Tentative Syllabus: Math 1151 Calculus, Autumn 2020

Instructor:

Your instructors will introduce themselves, post their contact information and office hours in Carmen. Office hours are times when you can meet with your professor or TA to discuss any questions or concerns you have about the course material or related items. This includes asking for clarifications, questions about a particular problem, and following up on course material and assignments. This semester, office hours will be held virtually.

Course Prerequisites:

A grade of C- or above in 1150, or Course Code L on the Math Placement Test.

GE Information:

This course sequence can be used, depending on your degree program, to satisfy a Quantitative Reasoning and Logical Analysis course requirement.

Course Goals:

In this course we will work to master the essentials of differential calculus and its applications, to develop the computational and problem-solving skills for that purpose, and to introduce the integral calculus. This includes:

- 1. The notions of limit and continuity
- 2. Computing the derivative of any elementary function (polynomials, exponentials, logarithmic, trigonometric, or any combination of such)
- 3. Determining maxima and minima
- 4. The definition of the definite integral
- 5. How these techniques apply to real-life situations.

Course Learning Objectives:

Upon successful completion of the course, students will be able to:

- 1. Demonstrate a thorough understanding of calculus concepts both graphically and analytically
- 2. Demonstrate a conceptual understanding and computational proficiency of single variable differential calculus.
- 3. Demonstrate relevant applications of mathematical principles by modelling problems arising in a variety of disciplines using calculus and analyzing their solutions.
- 4. Clearly explain their reasoning both verbally and in writing.
- 5. Develop patience and persistence when solving problems.
- 6. Become confident in using mathematics to analyze and solve problems both in class and in real-life situations.

Course Materials:

This course uses the Ximera platform which serves as our free textbook and online homework system. The textbook will also be available as a free PDF file, but working through the online textbook will constitute a portion of your grade in the course.

Course Structure:

Lectures:

On Mondays, Wednesdays, and Fridays you will attend lectures on Zoom (or watch recordings of those video lectures) in which fundamental skills are reviewed and new topics are presented. Lecture is a time for us to develop and discuss the big-picture ideas and get a little practice in solving problems.

Recitations:

On Tuesdays and Thursdays, you will attend recitation (or watch and work through the recordings of those classes) on the previous lesson. This is where you can ask questions about the course material you have learned and attempt more involved questions on that material.

The live lecture and recitation sessions will be recorded and posted to Carmen for those who are not able to stream the class live.

Course Management System:

This course uses the Carmen course management system, in conjunction with the Ximera platform. Links to Ximera are available from within the Carmen course. It is your responsibility to check Carmen regularly. Course announcements will be posted there.

Gradescope:

Written homework will be collected and returned through the Gradescope website. A link to Gradescope is posted in Carmen. You will also find files on Carmen (in the Getting Started module) with details on how to upload your work to Gradescope.

Grades:

We use a percentage-based system to determine course grades.

Assignment or category	Percent of Final Grade
Final Exam	20%
Midterms (6)	30%
Written Homework (6)	20%
Computational Test	5%
Discussion Forums	10%
Homework Quizzes	10%
Online Homework	2%
Online Textbook	3%
Total	100%

Grading Scale:

Α	[93, 100]	B-	[80, 83)	D+	[67, 70)
A-	[90, 93)	C+	[77, 80)	D	[60, 67)
B+	[87, 90)	С	[73, 77)	Е	Below 60
В	[83, 87)	C-	[70, 73)		

This grading scale will not be raised. Individual assignments, including exams, will not be curved, but the final grading scheme could be adjusted at the **end** of the semester. Class participation and effort will be important factors in decisions about borderline grades.

Midterms (exams):

Math 1151 has **common evening exams** (given outside of the regular class time). Exams will typically consist of short answer and free-response problems. Students who have a regularly scheduled course which conflicts with the evening exam times must attend their regularly scheduled class. These students are eligible for and should plan to take a makeup exam. They will need to contact their lecturer for permission to take the makeup exam. Exams files will be made available on Carmen at the opening time, and your solutions will be uploaded to Gradescope.

Exam	Percent	Sections Covered	Date and time	
Midterm 1	6%	UF - ULTDA	Monday, September 14, 8:00 – 8:40PM	
Midterm 2	6%	CATIVT - PRAQR	Monday, September 28, 8:00 – 8:40PM	
Midterm 3	6%	CR – ARR	Monday, October 19, 8:00 – 8:40PM	
Midterm 4	6%	MAM – LA	Monday, November 2, 8:00 – 8:40PM	
Midterm 5	6%	O – DI	Monday, November 23, 8:00 – 8:40PM	
Final Exam	20%	Cumulative	Tuesday, December 8, 6:00-7:45PM	

Make-up Policy:

Makeup exam will only be given in extraordinary circumstances. Excuses due to illness should be accompanied by a physician's note. Students should contact their instructor as soon as possible in the event a makeup is needed and should always contact the instructor before the exam is given. Documentation of the emergency is required in order for make-up exams to be considered for credit.

Online Textbook:

Our textbook is an interactive book on Ximera. The readings are due by 11:59PM the day after the lecture session for that section.

Discussion Forums:

With our lack of face-to-face interaction this semester, we will rely on Carmen forums for our discussion. For each new section we cover, there will be a discussion forum with a question asking you to come up with an answer and explanation or to comment on another student's submission. These will be graded out of 2

points each, based on effort not correctness. Responses showing a substantive effort (even if not correct) will receive 2 points.

Online Homework:

The online homework assignments are conducted through Ximera. These assignments will be due by 11:59PM on the date it is due (see the calendar for these dates). Each assignment will cover the new material and may also contain questions covering earlier material. This is to promote a continued review and mastery of all course material.

Homework Quizzes:

The homework quizzes assignments are taken as timed Quizzes in Carmen. These will consist of (usually) two problems very similar to the online homework. You will have 10 minutes to answer the questions. They are due the same time as the corresponding homework sets.

Written Homework:

There will be several written homework assignments throughout the semester. These written assignments are your opportunity to practice and receive feedback on how you write up solutions and explanations to problems before the exams. You are encouraged to work with other students on the written homework problems, but the writeup you submit should be in your own words. These will be submitted on Gradescope.

Computational Test:

This will be our assessment on taking derivatives using shortcut methods. It is a timed assessment using the Proctorio browser extension.

MSLC Free Tutoring Hours:

The Mathematics and Statistics Learning Center offers free tutoring services during the semester. For information please go to: https://mslc.osu.edu/online-tutoring.

Other Course Policies

Technology Problems:

It is inevitable that technology will sometimes malfunction. Students are responsible for beginning assignments early enough to have time to ask for help with technical issues. Although reasonable accommodations for students when there are technical issues, the student will be responsible for documenting errors and seeking help in a timely fashion from both technical support and the instructor as needed. No accommodations will be made for students who do not work actively to resolve their technical problems in a timely fashion.

Participation Expectations:

You are expected to check Carmen at least **once every 24 hours on weekdays**. You should plan on working on this course every school day. There are frequent deadlines in this course, and students are expected to keep track of all deadlines. Students are expected to work ahead of those deadlines whenever possible to prevent last-minute issues.

Contingency Planning:

We are aware that current health issues may impact our course. Since most of our course content is delivered and turned in online, such an issue will primarily affect those with an in-person recitation.

If you are unable to attend class due to a positive diagnosis, symptoms, or a required quarantine following contact tracing: Do not attend any in-person recitations you may have. You can still participate in the class virtually, and no credit will be lost due to this. If symptoms prevent you from doing so, contact your instructors as soon as you can.

If the entire class is required to quarantine following contact tracing: Any in-person recitations that are quarantined will be moved to online recitations for the duration of that period.

If in-person classes are suspended: All in-person recitations will be moved to online recitations.

Health and Safety:

All students, faculty, and staff are required to comply with and stay up to date on all university safety and health guidance (https://safeandhealthy.osu.edu), which includes wearing a face mask in any indoor space and maintaining a safe physical distance at all times. Noncompliance will be warned first and disciplinary actions will be taken for repeated offences.

The Ohio State University Wexner Medical Center's Coronavirus Outbreak Site, https://wexnermedical.osu.edu/features/coronavirus, includes the latest information about COVID-19 as well as guidance for students, faculty, and staff.

Mental Health:

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting https://ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at https://suicidepreventionlifeline.org.

Diversity:

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Academic Misconduct Statement:

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc.

Accommodations for accessibility

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; https://slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.