Departmental Syllabus
Math 4810 -- Senior Seminar

Textbook: None

Prerequisites: 12 credits of mathematics selected from MATH 3100 and above, including either Math 4430 or Math 3330 with a grade of “C-” or better.

Course Objectives: Upon completion of this seminar, the student will be able to:
1. Research a mathematical or statistical topic not normally presented in the undergraduate mathematics curriculum.
2. Use library and/or computer resources to search for information required for understanding new mathematics or statistics.
3. Write a paper and give a presentation which involves mathematical or statistical ideas. Specifically,
   a) organize and consolidate mathematical or statistical thinking;
   b) communicate coherently and clearly to peers, teachers, and others;
   c) use the language of mathematics or statistics to express ideas precisely.

Student Learning Outcomes: Students should be able to:
• research a mathematical/statistical topic not contained in any math department course;
• use library and computer/resources to find information;
• write a paper on the topic; and
• give a presentation on the topic to the department.

Course Content: The student will be expected to research, prepare, and present two reports on the same mathematical or statistical topic. The topic will be chosen by the student subject to the approval of his/her advisor, and must be a topic not normally presented in the undergraduate mathematics curriculum. The first report, the Introduction Paper, is a brief preview of what the student plans to present, demonstrate and/or prove in their second report. The second report, the Mathematics Paper, will involve the mathematics of the topic.

Each student will be required to give two oral presentations. The First Draft Presentation should be ten minutes long. The presentation of the Mathematics Paper should take an entire fifty-minute class period. Each student is required to attend one session of the First Draft Presentations, as well as several Mathematics Paper Presentations.

The student will select a faculty member of the Mathematics Department as an advisor, and will meet with the advisor at least weekly during the semester.

The student will also be expected to attend the Mathematics Department’s Colloquium Series.

If you require an accommodation due to a disability, please make an appointment to see me as soon as possible to discuss arrangements for the accommodations. You will need a Verified Individualized Services and Accommodations (VISA) form from Services for Students with Disabilities.