Bemidji State University

BIOL 6450: Trajectories in Biology: Past, Present, and Future

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

Trajectories in Biology is an expansive, wholistic view of how the history of biology laid the groundwork to the explosion of knowledge in the 19th and 20th century. As we grapple with technological, ethical, and biological possibilities we will imagine and explore how the vast field of biology might evolve in, and beyond, our lifetimes.

B. COURSE EFFECTIVE DATES: 08/15/2020 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. The understanding of historical events that have shaped biological understanding. This framework will allow students, facilitated by the instructor, to discuss implications of how this field may change given current (and future) technologies. Special consideration will be given to ethical issues raised as the field of biology moves forward.

D. LEARNING OUTCOMES (General)

1. discover important historical events in biology
2. correlate historical perspectives with drivers of current and future biological applications.
3. critique relevant topics and opinion pieces addressing future trends in synthetic biology and bioengineering.
4. determine potential implications of trends located.
5. assemble and appraise ideas and communicate opinions of these.
6. imagine future developments in biology

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted