A. Course Description

Credits: 3

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

Advanced course in freshwater ecology with applications to water quality assessment and monitoring, lake management, and drinking water supply. Students learn and apply techniques in water quality monitoring and taxonomic methods used in the science of phycology. Course is open to students who have met the criteria and been granted honors biology status, a process administered by the Natural Sciences Department.

B. Course Effective Dates: 01/09/2017 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Understand and apply core theories and current research in aquatic ecology.
2. Understand and apply methods of water quality assessment and monitoring that are used by local, regional, state and federal agencies.
3. Collect and identify diatom and other algal species found in Minnesota lakes and rivers.
4. Use standard methods for biological monitoring based on diatoms and other algae.
5. Understand government structures and legislation that have roles in freshwater conservation and management.
6. Effectively communicate technical information between and among experts and public.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Note: This honors course is open to students who have met the criteria and been granted honors biology status, a process administered by the Natural Sciences Department. All prerequisites must be completed with grade of B or above. Contact instructor or department chair for permission.