CHEM 4980: Research

A. COURSE DESCRIPTION

Credits: 1,2,3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

This research experience will develop essential skills needed to be a chemist. Student researchers will participate in scholarly projects based on appropriate methodology and scholarship. Work will culminate in a presentation or paper. Course may be repeated for 6 credits.

B. COURSE EFFECTIVE DATES: 07/31/2023 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. As arranged

D. LEARNING OUTCOMES (General)

1. collect, analyze, and interpret data.
2. practice standard operating procedures, including lab safety, and safely use, handle, and store chemicals and hazardous waste.
3. evaluate primary literature articles and use them to guide project and place results in the context of the field.
4. record experimental methods and results in a laboratory notebooks.
5. develop chemical and biochemical laboratory skills.
6. summarize and explain experimental results in written and oral reports.
7. write a research progress report that models a scholarly paper and includes relevant background information, materials and methods, results and discussion, and supporting references.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted