A. Course Description

Credits: 3

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week:

MnTC Goals: None

This course examines theory and methods central to the assessment, monitoring and maintenance of freshwater ecosystem health. Students learn and apply techniques in water quality monitoring and taxonomic methods used in the science of phycology.

B. Course Effective Dates: 05/09/2017 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Understand and apply core theories in aquatic ecology including food webs, resource competition and biomanipulation.
2. Understand and apply methods of water quality assessment and monitoring that are used by local, regional and state agencies.
3. Conduct diatom analysis of water body: collect, process, identify and interpret abundance based on diatom community composition.
4. Use standard methods for biological monitoring based on diatoms, algae, and macroinvertebrates.
5. Understand government structures and legislation with roles in water quality.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Note: Graduate status required or Natural Science Department approval.