM MEANS THE HIGHEST GRADE YOU CAN ACHIEVE IN THIS COURSE IS A B+.
**

Lecture material presented throughout the course may be modified to remediate topic areas as determined based on the results of the exam.

**A Word About Certification**
In order to be eligible for certification students must:
• Attend all lecture and pool sessions.
• Score >80% on all examinations and be coached up to 100% to the satisfaction of your instructor.
• Be coached up to 100% on the decompression portions of all quizzes and exams to the satisfaction of your instructor.
• Complete the class with a minimum overall grade of 70%.
• Score >80% on all skill evaluations.
- Pay all fees.
- Successfully complete all open water proficiency dives.
- Be recommended by your instructor as a safe and competent diver.

"Training is purchased, certification is earned."

Payment of all course fees does not guarantee that you will earn certification in this course. NAUI instructors are obliged to use the "loved one" principle prior to issuing any certification. This requires that every NAUI instructor to ask the question, "do I want this person diving with my loved ones?" If the answer is no, then they should not issue that certification.

Students that exhibit unsafe behaviors and attitudes that could put themselves, or others, at risk of injury will not be certified.

**SCUBA Equipment provided for the lab and open water dives**
- Regulator with Safe Second, Pressure Gauge, and LP Inflator Hose
- Buoyancy Control Device
- Weight Belt
- Dive Bag
- Underwater Compass
- SCUBA cylinders and safe breathing air
- Wet Suit (open water dives only)

**Equipment Notes:**
UF stocks small through XL wetsuits. UF does not stock custom or unusual sizes. If you do not fit in a standard suit, you will be required to provide your own. Selection is limited and provision of a suit is not guaranteed. Suits are checked out at gear check-out on a first come, first serve basis. 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. If you own your own regulator, BCD, or wet suit, you are more than welcome to use it for the class after it has been examined and deemed appropriate for use by a staff instructor.

**Lecture**
Lecture will be held on Wednesdays from 6:15PM to 8:20PM in MCCA 2186. Lecture material will follow the schedule posted below in the "Schedule of Class Topics." 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. 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 the Florida Pool from 7:20PM until 9:10PM. Pool sessions will follow the schedule posted below in the “Schedule of Class Topics.” Attendance is mandatory. Known excusable conflicts must be worked out with your instructor prior to the absence and a make-up session scheduled.

Cell Phones
Cell phones are to be turned off during all class periods. Cell phone use, including texting, will not be tolerated. Students using cell phones during class may be asked to leave and they will be marked as having an unexcused absence.

Grading
This is a 4000 level academic course. You will earn 3 credit hours by completing this course. Your academic grade will be based on a point system with a perfect score requiring 1000 points. The number of points you may earn:

Attendance and Classroom Participation – Up to 200 points

Examinations – Up to 400 points (pre-exam, rescue diver exam, nitrox exam, final exam)

Paper – Up to 100 points

Skill Evaluations – Up to 300 points

Grading Scale:

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>900-1000</td>
<td>A</td>
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<td>D</td>
</tr>
<tr>
<td>&lt;600</td>
<td>E</td>
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Attendance and participation: There will be a 50 point deduction for every unexcused absence. There will be a 25 point deduction for any tardiness. There will be a 25 point deduction for the first abuse of the cell phone policy, and a 50 point deduction for each subsequent abuse. There will be a one point deduction from the participation grade for not completing the pre-assessment exam.

Examinations: The pre-assessment exam is worth 100 points and is marked as either complete or incomplete. The rescue diver, nitrox diver, and final exam are worth 100 points each, and are scored based on correct and incorrect answers.

Paper: There will be an assignment to write a brief essay based upon one of the check out dives. The topic will be assigned in class. The writing assignment will not be long enough to count towards Gordan Rule designation.

Skill Evaluations: The skill evaluations are worth up to 300 points.
For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx.

**Schedule of Class Topics**

**Lectures:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>January 8</td>
<td>Introduction, Waivers, Syllabus</td>
</tr>
<tr>
<td>January 15</td>
<td>Basic Review (Pressure, Boyles &amp; Haldane / DCS / Tables) / Equipment</td>
</tr>
<tr>
<td>January 22</td>
<td>Advanced Diving Physics</td>
</tr>
<tr>
<td>January 29</td>
<td>CPR / First Aid</td>
</tr>
<tr>
<td>February 5</td>
<td>Advanced Diving Physiology</td>
</tr>
<tr>
<td>February 12</td>
<td>Rescue</td>
</tr>
<tr>
<td>February 19</td>
<td>Search &amp; Light Salvage / Limited Vis / Deep Diving</td>
</tr>
<tr>
<td>February 26</td>
<td>Environment / Navigation</td>
</tr>
<tr>
<td>March 12</td>
<td>Nitrox</td>
</tr>
<tr>
<td>March 19</td>
<td>Decompression / Recompression / Altitude Diving</td>
</tr>
<tr>
<td>March 26</td>
<td>Night Diving / Photography</td>
</tr>
<tr>
<td>April 2</td>
<td>Technical Diving (Papers due)</td>
</tr>
<tr>
<td>April 9</td>
<td>Boating and Seamanship</td>
</tr>
<tr>
<td>April 16</td>
<td>Final Exam due in Sakai</td>
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</table>

**Labs: (Other dates added as needed)**

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>January 9</td>
<td>Swim Test / Gear Sizing</td>
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<tr>
<td>January 16</td>
<td>SCUBA Skills Evaluation / Buddy Breathing / Buoyancy Workshop</td>
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<tr>
<td>January 23</td>
<td>Advanced Buoyancy / Alt Finning / Helicopter Turns</td>
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<td>January 30</td>
<td>CPR / FBAO / AED</td>
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<td>O2 / 1st Aid / Accident Management</td>
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<td>February 13</td>
<td>Rescue</td>
</tr>
<tr>
<td>February 20</td>
<td>Search / Salvage Techniques</td>
</tr>
<tr>
<td>February 27</td>
<td>Navigation / Land Drills / Water Drills</td>
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<tr>
<td>March 13</td>
<td>Transects / Quadrats / Gear Checkout</td>
</tr>
<tr>
<td>March 20</td>
<td>Doubles / AGA Mask</td>
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<tr>
<td>March 27</td>
<td>Doubles / AGA Mask</td>
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<tr>
<td>April 3</td>
<td>Doubles / AGA Mask</td>
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<tr>
<td>April 10</td>
<td>Checkout for weekend</td>
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**Open Water Dives: (tentative!)**

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<tr>
<td>February 15/16</td>
<td>Rescue &amp; OW Skills Eval</td>
</tr>
<tr>
<td>March 15/16</td>
<td>Limited Vis / Deep / Navigation and Transects / Manatee Springs</td>
</tr>
<tr>
<td></td>
<td>Hudson Grotto / Venice Beach</td>
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Additional References

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

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

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."

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, www.dso.ufl.edu/drc/

Campus Helping Resources
Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students
having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- **University Counseling & Wellness Center**, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)
  Counseling Services
  Groups and Workshops
  Outreach and Consultation
  Self-Help Library
  Wellness Coaching

- **Career Resource Center**, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)
Academic Approval Tracking
UNIVERSITY of FLORIDA

ucc1–FAS4XXX Science Diver

This request is in progress.

Info

Process: Undergraduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Sager, Scott A
Created: 8/20/2014 9:40:39 AM
Updated: 8/24/2014 3:47:26 PM
Description: new course

Documents

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Decision

Set status to:  

http://apps.aa.ufl.edu/Approval/Requests/Info/9508

9/4/2014
UCC1: New Course Transmittal Form

Department Name and Number: SFRC-FAS - 541946003

Recommended SCNS Course Identification

Prefix: F
Level: 4
Full Course Title: Science Diver
Transcript Title (please limit to 21 characters): SCIENCE DIVER

Effective Term and Year: Spring 2015
Rotating Topic: no
Amount of Credit: 3
Contact Hour: Base 3
Repeatability: no
If yes, total repeatable credit allowed:
Variable Credit: no
If yes, minimum and maximum credits per semester:
Course Description (50 words or less):
Provides the prerequisites for individuals to become UF/AAUS (American Academy of Underwater Scientists) and be eligible to participate as divers on University research projects.

Prerequisites

Permission of Instructor

Co-requisites

Degree Type (mark all that apply):
- Baccalaureate
- Graduate
- Professional
- Other

Category of Instruction:
- Introductory
- Intermediate
- Advanced

Rationale and place in curriculum:
Course provides students necessary skills in SCUBA diving for academic purposes.

Department Contact
Name: Scott A. Sager
Phone: 352.317.7675
Email: sasager@ufl.edu

College Contact
Name: Al Wysocki
Phone: 352.392.1963
Email: wysocki@ufl.edu

Rev. 7/13
All UCC1 forms and each UCC2 form that proposes a change in the course description or credit hours must include this checklist in addition to a complete syllabus. Check the box if the attached syllabus includes the indicated information.

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

**It is recommended that syllabi contain the following information:**
1. Critical dates for exams and other work
2. Class demeanor expected by the professor (e.g., tardiness, cell phone usage)
3. UF’s honesty policy regarding cheating, plagiarism, etc. Suggested wording: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (http://www.dso.ufl.edu/scr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of TAs in this class.
4. Phone number and contact site for university counseling services and mental health services: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx
   University Police Department: 392-1111 or 9-1-1 for emergencies.

The University’s complete Syllabus Policy can be found at: http://www.aaufl.edu/Data/Sites/18/media/policies/syllabi_policy.pdf
Course Description
Provides the prerequisites for individuals to become UF/AAUS (American Academy of Underwater Scientists) and be eligible to participate as divers on University research projects.

Instructors and Qualifications

<table>
<thead>
<tr>
<th>Doug Marcinek</th>
<th>Ken Sallot</th>
<th>Cheryl Thacker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Coordinator</td>
<td>Lecture coordinator, Pool Instructor</td>
<td>Lecture, Pool Instructor</td>
</tr>
<tr>
<td><a href="mailto:marcinek@ufl.edu">marcinek@ufl.edu</a></td>
<td><a href="mailto:kens@ufl.edu">kens@ufl.edu</a></td>
<td><a href="mailto:cthacker@ehs.ufl.edu">cthacker@ehs.ufl.edu</a></td>
</tr>
<tr>
<td>352.273.3626</td>
<td>352.273.3626</td>
<td>352.392.1661</td>
</tr>
<tr>
<td>Available by appointment</td>
<td>Available by appointment</td>
<td>Available by appointment</td>
</tr>
<tr>
<td>NAUI Course Director</td>
<td>NAUI Technical Instructor</td>
<td>UF Diving Safety Officer</td>
</tr>
<tr>
<td>NAUI Technical Instructor</td>
<td>SDI/TDI Technical Instructor</td>
<td>NAUI Course Director</td>
</tr>
<tr>
<td>IANTD Technical Instructor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Mike Kutyna                        | Ian Segebarth                        | Mike Engle                          |
| Lecture, Pool Instructor           | Lecture, Pool Instructor              | Pool Instructor                     |
| mkutyna@gmail.com                  | 352.273.3626                         | 352.273.3626                        |
| 352.273.3626                       | Available by appointment             | Available by appointment             |
| Available by appointment           | NAUI Instructor                       | SDI Instructor                       |
| NAUI Instructor                    |                                      | NAUI Emeritus                       |

| Stephen Larsen                     | Callaway Johnson                     | Richard Lowery                       |
| Pool Instructor                    | Lecture, Pool Instructor              | Pool Instructor                      |
| 352.273.3626                       | 352.273.3626                         | 352.273.3626                        |
| Available by appointment           | Available by appointment             | Available by appointment             |
| NAUI Instructor                    | NAUI Instructor                       | NAUI Instructor                      |

| Travis Lowke                       |                                      |                                     |
| Lecture, Pool Instructor           |                                      |                                     |
| 352.273.3626                       |                                      |                                     |
| Available by appointment           |                                      |                                     |
| NAUI Instructor                    |                                      |                                     |
Objectives
Upon successful completion of this course, each student will:

- meet the requirements to be University of Florida/AAUS science divers

Course Meeting Times and Locations
Lecture
Location: MCCA 2186
Meeting time: Wednesdays, periods 11-E1 (6:15-8:10)

Lab
Location: Florida Pool
Meeting time: Thursdays, periods E1-E2 (7:20-9:10)

Required Texts / Readings / Equipment
1. NAUI Rescue Diver eLearning Kit (*required by 2nd week of class)
2. NAUI First Aid Student Kit (*required by 2nd week of class)
3. NAUI Master Scuba Diver Textbook (*recommended)
4. NAUI Nitrox Diver Student Kit (*required by 5th week of class) which includes:
   a. NAUI Nitrox Textbook
   b. NAUI Nitrox 32 Dive Tables
   c. NAUI Nitrox 36 Dive Tables
   d. NAUI OceanX Calculator
5. NAUI Dive Tables (*required by 2nd week of class, standard AIR tables)
6. Mask, Snorkel, Fins and neoprene dive booties (by 1st week of pool)
7. Watch – Water resistant to 50 meters (required by 1st week of pool)
8. Dive Slate w/Pencil (required by 1st week of pool)
9. Line Cutting Device (required for openwater dives)
10. Dive light and clylume stick for night dive
11. Surface Marker Buoy and Reel/Spool (by Pompano Trip, may be purchased at time of dives)

Class Format and Policies
Attendance Policy
Attendance is mandatory.
Lecture: If you are sick, please contact the lecture coordinator prior to the class in order to get a copy of the notes and readings. Some sessions may use lecture capture technology (mediasite), and may be made up by watching the capture.

Lab: Because the skills used in the open water dives are first taught and practiced in the pool, a missed lab section may mean that a student is unable to participate in a check-out dive. Missed lab sections may be made up on a Tuesday night at the discretion of the instructor.
Check-out dives: In order to earn certification students must complete all of the scheduled check-out dives. A missed check-out dive may be made up at the discretion of the instructor for an additional fee.

**Prerequisite to Participation in UF Scientific Diver**
Students must hold Advanced Open Water, Rescue, and Nitrox certification from a recognized certification agency. Students currently enrolled in the Advanced Open Water SCUBA course may enroll in the UF Scientific Diver SCUBA course simultaneously. Students must bring a copy of their certification card(s) (both front and back) to the first class for inclusion in their student records folder. Students must bring their SCUBA log books for review of recent diving activity. Students must also have an AAUS cleared Scuba Medical examination.

**Skills Evaluation**
The first lab session will consist of a swim evaluation, as required for the Scientific Diver rating, and completion of a medical history questionnaire. Students must successfully complete the swim evaluation and not have any medical contraindications to participation in SCUBA activities in order to continue in the course.

The swim evaluation consists of the following:
- Swim 400 yards. Students seeking Scientific Diver status must complete the 400 yard swim in under 12 minutes.
- 25 yard underwater swim in one breath.
- Tow another swimmer 25 yards.
- Tread water for 10 minutes with the last two minutes keeping hands out of water.

The diving medical history questionnaire and information on contraindications to participation in SCUBA diving activities can be found at:


One of the first lab sessions will consist of a basic SCUBA skills evaluation to verify basic SCUBA competency. The basic SCUBA skills evaluation consists of the following:
- Correctly assemble SCUBA equipment.
- Giant stride entry into the water and establishment of neutral buoyancy.
- Flooding and removal and replacement of mask.
- Removal, recovery, and clearing of the primary second stage regulator.
- Removal and replacement of the SCUBA unit while underwater (doff-n-don).
- Alternate Air Share with ascent.
- Buddy Breathing (will be taught).
- Neutral buoyancy.

99 of 130
• Proper exit from the water and break-down of SCUBA equipment.

On the first open water checkout dive a SCUBA competency evaluation will take place. The competency evaluation consists of the following:
• Proper gear assembly and entry.
• Mask removal/replace and clearing.
• Regulator, recovery, and clearing of the primary second stage regulator.
• Controlled Emergency Swimming Ascent (ESA)
• Neutral buoyancy.
• Alternate Air Share with ascent as both a donor and receiver.
• Doff-n-Don.
• Buddy Breathing (stationary).

SCUBA Knowledge Evaluation
Students will be assigned the standard NAUI Open Water Diver Examination through eLearning in order to assess their level of basic SCUBA knowledge. As different training agencies have different standards, the sole purpose of the assignment is to gauge the depth of student knowledge. The evaluation will be scored as either “complete” or “incomplete.” Complete means the student has finished the test to the best of their ability, and that is worth 100 points towards their final grade. Incomplete means the student did not complete the exam, and will miss out on 100 points from their final grade. Failure to complete the exam will also result in a one point deduction from the classroom participation grade.

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In order to be eligible for certification students must:
• Attend all lecture and pool sessions.
• Score >80% on all examinations and be coached up to 100% to the satisfaction of your instructor.
• Be coached up to 100% on the decompression portions of all quizzes and exams to the satisfaction of your instructor.
• Complete the class with a minimum overall grade of 70%.
• Score >80% on all skill evaluations.
• Pay all fees.
• Successfully complete all open water proficiency dives.
• Be recommended by your instructor as a safe and competent diver.

“Training is purchased, certification is earned.”

Payment of all course fees does not guarantee that you will earn certification in this course. NAUI instructors are obliged to use the “loved one” principle prior to
issuing any certification. This requires that every NAUI instructor to ask the question, “do I want this person diving with my loved ones?” If the answer is no, then they should not issue that certification.

Students that exhibit unsafe behaviors and attitudes that could put themselves, or others, at risk of injury will not be certified.

**SCUBA Equipment provided for the lab and open water dives**
- Regulator with Safe Second, Pressure Gauge, and LP Inflator Hose
- Buoyancy Control Device
- Weight Belt
- Dive Bag
- Underwater Compass
- SCUBA cylinders and safe breathing air
- Wet Suit (open water dives only)

**Equipment Notes:**
UF stocks small through XL wetsuits. UF does not stock custom or unusual sizes. If you do not fit in a standard suit, you will be required to provide your own. Selection is limited and provision of a suit is not guaranteed. Suits are checked out at gear check-out on a first come, first serve basis.

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.

If you own your own regulator, BCD, or wet suit, you are more than welcome to use it for the class after it has been examined and deemed appropriate for use by a staff instructor.

**Lecture**
Lecture will be held on Wednesdays from 6:15PM to 8:20PM in MCCA 2186. Lecture material will follow the schedule posted below in the “Schedule of Class Topics.” 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. 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 the Florida Pool from 7:20PM until 9:10PM. Pool sessions will follow the schedule posted below in the “Schedule of Class Topics.” Attendance is mandatory. Known excusable conflicts must be worked out with your instructor prior to the absence and a make-up session scheduled.
Cell Phones
Cell phones are to be turned off during all class periods. Cell phone use, including texting, will not be tolerated. Students using cell phones during class may be asked to leave and they will be marked as having an unexcused absence.

Grading
This is a 4000 level academic course. You will earn 3 credit hours by completing this course. Your academic grade will be based on a point system with a perfect score requiring 1000 points. The number of points you may earn:

Attendance and Classroom Participation – Up to 200 points

Examinations – Up to 400 points (pre-exam, rescue diver exam, nitrox exam, final exam)

Paper – Up to 100 points

Skill Evaluations – Up to 300 points

<table>
<thead>
<tr>
<th>Grading Scale:</th>
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</thead>
<tbody>
<tr>
<td>Points</td>
</tr>
<tr>
<td>900-1000</td>
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Attendance and participation: There will be a 50 point deduction for every unexcused absence. There will be a 25 point deduction for any tardiness. There will be a 25 point deduction for the first abuse of the cell phone policy, and a 50 point deduction for each subsequent abuse. There will be a one point deduction from the participation grade for not completing the pre-assessment exam.

Examinations: The pre-assessment exam is worth 100 points and is marked as either complete or incomplete. The rescue diver, nitrox diver, and final exam are worth 100 points each, and are scored based on correct and incorrect answers.

Paper: There will be an assignment to write a brief essay based upon one of the check out dives. The topic will be assigned in class. The writing assignment will not be long enough to count towards Gordan Rule designation.

Skill Evaluations: The skill evaluations are worth up to 300 points.

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.

Schedule of Class Topics
Lectures:

<p>| January 8       | Introduction, Waivers, Syllabus, Science Diving (test on Sakai) |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 15</td>
<td>Basic Review (Pressure, Boyles &amp; Haldane / DCS / Tables) / Equipment</td>
</tr>
<tr>
<td>January 29</td>
<td>CPR / First Aid</td>
</tr>
<tr>
<td>February 12</td>
<td>Rescue</td>
</tr>
<tr>
<td>February 19</td>
<td>Dive Safety Manual Discussion, Online dive logs due</td>
</tr>
<tr>
<td>February 26</td>
<td>Environment / Navigation</td>
</tr>
<tr>
<td>April 2</td>
<td>Technical Diving</td>
</tr>
<tr>
<td>April 9</td>
<td>Boating and Seamanship</td>
</tr>
<tr>
<td>April 16</td>
<td>Final Exam due in Sakai</td>
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Labs: (Other dates added as needed)

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
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<tbody>
<tr>
<td>January 9</td>
<td>Swim Test / Gear Sizing</td>
</tr>
<tr>
<td>January 16</td>
<td>SCUBA Skills Evaluation / Buddy Breathing / Buoyancy Workshop</td>
</tr>
<tr>
<td>January 23</td>
<td>Advanced Buoyancy / Alt Finning / Helicopter Turns</td>
</tr>
<tr>
<td>February 13</td>
<td>Rescue</td>
</tr>
<tr>
<td>March 13</td>
<td>Transects / Quadrats / Gear Checkout</td>
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<tr>
<td>March 20</td>
<td>HAZMAT Cylinder Handling / Filling / Transport</td>
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<tr>
<td>March 27</td>
<td>Dive Plan Discussion, Gear Checkout</td>
</tr>
<tr>
<td>April 3</td>
<td>Doubles / AGA Mask</td>
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<td>April 10</td>
<td>Checkout for weekend</td>
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Open Water Dives: (tentative!)

<table>
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<th>Date</th>
<th>Topic</th>
<th>Location</th>
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<tbody>
<tr>
<td>February 15/16</td>
<td>Rescue &amp; OW Skills Eval</td>
<td>Manatee Springs</td>
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<tr>
<td>March 15/16</td>
<td>Limited Vis / Deep / Navigation and Transects / Quadrats / S&amp;S</td>
<td>Hudson Grotto / Venice Beach</td>
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<td>March 29/30</td>
<td>Science Diver Weekend</td>
<td>Cedar Key</td>
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<tr>
<td>April 12/13</td>
<td>Deep / Drift / Night / Wreck</td>
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**Additional References**

- UF SCUBA Web Site: [http://www.scuba.ufl.edu](http://www.scuba.ufl.edu)
- UF Diving Science and Safety Program Web-Site: [http://www.ohs.ufl.edu/Dive](http://www.ohs.ufl.edu/Dive)
- NAUI Web Site: [http://www.naui.org](http://www.naui.org)
- Diver's Alert Web Site: [http://www.dan.org](http://www.dan.org)

**Other Information:** Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities
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, www.dso.ufl.edu/drc/

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

• Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/
Academic Approval Tracking
UNIVERSITY of FLORIDA

ucc1-FAS4XXX Algae Biology and Ecology

This request is in progress.

Info

Process: Undergraduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Sager, Scott A
Created: 8/21/2014 7:44:42 AM
Updated: 8/21/2014 1:31:24 PM
Description: new undergrad course

Documents

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Decision

Set status to:  

June 24th, 2014

RE: Undergraduate/graduate differentiation in dual-enrolled FAS 4XXX/6XXX Algae Biology and Ecology

Dear Curriculum Committee,

Thank you for your consideration of Algae Biology and Ecology for formal approval and assignment of course numbers. The course is intended for upper division (junior or senior) undergraduates or early stage graduate students. The course will be rigorous for both, although there will be higher expectations for graduate students. There are several clear distinctions between the undergraduate and graduate requirements notable in the syllabi for each course. These are:

**Prerequisites**

**Undergraduates** are required to have taken BSC 2010 and 2011 (or equivalent).

**Graduate** is graduate student status, including a fundamental knowledge of basic biology.

**Required Reading**

**Undergraduate** students will be expected to read primary literature provided with each major topical area covered in the class. The required primary literature may be used as part of required reference material for the special project reports.

**Graduate** students will also be required to read primary literature provided with each major topical area covered in the class. Some of the concepts presented in the primary literature may be used in the formulation of some of the essay questions in the three exams.

**Special Projects**

**Undergraduate** students will be required to submit two special projects during the semester. For each project, students will find a short video (i.e. < 4 minutes in *.flv* file format) or a still image (jpeg format) which illustrates a concept or principle covered during the course to that date. The student will be required to write and submit a paragraph (approximately half a page single spaced...
text) describing the video or image and its significance, along with three references from the primary literature on the subject.

Graduate students will be required to submit one project similar in format to the first undergraduate project. The second special project will involve the development of a 20-25 minute voice over PowerPoint presentation on a special topic of the students choosing. The PowerPoint presentation should include a list of at least five references from the primary literature.

Exams

Graduate students will receive more complex exams, with an emphasis on essay-type questions. They will be expected to provide answers that synthesize the information they have learned in a more advanced manner than undergraduates.

Please contact me should any of this information require clarification.

Sincerely,

Edward J. Phlips
Professor
School of Forest Resources & Conservation
**UCC1: New Course Transmittal Form**

**Department Name and Number**: SFRC-FAS - 541946003

**Recommended SCNS Course Identification**
- **Prefix**: F, A, S
- **Level**: 4
- **Course Number**: __ __ __
- **Lab Code**: __ __ __
- **Full Course Title**: Algae Biology and Ecology
- **Transcript Title (please limit to 21 characters)**: ALGAE BIO & ECOLOGY

**Effective Term and Year**: Spring 2015

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**Course Description (50 words or less)**
Covers the biology and ecology of aquatic algae, including evolution, classification, structure, photosynthesis, growth, and reproduction. Emphasis on the ecological role of algae in different aquatic ecosystems (e.g. open ocean, estuaries, coral reefs, rocky intertidal), their impacts (e.g. harmful algae blooms, food webs), and their applications (e.g. food, biochemical).

**Prerequisites**
BSC2010; BSC2010L

**Co-requisites**

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</table>

**Rationale and place in curriculum**
Advanced course designed for undergraduates interested aquatic algae. Co-taught with graduate section.

**Department Contact**
- **Name**: Scott A. Sager
- **Phone**: 352.317.7675
- **Email**: sasager@ufl.edu

**College Contact**
- **Name**: Al Wysocki
- **Phone**: 352.392.1963
- **Email**: wysocki@ufl.edu
**UCC: Syllabus Checklist**

All UCC 1 forms and each UCC 2 form that proposes a change in the course description or credit hours must include this checklist in addition to a complete syllabus. Check the box if the attached syllabus includes the indicated information.

<table>
<thead>
<tr>
<th>Syllabus MUST contain the following information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Instructor contact information (and TA if applicable)</td>
</tr>
<tr>
<td>✔ Course objectives and/or goals</td>
</tr>
<tr>
<td>✔ A weekly course schedule of topics and assignments</td>
</tr>
<tr>
<td>✔ Required and recommended textbooks</td>
</tr>
<tr>
<td>✔ Methods by which students will be evaluated and their grades determined</td>
</tr>
<tr>
<td>✔ A statement related to class attendance, make-up exams and other work such as: “Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.%E2%80%9D">https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.”</a></td>
</tr>
<tr>
<td>✔ A statement related to accommodations for students with disabilities such as: “Students requesting classroom accommodation must first register with the Dean of Student Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.”</td>
</tr>
<tr>
<td>✔ Information on current UF grading policies for assigning grade points. This may be achieved by including a link to the appropriate undergraduate catalog web page: <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</a></td>
</tr>
<tr>
<td>✔ A statement informing students of the online course evaluation process such as: “Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <a href="https://evaluations.ufl.edu">https://evaluations.ufl.edu</a>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <a href="https://evaluations.ufl.edu.%E2%80%9D">https://evaluations.ufl.edu.”</a></td>
</tr>
</tbody>
</table>

**It is recommended that syllabi contain the following information:**

1. Critical dates for exams and other work
2. Class demeanor expected by the professor (e.g., tardiness, cell phone usage)
3. UF's honesty policy regarding cheating, plagiarism, etc. Suggested wording: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sscr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of TAs in this class.
4. Phone number and contact site for university counseling services and mental health services: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx
   University Police Department: 392-1111 or 9-1-1 for emergencies.

**The University's complete Syllabus Policy can be found at:** http://www.aas.ufl.edu/Data/Sites/18/media/policies/syllabi_policy.pdf
FAS4XXX: ALGAE BIOLOGY AND ECOLOGY

Instructor: Professor Edward Phlips

7922 NW 71st Street, Gainesville FL 32653
352-273-3603
phlips@ufl.edu

Office Hours: Thursday 8-10 AM

Course Description: The biology and ecology of aquatic algae, including evolution, classification, structure, photosynthesis, growth, and reproduction. Emphasis on the ecological role of algae in different aquatic ecosystems (e.g. open ocean, estuaries, coral reefs, rocky intertidal), their impacts (e.g. harmful algae blooms, food webs), and their applications (e.g. food, biochemical).

Prerequisites: BSC2010 and BSC2010L, or equivalent as determined by instructor

Time and Place:
Lectures (Online): Lecture modules will be posted on the e-Learning web site for the course on Monday of each week, along with required reading and supplemental information. Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See http://distance.ufl.edu/student-complaints for more details.

Course Objectives: After completing the course, students will:
- be able to describe the basic concepts of algal biology and ecology, and how they apply to different aquatic environments;
- be able to identify the role algae play in critical environmental issues, such as eutrophication, human health and global climate change;
- be able to describe the basic applications of algae in biotechnology, such as the production of food, chemicals, and biofuels.

Course Communication: This course will take advantage of e-Learning support to post course information and to allow you day-to-day access to your grades. Please visit http://lss.at.ufl.edu to access the course via the e-Learning link and for information on how use the e-Learning site (Please use the help desk as your first course of action if you have any difficulties). Lectures are based on PowerPoint presentations to facilitate the use of figures and visual aids. Not all the information for the class will be on the PowerPoint slides, therefore it is your responsibility to take notes and complete reading assignments.

Participation and Attendance: Participation and attendance is expected for all lectures, discussions, and special project presentations. Contact me as early as possible if you must legitimately miss a scheduled exam. If an emergency situation arises immediately before an exam, notify me as soon as the emergency is resolved. Make-up exams will not be given except for an excused absence with written substantiation (e.g., official University event, illness, family emergency, etc.).
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://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx).

**Course Format and Grading:** This course is offered for three (3) credits in the spring semester. Exams will be based on material presented in the lectures and the required readings. Required readings will be provided online for each major topical area. Ten short quizzes will be administered during the term. The quizzes will involve five multiple-choice or true/false questions. Seven minutes will be allowed for each quiz. The quizzes will be based on lecture materials. Each quiz will count for up to 2 points. Two points will be awarded for exams with 0-1.5 wrong answers. One point will be awarded for exams with 2-2.5 wrong answers.

The course will also involve two special projects during the semester. For each project, students will be required to find a short video (i.e. < 4 minutes in ‘.flv’ file format) or a still image (.jpeg format) which illustrates a concept or principle covered during the course to that date. The student will be required to write and submit a paragraph (approximately half a page single spaced text) describing the video or image and its significance, along with three published references related to the subject. The required primary literature may be used as part of required reference material for the special project reports. Image files should be imbedded in the pdf file. Video files can be submitted as separate flv files labeled with the student’s name and assignment number (e.g. ‘John Smith Video Special Project 1’). The visual material with text will be posted on the e-Learning web site. All students in the class will be asked to grade the presentations of a specified sub-set of other undergraduate students in the class on a scale of 1-3 (1 - below average, 2 - average, 3 - above average). During the grading, students will be asked to enter a brief comment on the presentation (e.g. strong point and/or weak point). The average grades of the students will be averaged with the grade of the instructor for a final grade. Students will receive five points for submitting the project and two additional points per project based on the average peer/instructor grade of 2 or higher. Students will get 3 points per project for participating in grading of the projects. Detailed instructions on how to submit projects and participate in grading will be provided on the e-Learning web site at the beginning of the semester.

Three exams will be administered online during the course. Each will be worth up to 20% of the grade. The exams will not be cumulative in terms of the material covered. Exam questions will emphasize lecture materials, but may also include general concepts presented in the required reading. The exams will be one hour in length and will be available online Wednesday-Sunday of exam week. Exam questions may include multiple-choice, true/false, list/explain, short answers or short essays.

The grade point allocation is: A (93-100%), A- (90-92%), B+ (86-89%), B (82-85%), B- (78-81%), C+ (74-77%), C (67-73%), C- (63-66%), D+ (59-62%), D (55-58%), D- (51-54%), and E (<50%).

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

**Basis for grade:**

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<tr>
<th>Requirement</th>
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<tr>
<td>Quizzes (10)</td>
<td>20%</td>
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<tr>
<td>Exam 1</td>
<td>20%</td>
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<tr>
<td>Exam 2</td>
<td>20%</td>
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</tbody>
</table>
Exam 3 20%
Special projects 14%
Participation in project 6%
grading & discussion

Course Outline

<table>
<thead>
<tr>
<th>Week</th>
<th>Topical Areas, Tests and Assignments</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction &amp; course description</td>
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<td>Week 2</td>
<td>Origins of algae</td>
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<td>Environmental changes and evolution of algae</td>
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<td>Phylogeny of algae</td>
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<td>Week 3</td>
<td>Algae structure &amp; function – by division</td>
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<td>Reading assignments</td>
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<td>Quiz 2</td>
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<td>Week 4</td>
<td>Algae structure &amp; function – by division – continued</td>
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<td>Week 5</td>
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<td>Benthic algae sampling methods</td>
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<td>Taxonomic methods</td>
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<td>Week 6</td>
<td><strong>Exam 1</strong></td>
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<td>Week 7</td>
<td>Photosynthesis – Structures, processes, methodologies</td>
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<td>Growth – Dynamics, physical limiting factors, methodologies</td>
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<td>Reading assignments</td>
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<td>Quiz 5</td>
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<td>Week 8</td>
<td>Growth – Chemical limiting factors, methodologies</td>
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<td>Freshwater algae toxins</td>
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First Special Project due by Wednesday
Reading assignments
Quiz 6

Week 9  Spring break

Week 10  Marine algae toxins
          Other harmful effects of algae

Peer Grades for Special Project 1 due
Reading assignments
Quiz 7

Week 11  Exam 2

Week 12  Ecological principles – e.g. eutrophication, hydrologic factors,
          food webs, climatic factors
Reading assignments
Quiz 8

Week 13  Examples of ecosystem types
Reading assignments
Quiz 9

Week 14  Examples of ecosystem types - continued
Quiz 10

Week 15  Algal applications

Second special project due by Wednesday

Week 16  Exam 3
Peer Grades for Special Project 2 due

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

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0001 Reid Hall, 352-392-8565, [www.dso.ufl.edu/drc](http://www.dso.ufl.edu/drc/)

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damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.
Academic Approval Tracking - UCC2 - FNR4070C

This request is in progress.

Info

Process: Undergraduate Courses
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Sager, Scott A
Created: 5/20/2014 1:41:00 PM
Updated: 5/21/2014 11:53:49 AM
Description: dropping pre-req and co-req text

Documents

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Decision

Set status to: ▼

http://apps.aa.ufl.edu/Approval/Requests/Info/9384

9/4/2014
UCC2: Course Change Transmittal Form

Department Name and Number: School of Forest Resources & Conservation - 514946001

Current SCNS Course Identification

Prefix   F   N   R   Level 4   Course Number 0 7 0   Lab Code Combined (C)
Course Title Environmental Education Program Development

Effective Term and Year: Spring 2015
Terminate Current Course: ☐
Other Changes (specify below): ☐

Change Course Identification to:

Prefix   □   □   □   Level   □   □   □   Course Number   □   □   □   □   □   □   Lab Code   □
Full Course Title
Transcript Title (please limit to 21 characters)

Credit Hours: From □   □   □   To □   □   □
Contact Hours: □ Base or □ Headcount From □   □   □   To □   □   □

Rotating Topic: From □ yes □ no   To □ yes □ no
S/U Only: From □ yes □ no   To □ yes □ no

Variable Credit: From □ yes □ no   To □ yes □ no
Repeateable Credit: From □ yes □ no   To □ yes □ no
If yes, □ minimum and □ maximum credits/semester
If yes, □ total repeatable credit allowed

Prerequisites
From EDG2930 and/or WIS5423 recommended
To none

Co-requisites
From FNR4343L
To none

Course Description (50 words or less; if requesting a change, please attach a syllabus)
From
To

Rationale /Place in Curriculum/Impact on Program
These pre-reqs/co-reqs appear to have been an error. They've never been enforceable... dropping them to reduce confusion.

Department Contact
Name: Scott A. Sager
Phone: 352.846.0846
Email: sasager@ufl.edu

College Contact
Name: Ricky Telg
Phone: 352.392.1963
Email: rwtelg@ufl.edu
All UCC1 forms and each UCC2 form that proposes a change in the course description or credit hours must include this checklist in addition to a complete syllabus. Check the box if the attached syllabus includes the indicated information.

**Syllabus MUST contain the following information:**

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

It is recommended that syllabi contain the following information:

1. Critical dates for exams and other work
2. Class demeanor expected by the professor (e.g., tardiness, cell phone usage)
3. UF’s honesty policy regarding cheating, plagiarism, etc. Suggested wording: UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of TAs in this class.
4. Phone number and contact site for university counseling services and mental health services: 392-1575, http://www.counseling.ufl.edu/cwc/Default.aspx
   University Police Department: 392-1111 or 9-1-1 for emergencies.

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

Rev. 7/13
FNR4070C Environmental Education Program Development
University of Florida
Martha C. Monroe, Professor
347 Newins-Ziegler Hall (352) 846-0878
E-mail: memonroe@ufl.edu
Office Hours: Tues and Thursday 2-4, and by appointment
Class Meets: Wednesday: Periods 8-10, 3:00 – 6:00 pm Fall 2011

Course Description:
A comprehensive approach to program development, from needs assessment to evaluation, will be applied to non-formal environmental education.

Course Objectives/Student Learning Outcomes:
By the end of this course, students will be able to:
- Describe the goals and objectives of environmental education (EE) and education for sustainable development (ESD)
- Explain how a variety of educational programs achieve EE goals
- Critique EE and ESD materials
- Use a Logic Model for program planning
- Apply learning theory and teaching strategies to environmental education programs
- Develop and use evaluation tools, collect and analyze data for a client
- Explain how social and political change affects EE
- Write a fundable grant proposal for EE program development

Materials:


Wojcik, D., K Biedenweg, L. McConnell, G. Iyer, M. Monroe. Draft chapter on Global Trends in Environmental Education. – RESERVE
NAAEE, Guidelines for Excellence: EE Materials and NonFormal Programs. Order or download your own from the National Service Center for Environmental Publications (NSCEP) at http://www.epa.gov/nscep/

171B04001 - Nonformal Environmental Education Programs: Guidelines For Excellence

171B04003 - Environmental Education Materials Guidelines For Excellence

Additional materials may be required.

Course Policies:

Students are expected to attend class, engage in discussion, submit assignments on time, and participate in group work. Absences will be excused if accompanied by appropriate paperwork. After three unexcused absences, 1% per day will be deducted from the final course grade. Assignments are to be turned in during class on the day they are due. For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx. 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.

Grading Scale:

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<thead>
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<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93 – 100%</td>
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<tr>
<td>A-</td>
<td>90 – 92%</td>
</tr>
<tr>
<td>B+</td>
<td>87 – 89%</td>
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<td>B</td>
<td>83 – 86%</td>
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<tr>
<td>B-</td>
<td>80 – 82%</td>
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<tr>
<td>C+</td>
<td>77 – 79%</td>
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<td>D</td>
<td>63 – 66%</td>
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<tr>
<td>D+</td>
<td>67 – 69%</td>
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<tr>
<td>D-</td>
<td>60 – 62%</td>
</tr>
<tr>
<td>E</td>
<td>below 59%</td>
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</table>

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# Course Agenda

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<tr>
<th>Wed.</th>
<th>Discussion Topic</th>
<th>Read for this date</th>
<th>Project Work</th>
</tr>
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</table>
| Aug 24 | Course Intro, What is EE, Historic context | Hungerford reflection 2010  
Just say YES | Intro selves |
| Aug 31 | Learning Theories  
Adult Education  
Activity Demonstration | Framework  
CEOT Chapter 2  
One size does not fit | Intro to Projects  
Select a Group |
| Sept 7 | Materials Guidelines for Excellence  
[1] Climate Ed Review | Wojcik et al. draft  
Climate change & Literacy Guidelines | Climate background |
| Sept 14 | Program Development  
Logic Models  
Project Objectives, [1] Due | Workbook, 1 & 2 | [3a] Discuss a Logic Model and Eval Plan for your project |
| Sept 21 | Evaluation Tool Development | Workbook, 3 | [3a] Due  
[3b] Work on ideas for activities and items for assessments |
| Sept 28 | Schools and EE  
Science Ed Standards and Testing  
Connection to Nature | Gough, Ernst, Weibacher, Leiberman  
NGSSS on Web  
Stevenson | Work on ideas for activities and items for assessments |
| Oct 5 | ESD  
EBE | Tilbury, Ernst | [3b] due  
Begin plan for Pilot testing  
IRB Revision |
Continue plan for Pilot testing |
| Oct 19 | Data Collection  
Data Analysis | Workbook, 4 & 5 | Collect data over the next month; solve problems in class |
| Oct 26 | EE Backlash & Advocacy Bias | Poore, Salmon, Holsum, ZPG | |
| Nov 2 | [5] Writing Proposals for Projects | Archie, Place | |
| Nov 9 | [5a] Proposal Ideas Due Adults and Social Learning | Schuster, Muro/Jeffrey, Wals | |
| Nov 16 | Budgets, Letters, Details on Proposal Writing | | Analyze data |
| Nov 23 | Thanksgiving Holiday | | |
| Dec 7 | Presentations on Projects [4] due | | |
Assignments and Points

1. Climate Education Review. Select one of the climate education programs or materials from the list and use the NAAEE Materials Review Guidelines and the Climate Literacy Framework to critique it. Describe the audience it was designed for and its objectives. Assess how it addresses the EE goal and the five EE objectives. Discuss whether and how it allows you to judge the 6 components of excellence. What other aspects could be relevant in this case? One page, single spaced. Due September 14. 10 points

2. In Class Quiz and Take Home Essay. This two-part assessment will enable you to dispense with basic concepts on the in-class portion (October 12) and spend a bit more time thinking about their application in the take-home portion, which will be due October 19. You are welcome to use any written resources from class or the library, but please do your own work, individually. 20 points

3-4. The Project. Much can be learned about EE program development by doing it. You will work in small groups to work on a climate change education project (see next page). Some class time will be set aside to work with groups; you may also need to meet outside class. Homework assignments will be directly related to your project. Draft tools are due September 21 and October 5 for in-class discussions and feedback. Your final report and oral presentation will be due December 7. 35 points

5. EE Proposal. Writing project proposals is essential to obtain funding to support EE programs. Develop an idea for a project that meets the RFP criteria and write a proposal following EPA’s Small Grants for EE Request for Proposals. http://www.epa.gov/enviroed/grants.html. This exercise will incorporate much of what we have discussed about program development, logic models, objectives, evaluation, training, learning, etc. You can dream up the organization or use a real one. You will write the budget, letters of support, and justification for the program. If your ideal program is better addressed with a different funder or RFP, you can propose one to me. Submit a 1 page summary of your plans (single spaced) and draft logic model on November 9. Submit your final proposal November 30. 25 points

Points for participation, attendance, and coming to class prepared with the mini assignments 10 points
modify-FRC specialization in Environmental Pre-Law

This request is in progress.

**Info**

- **Process**: Undergraduate Curriculum Changes
- **Status**: Pending at CALS - College of Agricultural and Life Sciences
- **Submitter**: Sager, Scott A
- **Created**: 8/24/2014 7:32:19 PM
- **Updated**: 8/25/2014 6:51:07 AM
- **Description**: modify specialization in Environmental Pre-Law within

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**Decision**

Set status to: 

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http://apps.aa.ufl.edu/Approval/Requests/Info/9515

9/4/2014
August 26, 2014

To: Dr. Al Wysocki  
Associate Dean, College of Agricultural and Life Sciences

From: Dr. Michael Andreu  
Undergraduate Coordinator, Forest Resources and Conservation major

We are requesting revisions to the existing specialization in Environmental Pre-Law, within the Forest Resources and Conservation major, administered through the School of Forest Resources & Conservation. This specialization is designed to allow students to gain a broad understanding of basic forest management, while focusing on the regulatory, legal, and policy aspects of natural resource management.

There is one proposed modification:

Currently, students must complete PUP3294 Politics and Ecology; however, this course is no longer being offered. In its place, we would like to require students to complete CPO4793 Environmental Politics in the Global South.

We believe this modification will still provide the academic content desired. We hope that this change can take effect summer B 2015 (2015 catalog year).

Please contact either myself or Scott Sager with any questions.

Dr. Michael Andreu  
mandreu@ufl.edu

Direct responses to: Scott A. Sager, Education/Training Coordinator ssager@ufl.edu 352.846.0846

The Foundation for The Gator Nation 126 of 130
An Equal Opportunity Institution
# Environmental Pre-Law

## Recommended Semester Plan

<table>
<thead>
<tr>
<th>Semester 5</th>
<th>Credits</th>
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<tr>
<td>FNR 3131C Dendrology/Forest Plants</td>
<td>3</td>
</tr>
<tr>
<td>FNR 3410C Natural Resource Sampling</td>
<td>3</td>
</tr>
<tr>
<td>FOR 3153C Forest Ecology</td>
<td>3</td>
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<tr>
<td>SWS 3022 Introduction to Soils in the Environment or Geomatics course</td>
<td>3</td>
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<td>Directed elective, adviser-approved *</td>
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<th>Semester 6</th>
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<td>BUL 4310 Legal Environment of Business</td>
<td>4</td>
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<tr>
<td>FOR 3162C Silviculture</td>
<td>4</td>
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<tr>
<td>FOR 3202 Society and Natural Resources</td>
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<tr>
<td>PUB 3204 Politics &amp; Ecology, CPO 4793 Environmental Politics in the Global South</td>
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The summer term between the junior and senior year is normally reserved for professional work experience. For questions regarding opportunities, contact the SFRC Student Services office at khaselier@ufl.edu.

<table>
<thead>
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<th>Semester 7</th>
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<tr>
<td>AEB 4085 Agricultural Risk Management and the Law</td>
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<tr>
<td>AEB 4126 Agricultural and Natural Resource Ethics or POT 3503 Environmental Ethics and Politics</td>
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<td>FNR 4660 Natural Resource Policy and Economics</td>
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<td>FOR 4020 Seminar in Contemporary Issues in Forest Resources and Conservation</td>
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<td>SUR 4403 Cadastral Principles</td>
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<td>AEB 4123 Agricultural and Natural Resource Law or PAD 4604 Administrative Law and Regulatory Politics</td>
<td>3</td>
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<tr>
<td>AEB 4242 International Trade Policy in Agriculture</td>
<td>3</td>
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<td>FNR 4343C Forest Water Resources</td>
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<td>FNR 4623C Integrated Natural Resources Management</td>
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<tr>
<td>FOR 3214 Fire Ecology and Management (2) and FOR 3214L Fire Ecology and Management Laboratory (1), optional</td>
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Total 14-15

* Please see adviser for list of approved electives.
terminate-FRC specialization in Forest Informatics

This request is in progress.

Info

Process: Undergraduate Curriculum Changes
Status: Pending at CALS - College of Agricultural and Life Sciences
Submitter: Sager, Scott A
Created: 8/24/2014 7:30:20 PM
Updated: 8/25/2014 6:51:59 AM
Description: terminate specialization in Forest Informatics, within the Forest Resources and Conservation major

Documents

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Actions

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Decision

Set status to:  

Submit decision

http://apps.aa.ufl.edu/Approval/Requests/Info/9514

9/4/2014
August 26, 2014

To: Dr. Al Wysocki
   Associate Dean, College of Agricultural and Life Sciences

From: Dr. Michael Andreu
      Undergraduate Coordinator, Forest Resources and Conservation major

We are requesting the termination of the Forest Informatics specialization, within the Forest Resources and Conservation major, administered through the School of Forest Resources & Conservation. There are no students currently enrolled in this specialization.

We believe this modification will still provide the academic content desired. We hope that this change can take effect Summer B 2015 (2015 catalog year).

Please contact either myself or Scott Sager with any questions.

   Dr. Michael Andreu
   mandreu@ufl.edu

Direct responses to: Scott A. Sager, Education/Training Coordinator sasager@ufl.edu  352.846.0846