

PLS 4613/AGR6932
AQUATIC WEED CONTROL
FALL 2016
CREDITS: 3.0

DESCRIPTION: Identification of Florida's aquatic weed problems and methods of chemical, biological, mechanical and physical weed control. Specific topics will include plant biology/ecology, herbicide labels and use, herbicide residue, lake management, insect biocontrol, grass carp, and current laws regulating aquatic weed control.

AGR6932: Graduate students may register for graduate credit through AGR 6932. Students taking AGR 6932 will be required to do a literature review, write and submit for publication an article for AQUATICS or Wildland Weeds magazine. Past students have written articles on the general use of organic matter on lake productivity, identification of Typha sp. in Florida and similar topics of general interest. Instructor will help with the topic selection, review and submission.

INSTRUCTOR: William T. Haller
Agronomy Department
Phone: 392-9615
e-mail: whaller@ufl.edu
Office Hours: By appointment

**LECTURES &
LABS COMBINED:** Mondays, 3:15 - 4:15 pm
Wednesdays, 3:15-5:00 pm
Weed Shop Seminar Room – Bldg. 258 (Steel building south of microbiology on museum drive)

COURSE TEXT: None. Numerous handouts, herbicide labels and on-line publications.

OFFICE HOURS: Office hours will be held following Monday's class from 4:15 – 5:00 pm or by appointment at my off campus office at 7922 NW 71st Street.

SATURDAY

FIELD TRIPS: There will be at least two Saturday field trips scheduled from 8:00 am - 2:00 pm. Field trip will visit Rodman Reservoir, Orange Lake or other sites depending upon activities/weed levels.

WEDNESDAY

FIELD TRIP: Depending on class size and student schedules, we will have an optimal field trip to West Lake Toho near Kissimmee, FL. One of the most intensively managed lakes in Florida, the weed problems are entwined with multiple lake uses and endangered species issues.

CLASS

ATTENDANCE: Students are expected to attend and participate in all classes and laboratories. No make-up exams or quizzes will be given except in cases of extenuating circumstances.

QUIZZES & EXAMS:

Two preliminary exams (1 hour) will be given during the semester, approximately 30% and 60% through the course. A final comprehensive exam will be given at the convenience of the class. Problem sets (homework) and quizzes will be given and usually announced, but not scheduled. Laboratory exam will include identification of approximately 30 aquatic plants, and other field related topics.

PLANT

IDENTIFICATION: A list of plants with common and scientific names will be provided. Plants will be on regular display at the Agronomy Weed Shop or other location for your review as needed.

COURSE

GRADING: Grades for this course will be assigned according to established university policy:

A = 90-100%
B+= 86-89%
B = 80-85%
C+=76-79%
C = 70-75%
D+=66-69%
D = 60-65%
F = <60%

The course will be graded as follows:

| | |
|---------------------------------------|-----|
| Two 1-hour Exams (20% each) | 40% |
| Final Exam (comprehensive) | 25% |
| Problem Sets | 10% |
| Laboratory (quizzes & identification) | 25% |

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 Pledge:

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

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

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

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

(Source: 2009-2010 Undergraduate Catalog)

It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor. This policy will be vigorously upheld at all times in this course.

Software Use:

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

Campus Helping Resources:

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. 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, 392-575
<http://www.counseling.ufl.edu/cwc/>

□ *Student Health Care Center*, Rm. 245 Student Health Care Center, 392-1171
<http://shcc.ufl.edu/>

- Alcohol and Substance Abuse Program (ASAP)
- Attention Deficit Hyperactivity Disorder (ADHD)
- Center for Sexual Assault / Abuse Recovery & Education (CARE)
- Eating Disorders Program
- Employee Assistance Program
- Suicide Prevention Program

□ *Career Resource Center*, CR-100 JWRU, 392-1601 ext: 0, www.crc.ufl.edu/

Students with Disabilities:

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

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

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**Class Schedule
(subject to change)**

A more detailed schedule will be provided and updated occasionally during semester

Monday 3:25-4:15 pm

Wednesday 3:15-5:00 pm

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| Week | 1 | Very basic lake biology, limnology aquatic plant characteristics and problem plants |
| | 2 | Characteristics of herbicides, mode of action, how they work, introduction of labels and pesticide law |
| | 3 | Foliar aquatic herbicide application – glyphosate, 2,4-D and others |
| | 4 | The Auxin herbicides, characteristics and use |
| | 5 | Catch-up from previous topics and exam 1 |
| | 6 | The unclassified contact herbicides |
| | 7 | Grass Carp and other biological control agents |
| | 8 | The ALS herbicides, use and limitations |
| | 9 | Fluridone – the “perfect” herbicide and how it was lost |
| | 10 | Exam 2, and catch-up from previous topics |
| | 11 | The PPO inhibitors (field trip) |
| | 12 | Mechanical harvesting and utilization, fish by-catch, economics and costs |
| | 13 | Calibration and state pesticide exams. |
| | 14 | Plant ID Exams and course summary, the state wide program (FWC lecturer) |