Cover Sheet: Request 13928

FAS4XXX Algae Biology and Ecology

Info

Process	Course|New|Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Scott Sager sasager@ufl.edu
Created	5/23/2019 3:46:10 PM
Updated	10/16/2019 4:17:20 PM
Description of request	new course

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Forest Resources and Conservation 514946000	Terrell Baker III		5/23/2019
No document changes					
College	Approved	CALS - College of Agricultural and Life Sciences	Joel H Brendemuhl	Edits requested by the CALS CC have been addressed.	10/16/2019
syllabus_FAS4XXX Algae Biology and Ecology_revised.doc differences_Algae Biology and Ecology_revised.doc syllabus_FAS6XXX Algae Biology and Ecology.doc					10/8/2019 10/8/2019 10/8/2019
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			10/16/2019
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 13928

Info

Request: FAS4XXX Algae Biology and Ecology
Description of request: new course
Submitter: Scott Sager sasager@ufl.edu
Created: 10/8/2019 1:29:33 PM
Form version: 2

Responses

Recommended Prefix FAS
Course Level 4
Number XXX
Category of Instruction Joint (Ugrad/Grad)
Lab Code None
Course Title Algae Biology and Ecology
Transcript Title ALGAE BIOLOGY/ECOLOGY
Degree Type Baccalaureate

Delivery Method(s) Online
Co-Listing Yes
Co-Listing Explanation Exams will be different for graduate and undergrad versions, with grad exams more extensively testing understanding of concepts and principles outlined in the readings, requiring synthesis of information through essay questions and similar. Undergrad exams will be more general, and structured with less emphasis on synthesis and more checking basic understanding of core concepts and topics.

Undergrad version has two special projects... grad version has one special project, with the second being an academic-level presentation/lecture developed on a specified topic.
Effective Term Earliest Available
Effective Year Earliest Available
Rotating Topic? No
Repeatable Credit? No

Amount of Credit 3

S/U Only? No
Contact Type Regularly Scheduled
Weekly Contact Hours 3
Course Description 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, or equivalent
Co-requisites none
Rationale and Placement in Curriculum This course provides a basis for the foundational trophic level, required for students studying marine ecological systems. The course is required for students in the Interdisciplinary Studies-Marine Sciences major (CALS track).
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 synthesize the role algae play in critical environmental issues, such as eutrophication, human health and global climate change;
- be able to articulate the basic applications of algae in biotechnology, such as the production of food, chemicals, and biofuels.

Course Textbook(s) and/or Other Assigned Reading No textbook required. Readings will be taken from recent literature, such as...
- Nixon, S.W. (1995). Coastal marine eutrophication: a definition, social causes, and future concerns.

Ophelia 41, 199-219.
- Wetz, M.S., and Yoskowitz, D.W. (2013). An extreme future for estuaries? Effects of extreme climatic events on estuarine water quality and ecology. Marine Pollution Bulletin 69, 7-18.
- Rabalais, N.N., R.E. Turner, B.K. Sen Gupta, D.F. Boesch, P. Chapman and M.C. Murrell. 2007a. Characterization and long-term trends of hypoxia in the Northern Gulf of Mexico: Does the science support the action plan?; Estuaries and Coasts 30(5): 753-772.
Weekly Schedule of Topics - Introduction & course description
- Origins of algae, environmental changes and evolution of algae, phylogeny of algae, systematics basics
- Algae structure & function – by division
- Plankton sampling methods, benthic algae sampling methods, taxonomic methods
- Photosynthesis
- Growth
- Freshwater algae toxins
- Marine algae toxins, other harmful effects of algae
- Ecological principles (eutrophication, hydrologic factors, food webs, climatic factors)
- Examples of ecosystem types
- Algal applications
Links and Policies Online Course Evaluation Process: Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. 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. Itis 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

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

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

Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/

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 accommodation0001 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.
Grading Scheme Online Assignments (12) - 24%
Exam 1 - 20%
Exam 2- 20%
Special Project Part 1 - 2%
Special Project Part 2 - 10%
Special Project Part 3 - 20%
Participation in Project - 4%
Instructor(s) Dr. Edward Phlips

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

FAS4XXX *ALGAE BIOLOGY AND ECOLOGY*

Instructor: Professor Edward Phlips

Main Office: Program of Fisheries and Aquatic Sciences, 7922 NW 71st Street, Gainesville, Florida, 32653

Telephone: 352-273-3603

E-mail: 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 synthesize the role algae play in critical environmental issues, such as eutrophication, human health and global climate change;
- be able to articulate 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 miss a scheduled exam.

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.

Example Readings: Readings will include, but are not limited to:

Nixon, S.W. (1995). Coastal marine eutrophication: a definition, social causes, and future concerns. *Ophelia* 41, 199-219.

Wetz, M.S., and Yoskowitz, D.W. (2013). An extreme future for estuaries? Effects of extreme climatic events on estuarine water quality and ecology. *Marine Pollution Bulletin* 69, 7-18.

Rabalais, N.N., R.E. Turner, B.K. Sen Gupta, D.F. Boesch, P. Chapman and M.C. Murrell. 2007a. Characterization and long-term trends of hypoxia in the Northern Gulf of Mexico: Does the science support the action plan?; *Estuaries and Coasts* 30(5): 753-772.

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 week's lecture and/or reading material. Each correct answer will be worth 0.4 points.

The course will also involve a special team project during the semester. Each group will consist of 5-6 persons selected by the instructor. The final product of the project will be a short voice-over Power Point presentation (i.e. around 5-7 minutes) on a topic of their choice based on a list of options provided by the instructor. Three parts of the project will be due during the semester:

Part 1: Selection of project topic by teams. Topics should focus on algae species of particular ecological importance (e.g. harmful algae bloom species, important food web or habitat species), key ecosystem functions carried out by algae or biotechnological applications using algae (biofuel production, aquaculture) perspectives. Teams can consult with the instructor to discuss options. On time submission of topics will be associated with 2 points for each team member.

Part 2: Each member of each team 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 associated with the topic selected by each team. The image or video will be accompanied by a paragraph (approximately half a page single spaced text) describing the video or image and its significance, along with three published references (journal articles or books) related to the subject. 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. Part 2 of the Special Project will be worth up to 10 points (4 points for image/video, 4 points for descriptive paragraph, and 2 points for references).

Part 3: Each team will work together to produce a short voice-over Power Point presentation (i.e. around 5-7 minutes) on a topic of their choice. The presentation can include video segments. All members of the team must be included in the presentation to receive credit.

The presentation should also include references for the information provided in the presentation. Each of the team members will receive up to 20 points for the presentation (8 points for visual content, 8 points for narration content, 4 points for referencing). All students will be asked to evaluate the presentations of a selected number of other team projects in the class on a scale of 1-3 (1 – low quality, 2 – moderate quality, 3 – high quality). During the evaluations each person will be asked to enter a brief comment on the presentation they are assigned to evaluate (e.g. strong point and/or weak point). The average of the evaluations will be included in the instructor's grade of the project. Each student will be given 4 points for participation in the evaluation process.

Two exams will be administered online during the course. Each will be worth 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 (92.9-100%), A- (90.0-92.9), B+ (86.0-89.9%), B (82.0-85.9%), B- (78.0-81.9 %), C+ (74.0-77.9%), C (67.0-73.9%), C- (63.0-66.9%),D+ (59.0-62.9%), D (55.0-58.9%), D- (51.0-54.9%), and E
«51%).

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 Part 1	2%
Special Project Part 2	10%
Special Project Part 3	20%
Participation in Project grading & discussion	4%

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.

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academic misconduct to appropriate personnel. Itis 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.

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University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu

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

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

Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/

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 accommodation0001 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.

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:

Cloern, J.E. 2001. Our evolving conceptual model of the coastal eutrophication problem. *Marine Ecology Progress Series* 210:223-253.

Litchman, E., and C.A. Klausmeier. 2008. Trait-based community ecology of phytoplankton. *Annual Reviews Ecology Evolution and Systematics* 39:615-639.

Nisbet, E.G. and N. H. Sleep. 2001. The habitat and nature of early life. *Nature* 409:1083-1091.

O'Neil, J.M., T.W. Davis, M.A. Burford and C.J. Gobler. 2012. The rise of harmful cyanobacteria blooms: The potential roles of eutrophication and climate change. *Harmful Algae* 14: 313-334.

Szmant, A. 2002. Nutrient enrichment on coral reefs: Is it a major cause of coral reef decline? *Estuaries* 25:743-766.

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 on line 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 web site.

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 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:

Quizzes (10)	20%
Exam 1	20%
Exam 2	20%
Exam 3	20%
Special project 1	5%
Special Project 2	10%
Participation in project grading & discussion	5%

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 Quiz 1
Week 3	Algae structure & function – by division

	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. 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

- *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.