



NSCI 798: DISSERTATION RESEARCH

Course Description: Research and preparation of a dissertation required to earn a PhD degree.

Credit Hours: 1

Course Prerequisites: 54 hr graded credit hours; passage of program qualifying exam, and admission into candidacy.

Course Dates: TBA

Course Times: TBA

Course Location: Mentor's Lab

Instructor: Mentor

Required Text and Other Learning Resources: Publications pertaining to the area of research.

Course Overview: In consultation with their mentors and advisory committees, students will propose and conduct a body of novel research. This will include the formation of a scientific hypothesis(es), experimental design to test the hypothesis(es), implementation of necessary experiments, data collection and data analysis. Upon conclusion of the research project, students will write a PhD dissertation in which they describe the findings and importance of their project. In addition to the dissertation, students will submit at least one manuscript for publication in a peer-reviewed journal.

Course Objectives: Upon completion of this course, students will be able to:

- 1) Form hypotheses and design experiments to answer those questions,
- 2) Technically perform the planned experiments,
- 3) Collect and document experimental results
- 4) Interpret experimental results,
- 5) Describe the significance of these studies in a well-reasoned Discussion, and
- 6) Defend their approach, methods, and interpretation in an oral defense before their advisory committees.
- 7) Write and successfully revise a scientific manuscript for publication.

Grading Policy and Rubric. The dissertation should be submitted to the Advisory committee (composed of at least five members of the graduate faculty, at least four from within the Department and at least one from outside the department) two weeks prior to the committee meeting at which it will be determined whether or not the dissertation is

defensible. The committee member's will evaluate the dissertation and a pass/fail grade will be determined by a majority vote of the advisory committee. Grading is based on the quality of the writing and research.

Course Policies:

Requirements for successful completion of the PhD are three-fold: (1) a written dissertation describing the student's original research submitted to each member of the a student's Advisory Committee who will in private deliberation determine the acceptability of the dissertation and the defense of the dissertation, (2) a public oral presentation of the dissertation research, and (3) at least one peer-reviewed, first author publication describing original research done by the student in a major scientific journal.

The student or program director will inform the Office of the Dean of the intended date of the dissertation defense, the title of the dissertation, and copies of his/her published manuscripts. Manuscripts accepted for publication but not yet in press are acceptable, but must be accompanied by a letter from the editor attesting to their acceptance. On receipt of that letter, the director of the graduate program will schedule the student's public defense and notify the School of Graduate Studies in the Health Sciences .

University Policies:

Students with disabilities (ADA) statement Refer to UMC policy
Academic honesty statement Refer to UMC policy