



Introduction to Aquaculture

Zool 477

Hunger and malnutrition are one of the greatest problems facing today's world. According to the Food and Agriculture Organization of the United Nations ~11% of the world population suffers from poverty and lack of access to sufficient nutritious food necessary for human health. **Aquaculture** is the fastest developing food-producing sector and it comprises half of the total fish supply. **Aquaculture** has great potential to contribute to the world food security.

Currently, culture of aquatic biota for direct consumption, stock enhancement, or other purposes is also the most diverse sector of livestock production although aquaculture is one of the most ancient forms of animal husbandry. The purpose of this course is to develop an understanding of how aquaculture compares with other animal-producing systems, become familiar with commonly used fish rearing systems and the fundamentals of fish husbandry, and to gain an appreciation of aquaculture's roles in natural resource management, and the human food supply.

COURSE OBJECTIVES:

- To become familiar with extensive and intensive culture facilities (ponds, net pens, flow-through systems, recirculating aquaculture systems, etc.)
- To understand species-specific culture requirements (temperature, water quality etc.), and how to maintain optimal conditions in the various culture systems
- To become familiar with practical aspects of aquaculture (feeds and feeding; stocking, transport, and harvest techniques; disease prevention, diagnosis and treatment; etc.)
- To evaluate the state of world aquaculture (key countries and species, major challenges, etc.)

This year the course will include laboratory section which will provide hands-on experience in fish rearing, feeding, aquaculture system maintenance, diet preparation, and more.

Aquaculture course is offered in the fall semester. For more information, contact Dr. Kwasek: karolina.kwasek@siu.edu