CLASS SYLLABUS AQUACULTURE PRODUCTION (FISH 5250/6250) DEPARTMENT OF FISHERIES AND ALLIED AQUACULTURES DECEMBER 2015-CAN THO, VIETNAM

1. Class: Aquaculture Production FISH 5250/6250 (4): Lec 3, Lab 4

2. <u>Prerequisites</u>: BI 1030 and FISH 5210 or 6210, at least 19 years of age and GPA of 2.25 for undergraduates and 3.0 for graduate students or approval of instructor & OIE.

3. Instructors: Bill Daniels/CTU Faculty/Staff

334-844-9123

daniewh@auburn.edu

4. Schedule: December 5-22, 2015 (exact dates subject to change) with additional class & lab during Spring Semester.

Lectures TBA Monday-Sunday, Labs TBA (see DRAFT schedule)

Note: This class will be mostly taught in Vietnam and be based at Can Tho University in Can Tho City, Vietnam during a two-three week period with some class activities occurring after travel to Vietnam. Because of the nature of the class, the schedule is flexible and <u>may change at any time</u> to accommodate the aquatic species. Also, some data collection and laboratory work are required outside of the scheduled lab periods. The class is intended to provide professional and cultural development of students in an international environment where the majority of aquaculture species are grown. Learning Vietnamese is not a prerequisite, but students will have an opportunity to learn some language and experience the culture.

5. Description:

This course provides field-based training in production aquaculture and applies the principles taught in FISH 5210/6210 (Principles of Aquaculture) to real world production situations. Students will learn about production of major aquatic species in various culture systems and will use real research/production data to understand these principles. Students can expect to get wet and dirty. Because this is a one semester class being taught in a shorten timeframe, it will be intense and require all students to participate daily.

6. Objectives:

- **a)** Apply the principles of aquaculture and understand how they influence the carrying capacity, water quality, and growth and yield of cultured aquatic species.
- b) Learn principle management practices for culturing major aquatic species.
- c) Learn to culture live feeds for aquaculture species.
- **d**) Develop skills to identify when fish are stressed either because of water quality or health issues and how to avoid and deal with these problems.
- e) Develop technical and managerial skills required to raise a variety of aquatic species.
- f) Provide students with the skills to operate competently in international settings.

- 7. <u>Lecture/Lab Topics</u>: Not necessarily in this order and subject to change.
 - Concept of Commercial Fish Production
 - Site, Species, System, Business Selection/Evaluation/Permits and Regulations
 - Production Planning/Types of Production Systems
 - Water Budgets
 - Pond Preparation- Liming and Fertilizing
 - Pond Preparation- Insect & Unwanted Fish Control
 - Handling/Grading/Transportation/Harvesting
 - Water Quality Monitoring/Maintenance-DO,
 - Water Quality Monitoring/Maintenance-pH, ammonia, etc.
 - Feeds and Feed Management
 - Disease Prevention/Management
 - Aquatic Weed Management
 - Effluent Management
 - Flow-Through System Production Considerations-Tanks & In-Pond Raceways
 - Aerated Microbial Reuse Systems
 - Catfish Production/Processing/Marketing (West Alabama)

8. Field Trip Reports & Production Papers:

All students are required to submit field trip reports (see instructions) and production project papers (see instructions) as scheduled. Late reports or projects will result in a letter grade reduction for each day that it is late. All production project papers are due on **Monday, April 4, 2016 by 4 pm.**

9. Grading & performance:

A = 90-100	D = 60-69
B = 80-89	F = 0-59
C = 70-79	

Proposed performance requirements and evaluations for 5000 level students:

2, 1-hr Exams (20% each)	40%
Final Exam	20%
Class Participation & VN Presentation at AU	10%
Field Trip Reports (West Alabama-US)	15%
Production Project	15%
Total	100%

Proposed performance requirements and evaluations for 6000 level students:		
2, 1-hr Exams (20% each)	40%	
Final Exam	20%	
Class Participation & VN Presentation at AU	5%	
Field Trip Reports (RIA2-Vietnam & west Alabama-US	S) 15%	
Production Project-Written Report	20%	
Total	100%	

10. Examinations:

Examinations will consist of essay and short answer questions based on the material covered in the lecture, field trips and homework assignments.

11. Class & Field Trip Attendance:

University policies regarding class attendance will be followed. Since this course is offered primarily for upper level undergraduate and graduate students, the assumption is made that students are mature enough to weigh the advantages and disadvantages of regular class attendance and make the correct decision regarding punctuality and absence. It is the **responsibility of the student** to inform the instructor if he/she cannot be present for class. The portion of the class in Vietnam is **INTENSIVE** and **requires** students to **participate daily** <u>unless</u> they are <u>physically incapacitated</u> and can <u>document medical requirements</u> to not attend.

As part of the grading system, oral or written questions will be asked during class/lab. Students can earn points (Class Participation) toward their final grade. Students not in attendance will not earn these points and their final grade may be lowered as a result. Participation is also based upon **professionalism**, which includes being properly dressed (no offensive clothing), sensitive to cultural differences, courtesy to hosts and other students, and respect for others. **ALL** students will work as a team to put together a seminar after traveling to Vietnam to present to the College of Agriculture. Active participation in the seminar development and its presentation counts toward class participation points.

14. Office Hours: Dr. Daniels will accompany students to Vietnam and be available 24/7. He does not have marked office hours, but is normally available. Please feel free to speak with him at any time. Good communication is the best way to make our time together as enjoyable as possible. While CTU lecturers will also teach, Dr. Daniels is responsible for all grading and any questions concerning grades should be directed to him.

15. Cheating:

Cheating is a SERIOUS violation of the AU Honesty Code and will be dealt with accordingly. Those persons found cheating may receive a 0 (zero) on the exam or homework and may receive an 'F' for the course. Those persons found assisting someone with cheating may have their own grade reduced by a letter grade or more. Students who are accused of cheating, referred to the AU Academic Honesty Committee, and found guilty NORMALLY receive an 'F' for the course with notation on their transcripts. Information on cheating and procedures for appeal can be found at www.auburn.edu.

16. Text and References:

No text is required, but handouts and class notes will be provided. **Note:** Students are **expected** to read handouts prior to lectures/labs and be prepared to discuss them.

17. Challenged Students:

Students who need special accommodations in class, as provided for by the American Disabilities Act, should arrange a confidential meeting with the instructor during office hours the first week of classes - or as soon as possible if accommodations are needed immediately. You must bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have these forms but need accommodations, make an appointment with the Program for Students with Disabilities, 1244 Haley Center, 844-2096.