CHEMISTRY 509 Introduction to Research

C. Baumann (www.scranton.edu/faculty/baumann/) 570-941-6389 christopher.baumann@scranton.edu Office: LSC 451

This one-credit course provides the student an introduction to the literature and research methods in chemistry and biochemistry. The student will select a research mentor, assemble a thesis committee and write a proposal for the master's thesis. A student will not be allowed to engage in master's research until she/he has obtained a satisfactory grade in this course.

Week 1

Complete the Academic Integrity Tutorial. You must complete the university's Academic Integrity Tutorial no later than the end of the first week of the course (http://www.scranton.edu/academics/wml/acad-integ/index.shtml).

The Writing Center focuses on helping students become better writers. Consultants will work one-on-one with students to discuss students' work and provide feedback at any stage of the writing process. Scheduling appointments early in the writing progress is encouraged.

Students can make an appointment through the My.Scranton portal: my.scranton.edu -> Self Service -> Student & Financial Aid -> CTLE Menu.

For more information, please contact Amye Archer at amye.archer@scranton.edu or visit the Writing Center webpage.

Weeks 2, 3 and 4

Faculty presentations. Each faculty member in the department will make a 15 minute presentation about available research projects in his/her group. These will be made available remotely.

Week 5

Select a mentor. After you have "attended" the presentations, make appointments to further discuss potential research projects with those faculty members whose research matches your research interests or career goals. Once you and a mentor have decided on your thesis topic, you should begin writing the master's thesis proposal.

Fall 2020

Weeks 6-10

Write the master's thesis proposal. During this period, the mentor will guide you through literature searches, using online access to Chemical Abstracts and other available databases. The mentor will also instruct you on complying with the university's research regulations, including IACUC and IRB policies, and the department's research policies. It is expected that the mentor will explain the differences between original research and plagiarism and provide you with the groundwork necessary to perform your research in a safe and ethical manner. For consequences of violating academic ethics please refer to the University of Scranton Academic Code of Honesty: http://www.scranton.edu/academics/wml/acad-integ/acad-code-honesty.shtml.

Weeks 11-12

Assemble the master's thesis committee. You will select two department faculty members (in addition to your mentor) to serve on your thesis committee. You should choose committee members that can provide additional guidance and scientific expertise to you as you perform your research. Once your proposal has been approved by your mentor, members of the committee will also read the proposal. The committee may approve the proposal or may suggest alterations to the plan before giving approval. Once the proposal has been approved, you will complete a departmental research authorization form. Once the proposal has been approved and authorization granted (this may include IRB and IACUC authorizations as well), you may begin your master's research.

GRADING POLICY

The grading for this course will be S/U. The minimum requirement for a satisfactory grade will be selection of a mentor and research committee; completing (and obtaining committee approval of) a master's thesis proposal, and obtaining authorization to begin the research project. All of this must be completed by the end of the day on Wednesday, November 25th. The instructor will not issue an incomplete ("I") grade for this course. A grade of "S" in this course will be necessary in order to register for CHEM 599 *Master's Thesis*.

The SLO Track

In completing this course students will:

- 1. have selected a research mentor and thesis committee
- 2. have written and obtained committee approval of a proposal for master's thesis research