

# Minnesota State University Moorhead

## BCBT 478: Biotechniques: Plant and Mammalian Tissue Culture

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites:

This course requires both of these prerequisites

BIOL 111 - Cell Biology

CHEM 360 - Organic Chemistry II

Corequisites: None

MnTC Goals: None

Introduction to plant and animal cell tissue culture techniques. Students will learn the basic theory of plant and cell tissue culture. Students will also work with both plant and mammalian cell cultures, transfect cell cultures and learn techniques involved in maintaining and manipulating cell cultures.

**B. COURSE EFFECTIVE DATES:** 08/25/2008 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. Students will learn to independently culture cells and transfect animal cell culture.
2. Students will prepare and assess the viability of protoplasts cells, culture one or two animal cell lines for four or more passages, measure cell number, and determine cell viability.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted