Cover Sheet: Request 9510

ucc1-FAS4XXX Algae Biology and Ecology

Info

Process	Undergraduate Courses
Status	Pending
Submitter	Sager,Scott A sasager@ufl.edu
Created	8/21/2014 7:44:42 AM
Updated	9/1/2017 5:09:44 PM
Description of request	new undergrad course

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Forest Resources and Conservation 514946000	White, Tim		8/21/2014
Replaced checklist_FAS4XXX Biology-Ecology Algae.pdf Added checklist_FAS4XXX Biology-Ecology Algae.pdf					8/21/2014 8/21/2014
College	Approved	CALS - College of Agricultural and Life Sciences	Brendemuhl, Joel H	Approved by CALS CC on 9/12/14.	9/22/2014
No document changes					
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Gebhardt, Susan	Added to October 2014 agenda	9/29/2014
No document changes					
University Curriculum Committee	Conditiona Approved	PV - University Curriculum Committee (UCC)	Gebhardt, Susan	There is no graduate course syllabus but the cover memo summarizes their differences. Prerequisites on UCC 1 and memo are inconsistent. Please revise as necessary. Syllabus: Textbooks or required reading are necessary. How will the online exams be monitored? Any course fees need to be included. There are points for "Participation in project grading & discussion" so it seems that students will grade classmates' assignments.	10/23/2014

Step	Status	Group	User	Comment	Updated
Replaced syllabus_FAS4XXX Algae Biology and Ecology.doc Replaced UCC1_FAS4XXX Biology-Ecology Algae.pdf Replaced differences_Algae Biology and Ecology.doc Added UCC1_FAS4XXX Biology-Ecology Algae_revised.pdf Deleted syllabus_FAS4XXX Algae Biology and Ecology_revised.doc Added differences_Algae Biology and Ecology_revised.doc					10/15/2014 10/10/2014 10/15/2014 10/10/2014 10/15/2014 10/15/2014
College	Approved	CALS - College of Agricultural and Life Sciences	Brendemuhl, Joel H	Concerns of the UCC have been addressed and the Graduate Course version of the course was approved as FAS 6176.	9/1/2017
Added syllabus_FAS4XXX Algae Biology and Ecology_revised2.doc					1/5/2017
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			9/1/2017
No document changes					
SCNS Approval					
No document changes					
Student Academic Support System Implementati					
No document changes					

UF UNIVERSITY of FLORIDA

UCC1: New Course Transmittal Form

Department Name and Number SFRC - 514946003

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 | Rotating Topic ☐ yes ■ no

Amount of Credit 3 | Contact Hour: Base 3 or Headcount ___ | S/U Only ☐ yes ■ no

Repeatable Credit ☐ 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)

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

Degree Type (mark all that apply) ■ Baccalaureate ☐ Graduate ☐ Professional ☐ Other ___

Category of Instruction ☐ Introductory ☐ Intermediate ■ Advanced

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

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).

No course fee is required.

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.

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. Twelve short assignments will be administered during the term. The online assignments will involve five questions related to that weeks lecture and/or reading material. Each correct answer will be worth 0.4 points.

The course will also involve two special projects during the semester. For Project 1 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 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 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). The average grades of the students will be averaged with the grade of the instructor for a final grade. Students will receive seven points for submitting the project and up to 3 additional points per project for their average grade (rounded to the nearest whole number). 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.

For Project 2 will be a group project. Groups of 4-6 students will work together to produce a short voice-over Power Point presentation (i.e. around 5 minutes) on a topic of their choice, based on final approval from the instructor. The presentation can include video segments. The presentation should also include references for the information provided in the presentation. Students will receive 15 points for submission of the presentation. All groups will be asked to grade the presentations of the other groups in the class on a scale of 1-5. During the grading groups will be asked to enter a brief comment on the presentation (e.g. strong points and/or weak points). The average grades of the groups will be averaged with the grade of the instructor for a final grade. Each student in the groups will be given 3 points for participation in the grading process.

Two 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.

Basis for grade:

Online Assignments (12)	24%
Exam 1	20%
Exam 2	20%
Special Project 1	10%
Participation in Project 1 grading & discussion	3%
Special Project 2	20%
Participation in Project 2 grading & discussion	3%

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 Outline

Week	Topical Areas, Tests and Assignments
Week 1	Introduction & course description
Week 2	Origins of algae Environmental changes and evolution of algae Phylogeny of algae Systematics basics Reading assignments Online Assignment 1
Week 3	Algae structure & function – by division Reading assignments Online Assignment 2
Week 4	Algae structure & function – by division – continued Reading assignments Online Assignment 3
Week 5	Plankton sampling methods Benthic algae sampling methods

	Taxonomic methods Reading assignments Online Assignment 4
Week 6	Photosynthesis – Structures, processes, methodologies Growth – Dynamics, physical limiting factors, methodologies Reading assignments Online Assignment 5
Week 7	Growth – Chemical limiting factors, methodologies **First Special Project due by Wednesday** Reading assignments Online Assignment 6
Week 8	**Exam 1**
Week 9	Spring break
Week 10	Freshwater algae toxins Reading assignments Online Assignment 7 **Peer Grades for Special Project 1 due**
Week 11	Marine algae toxins Other harmful effects of algae Reading assignments Online Assignment 8
Week 12	Ecological principles – e.g. eutrophication, hydrologic factors, food webs, climatic factors Reading assignments Online Assignment 9
Week 13	Examples of ecosystem types Reading assignments Online Assignment 10
Week 14	Examples of ecosystem types - continued

Reading assignments
Online Assignment 11

Week 15 Algal applications

Reading assignments
Online Assignment 12

Second special project due by Wednesday

Week 16 Exam 2
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. 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/sccr/process/student-conduct-honor-code.

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

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

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

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

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/**

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.

UF UNIVERSITY of FLORIDA

Institute of Food and Agricultural Sciences
School of Forest Resources and Conservation
Fisheries and Aquatic Sciences Program

7922 NW 71st Street
PO Box 110600
Gainesville, FL 32611-0600

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 BSC2010 BSC2010L (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 Power Point 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

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