

Bemidji State University

BIOL 4894: Advanced Research Project I

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course provides a culminating experience that integrates the knowledge and skills learned in previous courses and applies them to a scholarly activity. Examples of an advanced research project may include an original research project, internship, or shadowing experience with a professional. Prerequisite: Junior status and consent of instructor.

B. COURSE EFFECTIVE DATES: 08/24/2015 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Hands-on research experience.
2. Present results at Bemidji State University Scholarly Achievement Conference in the spring.
3. Results in the format of a written scholarly paper
4. Semi-independent research

D. LEARNING OUTCOMES (General)

1. develop basic laboratory skills, which may include pipetting, sterile technique, DNA and RNA isolation, PCR and molecular cloning.
2. write a primary research article on the results of the project undertaken during the course, including an introduction with a literature review, materials and methods, results and discussion, and references.
3. evaluate primary research articles and review that are related to the research project.
4. practice standard laboratory operating procedures, including lab safety, preparation and handling of samples, maintenance of a lab notebook and the importance of standards and controls

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted