FA 22 Math 490-01: Seminar in Mathematics

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Office Hours: TBD

Required Materials

Textbook: More Math Into LATEX, 4th edition, by G. Gratzer. LATEX is a language for typesetting papers/posters containing mathematical formulas. The textbook is to be used as reference. As opposed to downloading and installing LATEX on your personal computers, we will use Overleaf (www.overleaf.com). Students are required to sign up for a free account by the end of the first week of classes.

Prerequisite: A grade of 'C' or better in Math 390

Course Aims

Course Description: This is a course on communicating mathematics. Students will be expected to explore mathematical ideas with a faculty mentor, and present these ideas to an audience of faculty and students.

Course Objectives: We will experience several aspects of communicating in mathematics. There are three basic goals for this course.

- Students will be exposed to topics from different areas of mathematics.
- Students will learn new concepts in mathematics through reading and independent discovery (with the help of their mentor).
- Students will become more comfortable at giving presentations and more adept explaining mathematical concepts in written and oral forms.

Student Learning Outcomes: Student learning should include but not be restricted to the following outcomes

- The student will be able to effectively communicate mathematical ideas orally.
- The student will be able to effectively communicate mathematical ideas through writing.
- The student will be able to effectively use LATEX to create documents and presentation slides.

Course Assessment

Faculty Mentors: Each student is responsible for finding a faculty mentor who will supervise their work. If a faculty mentor cannot be found, one will be assigned. It is the students responsibility to work closely with their mentor and to take the initiative to meet with their mentor on a regular basis.

Regular Faculty Meetings (20%): Students will be required to meet regularly with the faculty mentor to research a new topic in mathematics or statistics. This topic should be something that is not typically covered in standard coursework. Regular meetings to develop the new topic should be established between the faculty member and student.

Poster and Presentation (30%): Students will develop and present a poster demonstrating the work done with their mentor over the course of the semester.

Paper (25%): Students will develop a written report of at least 10 pages on the work done with their mentor over the course of the semester.

Final Presentation (25%): Students will be responsible for presenting their topic using Beamer. These presentations will be about 20 minutes in length.

Grade Scale

90-100 A	80-86 B	70-76 C	60-66 D
87-89 B+	77-79 C +	67-69 D+	$< 60 \; F$

Closing Remarks

Students with Disabilities: Coastal Carolina University is committed to equitable access and inclusion of individuals with disabilities in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act. Individuals seeking reasonable accommodations should contact Accessibility & Disability Services (843-349-2503 or www.coastal.edu/disabilityservices/).

Attendance Policy: As stated in the University catalog, students are expected to attend every class session. Attendance at all presentations and discussions is mandatory and will be taken into consideration when final grades are computed. If, for good reason, you are unable to attend class on a presentation day, you must personally notify your mentor and the class instructor. If you fail to give a presentation at the scheduled time, make-up will be at the discretion of the class instructor. If a make-up is granted, it will be given on a date when it will not affect presentations by other students, and it will not be a reason for postponing other presentations by the student granted the make-up.

Expectations: I believe that expectations should be made clear in advance. They should be fair while holding the student to high standards. I strive to make the course clear, fair, organized, and put in adequate time to help you succeed. I respect my students as individuals and have the same expectation in return. I expect you to treat your work and learning in this class with respect and appropriate effort. It will greatly prepare you for life upon graduation. I hope we even have fun in this process! Please let me know as soon as you have trouble or questions. I am here for you!

The instructor reserves the right to make changes to this syllabus during the semester.

^{**} Detailed rubrics will be provided to clarify expectations in each of these areas.