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Course Outline for CHEM 29

INDEPENDENT STUDY, CHEMISTRY

Effective: Fall 2018

I. CATALOG DESCRIPTION:

CHEM 29 — INDEPENDENT STUDY, CHEMISTRY — 0.50 - 2.00 units

Supervised study in the area of Chemistry. Any student interested in registering for an Independent Studies course should contact a full/part-time instructor or dean in the appropriate area.

0.50 - 2.00 Units Lab

Grading Methods:

Letter Grade

<u>Discipline:</u>

Chemistry

MIN MAX Lab Hours: 27.00 108.00 **Total Hours:** 27.00 108.00

- II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1
- III. PREREQUISITE AND/OR ADVISORY SKILLS:
- IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Develop a project in Chemistry to develop skills or deepen knowledge B. Complete the project according to established standards in the field
- C. Effectively communicate the essential concepts or results of the project to instructor

V. CONTENT:

- A. Develop skills and knowledge that reinforce, or expand upon, Chemistry concepts
 B. Develop methodology and reporting structure for a project
 C. Communicate the essential applications or theories related to Chemistry

VI. METHODS OF INSTRUCTION:

- A. Classroom Activity Work with faculty member to develop necessary skills to full fill independent study.
- B. Written exercises and case studies As noted in the Independent study form
- Discussion With instructor
- Projects As noted in the Independent study form
- E. **Demonstration** As noted in the Independent study form

VII. TYPICAL ASSIGNMENTS:

- A. Reading Assignments

 1. 1. Identification of a research project may include extensive reading.
- B. Writing Assignment
 - 1. Identification of a topic related to independent study class may include a paper or other form of report of completed work.
- C. Lab Work
 - 1. Completion of a project may include laboratory or field work

VIII. EVALUATION:

- A. Methods
 - Research Projects
 - Portfolios
 - 3. Papers
 - 4. Oral Presentation
 - 5. Projects
 - Lab Activities
 - Other:
 - a. Assignments/activities specified on Independent Study Form

B. Frequency

1. Research Projects- due by the end of the semester

- Portfolios- due by the end of the semester
 Papers- due by the end of the semester
 Oral Presentation- due by the end of the semester
 Projects and Lab activities- status reports may be due weekly to promote frequency of actitivies completed during the week. Entire project and lab activities due by the end of the semester
 All other methods of evaluation are due by the end of the semester

IX. TYPICAL TEXTS:
1. Textbooks, periodicals, manuals, and references associated with the project will be determined in consultation with the instructor.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

A. As needed