I. Catalog Information

A. Title of Course: Native Plant Identification  
   B. Course Designator: BIOL 2040

C. Number of Credits: Lecture 2  
   Lab 1  
   D. Control Number: 145/24

E. Catalog/Course description:
   Students will identify and classify common vascular and non-vascular plants of the Lake Superior Region with regard to floristic taxonomy, habitat requirements, and roles in various ecosystems. This course also emphasizes the ethnobotanical values of these plants for uses as tools, food, medicines, art, and cultural/spiritual significance. Lab includes field trips and laboratory time to collect, identify, and preserve specimens. Lecture and Lab.

F. Course prerequisites:

G. Date Approved: 02/18/98  
   Date Revised: 07/10/10

II. Course Materials (Recommended course materials and resources. List all that apply, e.g. textbooks, workbooks, study guides, lab manuals, videos, guest lecturers)

   Textbook will be selected based on relevance and availability of modern texts.

III. Learning Goals, Outcomes, and Assessment

Minimum of one goal and two learning outcomes in each competency. If your course does not meet one of the Competencies Across the Curriculum, please justify your rationale. Minimum of two assessment measures for each learning outcome. Add other goals and outcomes as needed. If this course is part of the Minnesota Transfer Curriculum (MnTC), attach the MnTC goals, outcomes, and your assessment measures to this form; if possible, use them to complete the information below.

A. Information Literacy (the ability to use print and/or non-print tools effectively for the discovery, acquisition, and evaluation of information as well as core computer tools for the manipulation and presentation of information.)

1. Learning Goals:
   Goal: Effectively use lab, library and internet materials to engage in the study of biology.

2. Learning Outcomes and Assessments:
   Outcome 1: Students will practice and be able to explain scientific procedures in data collection, analysis and dissemination.
      Assessment: Written exams
      Assessment: Lab Reports
   Outcome 2: Students will be able to explain and present examples of the importance of the scientific method in biological studies including the review of scientific literature.
      Assessment: Written exams
      Assessment: Lab Reports

B. Ability to Communicate (the ability to listen, read, comprehend, and/or deliver information in a variety of formats.)
1. Learning Goals:
   Goal: Students will be able to effectively communicate ideas and concepts central to the study of biology.

2. Learning Outcomes and Assessments:
   Outcome 1: Students will be able to define and apply terminology associated with biology.
   Assessment: Written exams
   Assessment: Lab Reports
   Outcome 2: Students will communicate effectively in writing, speech, and visual presentations within a variety of contexts.
   Assessment: Written exams
   Assessment: Lab Reports

C. Problem Solving (the ability to conceptualize, apply, analyze, synthesize, and/or evaluate information to formulate and solve problems.)

1. Learning Goals:
   Goal: To evaluate the importance of the scientific method and thought, in biological science.

2. Learning Outcomes and Assessments:
   Outcome 1: Students will identify scientific issues and use scientific approaches and strategies.
   Assessment: Written exams
   Assessment: Lab Reports
   Outcome 2: Students will demonstrate an understanding of the scientific research process.
   Assessment: Written exams
   Assessment: Lab Reports

D. Culture (knowledge of Anishinaabe traditions and culture, knowledge of one’s own traditions and culture, knowledge of others’ traditions and cultures, and/or respect for global diversity.)

1. Learning Goals:
   Goal: To introduce students to various cultural perspectives of biological science.

2. Learning Outcomes and Assessments:
   Outcome 1: Students will be able to discuss the role of biological science in today’s society.
   Assessment: Written exams
   Assessment: Written exams
   Assessment: Outside assignments

Documentation for MnTC - None

IV. Course Content (Outline the major topics covered in this course.)

Lecture topics:
- Introduction
- Nomenclature
- Terminology of plant descriptions
  - Leaves
• Flowers
• Fruits
• Seeds

• Plant taxonomy
• Vascular non-seed plants
• Angiosperms
• Gymnosperms
• Construction/use of identification keys
• Ethnobotony

Lab topics to closely follow lecture material

(revised October 2009)