A. Course Description

Credits: 3

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

BIOL 416 is intended to serve as an upper division elective within the Biology (B.A. and B.S.) and Environmental Science (B.S.) majors; as such, enrollment is restricted to juniors and seniors within these majors. This advanced lecture course examines the biology of exotic organisms that cause ecological or economic harm upon establishment in a novel environment. Topics include the stages of biological invasion and the ecological processes that mediate them (e.g., propagule pressure, biotic interactions, disturbance), the impacts and management of invasive species, risk assessment and post-invasion evolution. Field trips to local ecosystems may be incorporated.

B. Course Effective Dates: 12/15/2015 - 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 invasion biology, both theoretical and experimental, at the upper division level.
2. Analyze the intersection between scientific research and socioeconomic factors as they concern the development of management programs for invasive species.
3. Critically read and interpret primary scientific literature in invasion biology.
4. Recall, explain and apply the concepts, knowledge and vocabulary of invasion biology at the level necessary for success in graduate and professional study in this field.
5. Synthesize and evaluate the existing body of literature surrounding a chosen invasive species.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Note: Enrollment limited to Biology or Environmental Science majors, except by instructor permission. First day attendance required except by instructor permission.