

Minnesota State University Moorhead

BCBT 360: Team-Based Biochemistry and Biotechnology Research

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:

This course requires both of these prerequisites

BIOL 111 - Cell Biology

CHEM 150 - General Chemistry I

Corequisites: None

MnTC Goals: None

Students will participate in a team-based research experience in a principle investigator system in which they will apply advanced research techniques to a current research problem. In addition to research skills, as part of a research team the students will learn research management, team coordination, and conflict resolution skills.

B. COURSE EFFECTIVE DATES: 03/03/2014 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. The purpose of this course is to teach students how to conduct research in a team-based research setting. As multiple faculty members are available to teach the course the exact technical skills students will learn will vary with the professor and the research project being performed. Independent of the professor and the project all students will meet the learning outcomes identified for the course.

D. LEARNING OUTCOMES (General)

1. Apply management and conflict resolution skills to management of a research team.
2. Collect, analyze, interpret, and prepare data for presentation.
3. Identify and critically read primary literature and literature reviews.
4. Identify and modify appropriate protocols to meet the needs of the specific research topic.
5. Manage a group of peer scientists through overseeing, designing, and coordinate their work.
6. Propose scientifically relevant scientific questions, develop hypotheses, and design experiments to test those hypotheses.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted