

# *Introduction to Aquaculture*

*FAS 6932 and VME 5912 (3 credits) Spring, 2016*

## **Course Description**

Provides an overview of the field of aquaculture, including water quality, production systems, nutrition, spawning, and the common fish and invertebrate groups cultured in the United States. The course is entirely web-based, with narrated PowerPoint lectures followed by readings and other resources for each learning topic.

## **Instructors**

**Cortney L. Ohs, Ph.D.**  
[cohs@ufl.edu](mailto:cohs@ufl.edu)  
*UF/IFAS Indian River Research  
and Education Center (IRREC)  
2199 South Rock Road  
Ft. Pierce, FL 34945  
772-577-7348  
Office hours: Available by email  
or phone; office visits available  
by appointment*

**Jeffrey E. Hill, Ph.D.**  
[jeffhill@ufl.edu](mailto:jeffhill@ufl.edu)  
*UF/IFAS Tropical Aquaculture  
Laboratory (TAL)  
1408 24<sup>th</sup> Street SE  
Ruskin, FL 33570  
813-671-5230 x118  
Office hours: Available by email  
or phone; office visits available  
by appointment*

## **Student Learning Outcomes**

At the end of this course, each student will:

- Have an understanding of the basic principles of aquaculture
- Have an understanding of culture methods for common aquaculture species
- More effectively communicate through scientific writing
- Have a foundation for graduate studies in aquaculture or a career in aquaculture

## **Course Meeting Times**

This course is entirely web-based and students may access lectures, readings, and supporting materials at their own pace. Exams are available only on the dates listed in the syllabus.

## Required Texts/Readings

There is no required text for the course. Online readings will be provided for each learning topic. A computer with internet connection and sound speakers are required. The UF Sakai E-Learning site can be accessed at <https://lss.at.ufl.edu/> using your Gatorlink account.

## Class Format, Policies on Attendance and Make-up Exams

The class is in an asynchronous, web-based format. There are no pre-requisites for taking this course. Attendance records will not be maintained. **It is the responsibility of the student to access on-line lectures, readings, quizzes, and exams and to maintain satisfactory progress in the course.** Two exams are scheduled (see schedule below) and are only available on the days scheduled. **Missed exams cannot be taken after the scheduled date without prior written consent of the instructor except under exceptional circumstances.** Cases of serious illness, bereavement, or activities covered under the Twelve-Day Rule will be considered for make-up. Appropriate documentation must be provided in all cases. Computer or other hardware failures, except failure of the UF E-Learning system, will not excuse students for missing exams. For computer, software compatibility, or access problems call the HELP DESK phone number—352-392-HELP = 352-392-4357 (option 2). A writing assignment is due. Late writing assignments will be penalized 10% for the first day and 5% per day thereafter unless prior written arrangements are made or there is an exceptional circumstance.

### Assignments

- *Learning modules consisting of a lecture, readings, supporting material, and a quiz are provided online for each topic. Learning modules build on previous modules so you should complete the learning modules in the order presented.*
- *Learning modules covered on the mid-term exam (modules 1-9) are available from the beginning of the semester. Learning modules covered on the final exam (modules 10-20) are available after the mid-term exam. You may access and complete learning modules at your own pace.*
- *Each learning module will have a narrated PowerPoint presentation. Each presentation will have numerous photographs or diagrams and will summarize important information for each topic. You will be able to go back and view and listen to each slide as many times as you wish during the initial viewing of the lecture or at a later date.*
- *Each learning module has required readings beyond the lecture. This information will be covered on quizzes and exams. These files will all be made available for you to view on your computer, save, or print. There will also be references to additional (optional) readings if you desire further investigation of a topic.*
- *Each learning module will have a ten-question quiz. The questions will require the student to go through the PowerPoint presentation, watch any attached videos,*

and read the assigned readings to answer the questions correctly. These quizzes will contribute to the grade. All quizzes will be taken from your computer.

- *Mid-term and final exams: Each exam will consist of 50 questions. Some of the questions will come directly from the lecture quizzes. These exams will consist of multiple choice questions and maybe a few matching questions. The mid-term will consist of questions from the first half of the learning modules. The final exam will consist of questions from the last half of the learning modules. The exams will be taken on your computer. Exams are only available on the days indicated.*
- *Complete either a review paper or Voicethread presentation on a pre-approved aquaculture topic. The review paper or Voicethread presentation should cover all of the following: species, stages of culture, specific culture methods for each stage, system requirements, potential commercial application, current or potential markets. The review paper should be between 8 and 10 pages of text, have complete references, and include appropriate charts, photos, or tables. One or more examples will be provided. If you choose a Voicethread presentation, you will create and narrate a 20 minute powerpoint presentation and load it on the Voicethread website for all students to view and comment on it, all of the required information for the review paper will also be included in the Voicethread presentation. The review paper or Voicethread presentation will be equivalent to an exam in points.*

**Evaluation of Student Learning**

- 40% or 210 points Quizzes (10 points each)*
- 20% or 100 points Mid-term exam (Learning modules 1-9)*
- 20% or 100 points Writing or Voicethread assignment*
- 20% or 100 points Final exam (Learning modules 10-21)*

*510 points total*

**Grading Scale**

<b>Grade</b>	<b>Percentage</b>	<b>Points</b>
A	90-100	≥ 450
B+	85-89.99	425-449
B	80-84.99	400-424
C+	75-79.99	375-399
C	70-74.99	350-374
D+	65-69.99	325-349
D	60-64.99	300-324
E	< 60	≤ 299

## Schedule of Class Topics

### Learning Modules

1. Introduction to Aquaculture
2. Fish Biology
3. Water Quality Management
4. Recirculating Aquaculture Systems
5. Farm Ponds
6. Net Pens
7. Nutrition and Feed Manufacture
8. Handling and Hauling
9. Spawning
10. Disease
11. Prawns/Shrimp
12. Catfish
13. Hybrid Striped Bass
14. Tilapia
15. Salmonids
16. Freshwater Ornamentals I
17. Freshwater Ornamentals II
18. Marine Ornamentals
19. Marine Baitfish
20. Clams, Oysters, Scallops
21. Other Important Species

### Important Dates:

*January 5 – Classes start*

*February 24 – Mid-term exam available*

*April 20 – Classes end*

*April 21-22 – Reading days*

*April 23-29 – Final exam available*

## Other Information

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

In 1995 the UF student body enacted an [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: 2010-2011 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. 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

Training Programs

Community Provider Database

- *Career Resource Center*, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://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, 352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)