

Minnesota State University Moorhead

BIOL 305: General Botany

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 3

OJT Hours/Week: *.*

Prerequisites:

- BIOL 115 - Organismal Biology

Corequisites: None

MnTC Goals: None

This course is designed for the biology major and is a comprehensive introduction to the plant kingdom including the following topics: life-history, reproduction, structure, and physiology. A laboratory is included and involves self-paced microscopic and macroscopic analysis of living and preserved specimens.

B. COURSE EFFECTIVE DATES: 02/21/2003 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Introduction to Plant Ecology and Botany
2. Light Environment
3. Water
4. Soils
5. Growth and Reproduction
6. Life Histories
7. Competition
8. Herbivory
9. Succession
10. Invasive Species
11. Biomes and Global Change
12. Sustainability
13. Plant Evolution and Introduction to Systematics
14. Algae, Bryophytes and Vascular Spore Producers
15. Gymnosperms and Angiosperms
16. Plant Systematics

D. LEARNING OUTCOMES (General)

1. Introduction to plant ecology including the distribution and abundances of plant populations and composition and diversity of plant communities.
2. Survey major plant groups to understand patterns of evolution in plant form and function.
3. Use primary literature effectively.
4. Design and implement original experiments in plant biology

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted