

TEXAS A&M UNIVERSITY Rangeland, Wildlife & Fisheries Management

RWFM 446 FISH PHYSIOLOGY

Prerequisite: Undergraduate junior/senior or graduate classification and ECCB 311 or equivalent





LEARNING OBJECTIVES

- Characterize various physiological systems that fish use to live in an aquatic environment.
- Describe how these systems adjust to environmental changes in the short and long term Explain physiological differences between groups of fishes.
- Discuss how different physiological processes are regulated.
- Explain how physiological systems in fish may be similar to, differ from, or have evolved into those in terrestrial vertebrates.
- Discuss how unsustainable resource management and human perturbations in the environment affect fish at physiological level.

COURSE OVERVIEW

This in-person course is specially designated as a (C) stacked course for undergraduate and graduate students. The course will cover bioenergetics, respiration, cardiovascular system, blood chemistry and function, muscle function and locomotion, gas exchange, buoyancy regulation, nitrogen metabolism and excretion, thermoregulation, reproduction, growth, osmoregulation, and immunity. Graduate students will also be required to design, conduct, and document an experiment related to fish physiology that demonstrates one or more of the physiological principles covered during this course, culminating in a 5-minute oral presentation.

Interested in learning more?

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