

Bemidji State University

BIOL 3380: Molecular Genetics

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Study of the structure, replication, repair, expression, regulation, and change of genetic material. Introduction to theory and procedures by which recombinant DNA molecules are formed, cloned, and expressed. Prerequisites: BIOL 1400 and BIOL 2360.

B. COURSE EFFECTIVE DATES: 08/27/2018 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. identify and explain the major genetic information pathways, including replication, repair, transcription, RNA processing and translation.
2. evaluate primary research articles that describe seminal discoveries in molecular genetics.
3. compare and contrast the primary and higher order structures of DNA, RNA, and proteins.
4. examine the applications of molecular genetics in medicine, agriculture, industry, and forensics.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted