

Math 4160 - Senior Seminar I

Fall 2024

M 12:20 - 1:15 pm in RBN 4025

Instructor: Dr. Maddie Dawsey
Office: RBN 4048
Office Hours: TuTh 8-9 am and We 1:30-3 pm, or by appointment
Email: mdawsey@uttyler.edu
Website: All course materials will be posted on Canvas

Required Textbook

None. Free online references will be provided as needed.

Course Description

This is the first part of our two-part capstone course. The purpose of this course is to prepare you to work on your senior research project with your faculty mentor. In this course you will learn LaTeX, use databases to search for research articles, and hone your writing skills. This will all be done in the context of mathematical projects based on what you have learned in your course work at UT Tyler.

Prerequisites: The student must be within 3 semesters of graduation with a BS in Mathematics.

Student Learning Outcomes

By the end of the course, students should be able to do the following:

- Construct a well-written mathematical research paper.
- Typeset a mathematical document using LaTeX.
- Prepare a professional mathematical presentation using LaTeX.

Important Dates

September 2	Labor Day Holiday
September 9	Census Date
November 4	Withdrawal Deadline
November 25-29	Thanksgiving Break
December 9-13	Final Exams

Grading Scheme

Your final letter grade will be determined by the following grading scheme, subject to the rules below:

Attendance and		A	90 - 100
Class Participation	10%	B	80 - 89.99
Weekly Assignments	30%	C	70 - 79.99
Papers and Poster	60%	D	60 - 69.99
		F	0 - 59.99

Technology

Students are required to have a device capable of internet access and access to Canvas. The use of artificial intelligence (AI) is not permitted in this course, as being able to use your own brain and your own experiences to write about mathematics is essential in careers that require a BS in Mathematics.

Attendance and Class Participation (10%)

Students are expected to be present for all weekly meetings and participate in all class related activities.

Weekly Assignments (30%)

A short assignment will be distributed during most classes. We will start these assignments in class, and they will be due by the beginning of the next class meeting.

Papers and Poster (60%)

There will be three papers and one final research poster assigned during the semester. The papers will focus on reading mathematics, writing mathematics, learning LaTeX, and aiming one's writing at a particular audience. The final poster will be a presentation of your third paper. Detailed instructions for each paper and the final poster will be given throughout the semester.

Student Resources

Students are encouraged to set up study groups to work on assignments together, but each student must submit their own individual assignments. Other resources available to you include online papers, tutorials, and your professor (office hours or email).

University Policies

For university policies concerning Students' Rights and Responsibilities, Grade Replacement/Forgiveness, State-Mandated Drop Policy, Disability Services, Student Absence due to Religious Observance, Student Absence for University-Sponsored Events and Activities, Campus Carry, Social Security and FERPA Statement, please see the University Information module on the course Canvas page.

Tentative Schedule

WEEK	DATE	PLANNED ACTIVITY
1	August 26	Introductions
2	September 2	Labor Day Holiday
3	September 9	Mathematical Biographies (first paper assigned)
4	September 16	LaTeX Tutorial (Part 1)
5	September 23	LaTeX Tutorial (Part 2) – How to Make a CV
6	September 30	Searching Mathematics Databases
7	October 7	Textbook Exercise (second paper assigned)
8	October 14	Reading Mathematics
9	October 21	Writing Mathematics (third paper assigned)
10	October 28	Peer Review of Papers
11	November 4	Tutorial on Poster Presentations
12	November 11	Peer Review of Posters
13	November 18	Poster Presentations
14	November 25	Thanksgiving Break
15	December 2	Advisor Assignments