

# FISHERIES AND MARICULTURE (FAMA)

## **FAMA 5102 Graduate Defense Seminar**

### **1 Semester Credit Hour**

Formal presentation of the research activities conducted for the MS degree. To be taken the final semester of resident graduate study.

## **FAMA 5312 Mariculture Techniques**

### **3 Semester Credit Hours (2 Lecture Hours, 2 Lab Hours)**

The study and hands-on application of biological, mechanical, and other concepts required to develop the skills and techniques necessary for efficient operation and management of public and private aquaculture facilities. By permission of instructor. Offered during Maymester.

**Co-requisite:** SMTE 0091.

## **FAMA 5314 Aquatic Animal Nutrition**

### **3 Semester Credit Hours (3 Lecture Hours)**

The study of current concepts in aquatic animal nutrition including nutrient sources and requirements, deficiency effects, ingestive/digestive/metabolic processes, formulation and processing of feeds, and practical feeding considerations for selected aquatic species.

## **FAMA 5315 Diseases and Parasites of Aquatic Organisms**

### **3 Semester Credit Hours (3 Lecture Hours)**

Identification, epizootiology and control of viral, bacterial, fungal, parasitic and nutritional diseases of commercially cultured molluscs, crustaceans and fish.

**Co-requisite:** SMTE 0092.

## **FAMA 5327 Marine Restoration Ecology**

### **3 Semester Credit Hours (3 Lecture Hours)**

Overview of the rapidly expanding practice of restoring degraded marine, estuarine, and coastal ecosystems. Teaching methods will include lectures, discussion, paper critiques, field visits, and restoration plans. Course will explore ecological theory as it applies to restoration, restoration planning and implementation strategies, and controversies surrounding the practice of restoration.

## **FAMA 5328 Fisheries Ecology and Management**

### **3 Semester Credit Hours (3 Lecture Hours)**

Advanced study of theory and techniques in fisheries science including behavior of fisheries populations and applications to resource management with emphasis in tidal-influenced waters. Includes readings in the current literature and a research project. Cross-listed/stacked with BIOL 4328. Offered every Spring.

## **FAMA 5329 Fisheries Techniques**

### **3 Semester Credit Hours (2 Lecture Hours, 3 Lab Hours)**

Designed to provide students with practical experience in the theory and application of traditional and modern fisheries sampling and management techniques with an emphasis on practical sampling design and data interpretation. This is a hands-on field and laboratory based course that will develop skills that are commonly used by fisheries scientists and sought by future employers.

**Co-requisite:** SMTE 0091.

## **FAMA 5338 Applied Fisheries Statistics**

### **3 Semester Credit Hours (3 Lecture Hours)**

Data analysis is a critical component in fisheries research and management. Throughout this course, the students will learn to practice the series of data analysis and techniques that are relevant to fisheries science, with the aids of the personal computer software.

## **FAMA 5355 Public Aquarium and Animal Care Operations**

### **3 Semester Credit Hours (3 Lecture Hours)**

This course examines the unique requirements needed for aquariums and zoos to balance animal care and health with public display for general education and conservation research. Offered in Summer. Cross-listed with BIOL 4355, BIOL 5355.

**Co-requisite:** SMTE 0091.

## **FAMA 5370 Mariculture**

### **3 Semester Credit Hours (3 Lecture Hours)**

Survey of physiological, behavioral, environmental and economic parameters governing the culture of selected aquatic species. Included are techniques and methods employed worldwide to produce various marine species. Offered every Spring. Cross-listed/stacked with BIOL 4370.

## **FAMA 5392 Thesis Proposal**

### **3 Semester Credit Hours**

Thesis students must submit a completed proposal for their thesis project. A course section will be created for the student to enroll. Upon successful completion and submission of the proposal signed by the graduate committee of the student, students may then register for FAMA 5393 - Thesis Research.

## **FAMA 5393 Thesis Research**

### **3 Semester Credit Hours**

Implementation of the Thesis Proposal, and the production of a rough draft of the thesis submitted to the graduate committee of the student for initial editing and comment. A course section will be created for the student to enroll.

**Prerequisite:** FAMA 5392.

## **FAMA 5394 Thesis Submission**

### **3 Semester Credit Hours**

Completion of the final draft of the thesis, signed by the graduate committee of the student and ready for binding and distribution. A course section will be created for the student to enroll.

**Prerequisite:** FAMA 5392 and 5393\*.

\* May be taken concurrently.

## **FAMA 5397 Professional Paper Submission**

### **3 Semester Credit Hours**

Completion of the final draft of the professional paper (professional track students), signed by the graduate committee. A course section will be created for the student to enroll.

**Prerequisite:** FAMA 5998.

## **FAMA 5421 Chemistry of Natural Waters**

### **4 Semester Credit Hours (3 Lecture Hours, 3 Lab Hours)**

The examination of water as an environmental medium and how it may be monitored and managed for maximizing the growth and survival of various aquatic species.

**Prerequisite:** CHEM 1411.

**Co-requisite:** SMTE 0093.

## **FAMA 5590 Special Topics**

### **1-5 Semester Credit Hours (1-5 Lecture Hours)**

In-depth study and discussion of selected topics relevant to mariculture or fisheries. May be repeated when topics vary.

## **FAMA 5596 Directed Independent Study**

### **1-5 Semester Credit Hours (1-5 Lecture Hours)**

Study in areas of mariculture or fisheries interest.

**FAMA 5940 Project Research**

**1-9 Semester Credit Hours**

Research related to the MS project. Students can only apply 6 hours of credit toward the MS degree in Fisheries and Mariculture with approval of the committee.

**FAMA 5998 Internship**

**1-9 Semester Credit Hours**

Professional Track students are required to undertake an extensive internship program with an approved agency, institution, or commercial operation to develop skills and techniques relating to fisheries science or the culture of aquatic species. Students will participate in internship activities at selected aquaculture or fisheries facilities. Permission of graduate committee chair.