

FIELD ECOLOGY OF AQUATIC ORGANISMS
(FAS 5276C and FAS 4932, 4 credits)
Summer A Semester 2011

Tuesdays and Thursdays - 8:00 a.m. – 5:00 p.m.
Fisheries & Aquatic Sciences Conference Room

Course Description:

This field-oriented course is intended to introduce students to the diverse aquatic habitats found in Florida, their associated flora and fauna, and serve as an introduction to the management issues facing state and federal conservation agencies.. Students will gain an understanding of plant and animal community structure across a range of lakes, rivers and nearshore coastal systems. Extensive field trips are required and comprise approximately 75% of the total class time. Enrollment includes advanced undergraduates and beginning graduate students. *Prerequisites: None*

Course Goals:

Students will gain an appreciation for the diverse aquatic ecosystems in Florida, and an understanding of their complex ecology. Regularly scheduled field trips will allow students to explore and sample freshwater lakes, streams and springs, estuaries, and nearshore coastal ecosystems. Important themes through the course will revolve around: nutrient effects on aquatic ecosystems, the roles of different habitat types in structuring aquatic systems, and water use implications for aquatic ecosystem structure and function. In each field trip we will identify prominent plants, fishes, and invertebrates that occur and discuss system ecology. Students will also be introduced to some of the basic sampling methods used to study these systems.

Expected Benefits and Outcomes:

Upon completion of this course, students will:

- A. Be able to identify key flora and fauna found in Florida's lakes, streams, rivers, estuaries and nearshore coastal waters and have a basic understanding of their ecologies
- B. Be familiar with regularly used sampling gear to collect flora and fauna across a broad range of habitat types
- C. Demonstrate an understanding of important ecological relationships in Florida's diverse aquatic ecosystems
- D. Demonstrate an understanding of the potential consequences of human activities and natural disturbance events on the structure and function of aquatic ecosystems in Florida

Grading:

Weekly class assignments 50%, Class participation 25%; Final Exam 25%

A = 100-90, B = 89-80, C = 79-70, D = 69-60, E = 59 or less

Textbook:

None required although several field guides are suggested as appropriate supplemental course material (see attached reference list). Additional reading materials will be provided by course instructors.

Instructors (contact information provided as attached document):

Drs. Mike Allen, Don Behringer, Tom Frazer, Dan Canfield, Chuck Cichra, and Bill Pine

Teaching Assistants (contact information provided as attached document):

Ms. Janice Kerns and Mr. Jake Tetzlaff

Course Schedule: (All classes start at 8:00am - Fisheries and Aquatic Sciences Conference Room)

| <u>Date:</u> | <u>Activity:</u> | <u>Instructor(s):</u> |
|---------------------|--|------------------------------|
| 10 May – Tuesday | Organization of class | Allen |
| | Talk about Lake Okeechobee and Florida Keys trip | Allen/Behringer |
| | Lecture on over-riding themes | Allen/Canfield |
| | FAS ponds - Phytoplankton and Zooplankton | Mary Cichra |
| 12 May – Thursday | Orange/Newnans Lake (eutrophic) | Canfield/Kerns |
| 17 May – Tuesday | Hawthorn Lakes (meso/oligotrophic) | Allen/Kerns |
| 19 May – Thursday | Santa Fe River (half of class) | Tetzlaff/Pine |
| 24 May – Tuesday | Santa Fe River (half of class) | Tetzlaff/Pine |
| 26 May – Thursday | Chassahowitzka Springs and River | Frazer/Notestein |
| 31 May - Tuesday | no class | |
| 2 June - Thursday | St. Martin's Aquatic Preserve | Frazer/Notestein |
| 5 June – June 10* | Lake Okeechobee and Florida Keys | Allen/Behringer |
| 16 June – Thursday | Final Exam | |

* Note that the field trip to Lake Okeechobee and the Florida Keys will take place from Sunday through Friday. **This trip will require students to pay some costs for lodging and food.** A detailed itinerary and instructions will be provided prior to this trip.

Instructor and Teaching Assistant Contact Information

Instructors:

Dr. Mike Allen
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Dr. Thomas K. Frazer
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(352)273-3644

Dr. Daniel E. Canfield
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Dr. Charles E. Cichra
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Dr. William E. Pine
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(352)846-0899

Dr. Donald Behringer
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(352)273-3634

Teaching Assistants:

Ms. Janice Kerns
Janice.kerns@ufl.edu

Mr. Jake Tetzlaff
jctetz@ufl.edu

Checklist of Important Items:

- Bag Lunch and drinks (make sure you bring plenty of water)
- Sunscreen (hats and sunglasses are also recommended)
- Insect repellent
- An extra set of dry clothing and towel (you will get wet in this course)
- Appropriate shoes (they will get wet and muddy)
- Mask fins and snorkel for all classes held in June
- Field notebook

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

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

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

The Honor Code: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

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

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

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court (*Source: 2007-2008 Undergraduate Catalog*).

Software Use: All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Campus Helping Resources: Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. Both the Counseling Center and Student Mental Health Services provide 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. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health Services is located on the second floor of the Student Health Care Center in the Infirmary.

- *University Counseling Center*, 301 Peabody Hall, 392-1575, www.counsel.ufl.edu
- *Career Resource Center*, CR-100 JWRU, 392-1602, www.crc.ufl.edu/
- *Student Mental Health Services*, Rm. 245 Student Health Care Center, 392-1171, www.shcc.ufl.edu/smhs/
 - Alcohol and Substance Abuse Program (ASAP)
 - Center for Sexual Assault / Abuse Recovery & Education (CARE)
 - Eating Disorders Program
 - Employee Assistance Program
 - Suicide Prevention Program

Students with Disabilities: The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues.

0001 Reid Hall, 392-8565, www.dso.ufl.edu/drc/