Chemistry 482
Departmental Course Syllabus and Grading Policy

Course Description: This course is a two-credit independent research course. Students are expected to work a minimum of 6 hours per week in consultation with a faculty mentor.

Learning Outcomes:
- To design appropriate experiments after consulting scientific literature
- To evaluate experimental results and formulate a plan for moving the project forward
- To defend the results and interpretations of experiments in a written paper and in an oral presentation or poster presentation

Expectations:
1) Students who work independently in a lab must complete the Department of Chemistry and Biochemistry Research Safety Training once a year. During the academic year, training is conducted by the PI of the lab. In the summer, students will attend a day-long safety orientation. Each student will post their training record in their lab's orange 3-ring binder.
2) Students must commit to a work schedule arranged with the faculty member that corresponds to a minimum of 6 hours per week.
3) Student must provide the faculty mentor a written report of their work at the conclusion of the term, in the format of an ACS journal article (or other format at the discretion of the PI). A copy of the final paper must be submitted to the faculty mentor and ChemResearch@cofc.edu by the last day of class.
4) The student must either give an oral presentation of their work or a poster presentation of their work at the discretion of their advisor, preferably at a meeting. The research mentor will consider what experiences the student has completed already in 481 and in summer research experiences in determining whether a poster or oral is more appropriate for Chem 482. The aim is for a student to have completed an oral presentation, a poster presentation, and a written presentation over the course of their 481/482/397 enrollments. If no appropriate venue is available for an oral presentation, the student may present to the faculty mentor and their research group or to a student/faculty audience arranged by the department. In all cases, the powerpoint file of the poster or the oral will need to be submitted to ChemResearch@cofc.edu by the last day of class.
5) Students are expected to participate in the proper care and maintenance of lab facilities and to abide by safety regulations of the department, including monthly lab safety assessments, maintenance of chemical inventory (updated annually in the summer), and adhering to all department safety policies, especially with regards to wearing PPE at all times while in the lab. Faculty in the department will report students they observe who are not dressed in the proper PPE. Three observations will result in a failing grade and dismissal from lab.
6) Lab notebooks are the property of the faculty mentor and must remain in the laboratory.
7) Students are expected to understand and adhere to the “work alone” policy set forth by the faculty mentor. This acknowledgement should be in the group’s orange binder.
8) Students are responsible for carrying out the lab’s monthly safety inspections in January, February, March and April for Spring term enrollment and the September, October, November inspections in the Fall term. If multiple students in a lab are enrolled in a given semester, the work may be divided among the enrolled students.
9) Students will email their research advisor and ChemResearch@cofc.edu on Friday of each week with a brief summary of their lab work that week.
10) Grading:

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- Each week students will receive a grade for their work in the lab. These grades will be recorded in the group’s orange binder. If no appropriate venue is available for an oral presentation, the student may present to the faculty mentor and their research group or to a student/faculty audience arranged by the department. In all cases, the powerpoint file of the poster or the oral will need to be submitted to ChemResearch@cofc.edu by the last day of class.
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• Attendance in lab (6 hrs/week) and weekly lab updates 20%
• Satisfactory completion of lab assignments 40%
• Completion of lab paperwork and inspections and Adherence to safety rules 10%
• Final paper 15%
• Oral Presentation 15%

11) Grading Scale:
94-100 A
90-93 A-
87-89 B+
83-86 B
80-82 B-
77-79 C+
74-76 C
70-73 C-
65-69 D
Below 65 F
Student Name:

Title of Project:

Expected Final Project:

Expected Hours of Work:

Email:

Cell phone Number:

Emergency Contact Name and Number:

Student Signature:
I understand the expectations and responsibilities of taking an independent research course in the Department of Chemistry and Biochemistry

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