

Anoka-Ramsey Community College

BIOL 2230: Directed Research in Biology

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Prerequisites: A college level biology course with lab is required with a grade of C or better and permission of the instructor

Recommended Skills, Abilities, or Coursework: MATH 0240 with a grade of C or better, or the appropriate score on math placement test. Ability to do college level reading and writing as demonstrated by meeting enrollment requirements for ENGL 1121.

Advanced concepts in biology applied to real-life research problems. Under faculty direction, students will learn to analyze research problems, analyze data, and will use equipment and procedures typical of laboratory or field research in order to help address ongoing research problems. Specific topics will vary from semester to semester. Students will be expected to present their research orally or in writing. Students may take the class more than once, up to a total of 6 credits. Students must be prepared to spend 4-8 hours/week outside of class on the research project.

B. COURSE EFFECTIVE DATES: 10/31/2013 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Research and evaluate relevant published reports/data that pertain to the scientific research project
2. Develop essential skills appropriate to advanced biology topics
3. Demonstrate comprehension of the selected topic by engaging in discussions
4. Develop and demonstrate scientific communication skills using appropriate scientific style and format
5. Present research results to peers and/or faculty

D. LEARNING OUTCOMES (General)

1. Demonstrate an understanding of science as a process
2. Conduct guided laboratory or field research
3. Develop and hone laboratory skills critical for advanced biology research
4. Analyze relevant reports and data
5. Evaluate and analyze student-generated data
6. Develop and demonstrate communication skills appropriate for undergraduate research

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

Other hours per week: 4-8 hours