MATH 4160 – Senior Seminar I Spring 2022

Instructor: Dr. Scott M. LaLonde
Office: RBN 4005
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Email: slalonde@uttyler.edu (preferred method of contact)
Office hours: Tuesdays & Thursdays 1:00-2:30 P.M. or by appointment.

Scheduled classes:

Section 001 Monday, 12:20 P.M. – 1:15 P.M. Location: RBN 4039

Course Webpage: All course information and documents will be available on Canvas.

Textbooks: There is no required textbook.

Prerequisites: The student must be within three (3) semesters of graduation with a B.S. in mathematics.

Course Description

Reviews and integrates concepts from different branches of mathematics in the curriculum.

Student Learning Outcomes

Upon completion of this 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 mathematics presentation using LAT_{EX} .

Assignments and Grading

Class Participation and Attendance

It is expected that you will be present for all of our weekly class meetings and that you will readily participate in all in-class activities.

Weekly Assignments

A short assignment will be handed out most weeks during lecture. We will often begin these assignments in class, and they will be due before the next class meeting.

Peer Reviews

You will occasionally be required to critique some of your classmates' assignments during class.

Papers and Poster

There will be three papers and one research poster assigned during the semester. The papers will focus on reading mathematics, writing mathematics, learning LAT_EX , and aiming one's writing for a particular audience.

Grading

Your overall grade will be computed as follows.

Assignment	Percent]	Numerical	Letter
Class Participation	10		90 - 100	A
Weekly Assignments	20		80-89	В
Peer Reviews	10		70-79	C
Papers and Poster	$4 \times 15 = 60$		60-69	D
Total	100]	Below 60	F

Course Policies

Canvas

You must activate your Canvas account and check it regularly. You can activate your account and log in at https://www.uttyler.edu/canvas. If you are registered for the course, then you should already have access to the Canvas page. All homework assignments, announcements, and important documents will be posted there.

Email

In addition to Canvas, the preferred means of communication for this course is official UT Tyler email. If you email me, it needs to be sent from your Patriots account to my UT Tyler email address (slalonde@uttyler.edu). In the event that I need to contact you, I will send an email to your Patriots account, and I will assume that you have read any such message.

Attendance

As stated in the grading policies, I expect you to attend class every day. You are also responsible for any announcements made in class. Absences will be severely detrimental to your performance, so the following policy will be enforced to encourage attendance:

- 3 absences: one letter grade reduction in the course
- 4 absences: two letter grade reduction in the course
- 5 or more absences: automatic F in the course

Cell Phones and Electronic Devices

Cell phones and other similar electronic devices should be placed on silent and put away during class. Given the content of the class, you are welcome to use laptop computers or tablets. However, if I see that you are using your device for something not related to the class, I will ask you to stop.

Plagiarism and Academic Dishonesty

Any work you submit must represent your own effort, work, and solutions. If I determine that this is not the case, I will prosecute plagiarism and academic dishonesty to the fullest possible extent. In particular, modifying another student's code and submitting it as your own is not acceptable.

COVID-19 Mitigation

As of January 2022, the city of Tyler is in a high-transmission area for COVID-19. Per CDC guidelines and university recommendations, you are expected to wear a face mask covering your nose and mouth during our class meetings, regardless of your vaccination status. I also expect you to stay home if you are not feeling well (particularly if you have symptoms like sneezing, coughing, or a higher than normal temperature) at any time during the semester. There will be a Zoom option available if you are unable to attend class due to illness.

Please consult the "University Policies and Information" page on Canvas for more detailed information on current UT Tyler policies regarding COVID-19. You can also visit the UT Tyler website for information on vaccines, testing, and what to do if you have been exposed:

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https://www.uttyler.edu/coronavirus/
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Changes to Syllabus

I reserve the right to make changes to the syllabus during the semester. Any changes to course policies will be announced in class, and an updated version of the syllabus will be posted to Canvas.

Important Dates

- January 10: Classes begin.
- January 17: Martin Luther King, Jr. holiday. No class.
- January 24: Census date. Last day to change schedule or file for grade replacement.
- March 7–12: Spring break. No classes.
- March 28: Last day to withdraw.

University Policies

Information on University policies concerning the following topics:

- UT Tyler Honor Code
- Students Rights and Responsibilities
- Campus Carry
- UT Tyler Tobacco-Free Policy
- Grade Replacement/Forgiveness and Census Date
- State-Mandated Course Drop Policy
- Student Accessibility and Resources

- Student Absence due to Religious Observance
- Student Absence for University-Sponsored Events and Activities
- Social Security and FERPA Statement
- Emergency Exits and Evacuation
- Student Standards of Academic Conduct
- UT Tyler Resources for Students

can be found at

https://www.uttyler.edu/academic-affairs/files/syllabuspolicy.pdf

Tentative Weekly Schedule

This schedule is subject to change as we move through the semester.

Week	Date	Topics covered	Assignment Due
1	1/10	Introductions and overview of the course. A brief introduction to IAT_EX .	
2	1/17	Martin Luther King, Jr. holiday – no class.	
3	1/24	Basic IAT _E X tutorial.	Mini Assignment #1
4	1/31	Discuss first paper (Mathematical Autobiography).	Mini Assignment $#2$
5	2/7	Advanced LATEX tutorial.	First draft of Paper 1
6	2/14	Tips on reading and writing mathematics. Discuss second paper (Textbook Exercise).	Final version of Paper 1
7	2/21	Peer review of paper drafts.	First draft of Paper 2
8	2/28	Tips on researching math (including using mathe- matical databases). Discuss third paper.	Final version of Paper 2
9	3/7	Spring break – no class.	
10	3/14	More on writing mathematics.	Mini Assignment #3 and Topic for Paper 3
11	3/21	Peer review of paper drafts.	First draft of Paper 3
12	3/28	Tutorial on making posters in IAT_EX .	Final version of Paper 3
13	4/4	Peer review of posters.	First draft of poster
14	4/11	Poster presentations.	Final version of poster
15	4/18	Senior Seminar II poster presentations. Project as- signments for next semester.	