COMMON COURSE OUTLINE: Course discipline/number/title: CHEM: 2297 Chemistry Research

A. CATALOG DESCRIPTION
1. Credits: 1
2. Hours/Week: 3
3. Prerequisites (Course discipline/number): Permission of Instructor, CHEM 1127 (or co-requisite)
4. MnTC Goals (if any): NA

This course is designed to give students a hands on introduction to Chemistry research. Students will conduct independent research under the close supervision of a faculty advisor. The type of research will be determined by the faculty advisor and student. This course can be repeated up to four times.

B. DATE LAST REVISED (Month, year): April, 2014

C. OUTLINE OF MAJOR CONTENT AREAS:
Content will be consistent with the research agreed upon by the student and instructor.

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Search primary literature.
2. Read and summarize primary literature.
3. Perform techniques used in the research lab.
4. Gain confidence in the laboratory setting.
5. Demonstrate improved problem solving skills and critical thinking by focusing on a specific problem long term.
6. Keep a research notebook.
7. Write clear and concise updates of work.
8. Present completed projects in paper and/or poster form.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Short and long papers.
2. Outside evaluation of poster or presentation.

G. RTC CORE OUTCOME(S) ADDRESSED:
☑ Communication ☐ Civic Responsibility
☑ Critical Thinking ☐ Personal/Professional Accountability
☐ Global Awareness/Diversity ☐ Aesthetic Response

H. SPECIAL INFORMATION (if any): None