

Course:

**BIO 3720 Physiological Ecology**

4 hours

Departments/Programs:

Biology

This is a course about animal and plant function - about "how organisms work". It is a physiology course taught from a somewhat ecological and evolutionary perspective. The course will address physiological topics from the following perspectives: comparative, ecological, environmental, evolutionary, integrative, and organismal. It will to some extent address molecular and cellular mechanisms, but at the same time it will emphasize the organismal, ecological, and evolutionary significance of physiological function. The course will take a holistic view of physiological mechanisms and emphasize organismal interactions with the environment (ecology) and their evolutionary significance. This course will combine information from physiology with that of physical and chemical processes with structure in order to understand how animals evolved their functional characteristics and how they stay alive in the face of constantly changing internal and external environments.

*Prerequisite(s): BIO 1400 Introduction to Biological Inquiry, BIO 2200 Genetics and Cell Biology and BIO 2300 Ecology and Evolution.*