A. Course Description

Credits: 5

Prerequisites:

MATH 115 College Algebra AND
STAT 201 Statistics I

OR

BIOL 111 General Biology I AND
BIOL 112 General Biology II AND
CHEM 111 General Chemistry I AND
CHEM 112 General Chemistry II AND
MATH 208 Applied Calculus

OR

BIOL 111 General Biology I AND
BIOL 112 General Biology II AND
CHEM 111 General Chemistry I AND
CHEM 112 General Chemistry II AND
MATH 210 Calculus I

Lab Hours/ Weeks:

Corequisites: None

Lecture Hours/ Week :

MnTC Goals: Goal LS - Upper Division Liberal Studies

This course covers the science of animal behavioral ecology. The content and methods of modern ecological research are emphasized. Students read research papers in the field of animal behavior and conduct field investigations, experiments and computer modeling. Many of the weekly labs take place outdoors. Intended for biology majors.

B. Course Effective Dates: 08/24/2013 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Explain and apply scientific knowledge in behavioral ecology, both theoretical and experimental, at the upper division level.
2. Read and interpret primary scientific literature in behavioral ecology.
3. Design, propose, conduct, interpret, and present the results of an independent laboratory or field experiment in this subject area.
4. Apply this experience with research methods in behavioral ecology at the level necessary for success in senior undergraduate research.
5. Demonstrate quantitative reasoning skills and competency with algebra and statistics at a level appropriate for graduates of a bachelor’s degree program in biology.
6. Recall, explain and apply the concepts, knowledge and vocabulary of ecology, evolution and behavior at the level necessary for success in advanced study in this field.

E. Learning Outcomes (MN Transfer Curriculum)
Goal LS - Upper Division Liberal Studies
   None

G. Special Information

Note: Enrollment limited to Biology and Life Science Teaching majors only, except by instructor permission. First day attendance required except by instructor permission.