

**Instructor: Mrs. Maliha J. Luqman**

Email: [mluqman@gmu.edu](mailto:mluqman@gmu.edu)

Office Hours: MW 9:30-11:30AM (Zoom)

Please email me for the Zoom link and/or if these don't work for you.

**\*\*You are REQUIRED to attend at least one office hour during the semester.\*\***

**Course Information:**

Section: DL1 - 4 credits

Lectures: Videos (Blackboard)

**TA: Tenzin Zomkyi** ([tzomkyi@gmu.edu](mailto:tzomkyi@gmu.edu))

**LA: Ahsan Shaikh and Merkorios Masresha**

## **Course Description**

**Course Prerequisites:** A grade of C or better in MATH 105 or a passing score on the Math Placement Test. If you have not met the formal prerequisites for the course, you cannot stay in the course. Information on the Math Placement Test is available at <https://science.gmu.edu/academics/departments-units/mathematical-sciences/mathematical-sciences-testing-center>

### **Course Description and Objective:**

Major Topics to be included: functions, limits, the derivative, maximum and minimum problems, the integral and transcendental functions.

## **Textbooks and Materials**

**Text:** Thomas' Calculus - Early Transcendentals, ISBN: 9780134439419. The MyMathLab Access Code will give you access to the eText. You can purchase this through the College Bookstore or Pearson. A hardcopy of the textbook is also available from the bookstore but not required.

**Technology:** No calculators or computer programs will be allowed at any point in the course. Two devices are required to take exams. At least one of them should have a camera and the other must have Lockdown Browser installed. You may purchase a webcam, use the built-in camera on your laptop, tablet or smartphone when logging in.

## **Assessments and Grading Scale**

**Posting of Grades:** Student assignments will be evaluated within a week and posted to Blackboard one week after the assignment due date.

### **Grading Scale:**

|        |       |       |       |       |       |       |       |       |      |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| A      | A-    | B+    | B     | B-    | C+    | C     | C-    | D     | F    |
| 93-100 | 90-92 | 87-89 | 83-86 | 80-82 | 77-79 | 73-76 | 70-72 | 60-69 | 0-59 |

There are 5 components that will determine your grade:

1. Recitation Attendance/Participation – 10%
2. MyMathLab Homework (drop 2)– 5%
3. MyMathLab Quizzes (drop 1) – 10%
4. Exams (2 given on Zoom, about 2 hours each) – 25% x 2
5. Comprehensive Final Exam – 25%

## Assessments

- **Attendance/Participation:** Even though this class is delivered asynchronously, attending the recitation is very important. Math is an active sport, so attendance for recitations will be recorded. You may miss three classes with no grade penalty. As stated in the Grading Section above, attendance is part of your grade. If you miss class, your grade for that day will be 0. If you are absent, please email me a verifiable excuse (doctor note, police report, etc.), and I will make a decision on whether to remove the 0. Students are expected to be in class on time and to be actively working on math while they are in class. Have all supplies near you when class starts (pencil and paper). Recitations require active participation, which you can respond via audio or chat. If you are not there to try to answer the question, that will be counted as 1/3 of an attendance. Students should be respectful in class (participate only in discussions relative to the class, mute cell phones.)
- **MyMathLab Homework:** MyMathLab (MML) assignments will be assigned and due according to the course schedule. All assignments are due at 11:59PM on their due date. Students must have access to a computer and Internet to complete these assignments. You have unlimited attempts, so should always strive for a perfect score on all homework assignments. If you get stuck on a problem, you can use the “Help Me Solve” or “Ask Instructor” feature on MML. Late assignments will not be accepted. However, your lowest two scores will be dropped at the end of the semester. Working together on these assignments is allowed (and encouraged! Yay study groups!)
- **Quizzes:** Quizzes will be done on MyMathLab. You can expect at least one quiz every other week (except on weeks with exams). Quizzes are open-note, which means you may *only use written notes* and will be done with Lockdown Browser, so you may not use any online resources while taking the quiz. There will be no make-up quiz, however your lowest score will be dropped at the end of the semester. Your second lowest score can be *replaced* by your contributions to Blackboard Discussions.
- **Exams:** There will be two in-class exams in addition to the comprehensive final. Exams make up the majority of your grade. Cheating of any form will not be tolerated. Exams will be conducted on Zoom and Lockdown Browser, therefore you would need a second device (phone and/or tablet with Zoom capabilities) for the exam to be proctored. For your privacy, these Zoom sessions will not be recorded. You will then submit your work in the appropriate Gradescope. I allow an exam-swap policy, whereby if the grade on your Final Exam is higher than your lowest exam score, the lowest exam score will be replaced with your final. As a result, missing exams for non-emergency reasons results in a zero on the exam.
- **Final Exam:** The final exam is comprehensive. The final exam is worth 25% of your grade. The Final Exam will also be conducted on Zoom and Lockdown Browser and work submitted on Blackboard. There will be no make-ups permitted for the final exam. The date is already set by the university, so please do not make other plans on the date of the final exam such as appointments, early vacation departures, family outings, etc. Such changes are not negotiable.
- **Extra Credit:** There will be NO extra credit assigned. Please do not ask.

### Additional Resources and Information

**Academic Integrity:** Violations of the honor code will not be tolerated.

***Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.***

Mason Honor Code is available at: <https://oai.gmu.edu/mason-honor-code/>

**Disabilities and Accommodations:** GMU is committed to ensure all students have an opportunity to pursue a college education regardless of the presence or absence of a disability. Information regarding the Office of Disability Services is available at [ds.gmu.edu](https://ds.gmu.edu) and if you require accommodations, please contact Disability Services to provide the appropriate documentation.

**Tutoring Center:** The Mathematics Tutoring Center is offering online tutoring services to students currently enrolled in undergraduate math courses at GMU. Please see the website for details:  
<http://math.gmu.edu/tutor-center.php>

**ITS Support Center:** The ITS Support Center serves as the central point of contact for the university community for requesting IT support or information. Additional details and resources are located at <https://its.gmu.edu/service/its-support-center/> Email [support@gmu.edu](mailto:support@gmu.edu) or call 703-993-8870 for technical support.

**MyMathLab Support:** You can contact Ashley McPherson ([ashley.mcpherson@pearson.com](mailto:ashley.mcpherson@pearson.com))

### Important Dates

|   |                                     |
|---|-------------------------------------|
| Classes Begin   | Monday, January 24                  |
| Last day to add   | Monday, January 31                  |
| Last day to drop a class with a tuition refund  | Monday, February 7                  |
| Last day to drop (50% refund)   | Monday, February 14                 |
| Unrestricted Withdrawal Period (W on transcript)  | February 15-March 1                 |
| Spring Break  | March 14-20                         |
| Selective Withdrawal Period (W on transcript) <ul style="list-style-type: none"> <li>• If you do not withdraw by this date and <u>do not complete your assignments</u>, your grade will be based on what you have submitted, this is usually an F.</li> <li>• Note a W does not contribute to your GPA, but does show on your transcript</li> <li>• You are limited to 3 withdrawals in your academic career</li> </ul> | March 2-April 11                    |
| Final exam  | Wednesday, May 11<br>7:20PM-10:00PM |

### Tentative Schedule

|         | Start Date:     | Section and Topic:  | Online Activities Due:           |
|---------|-----------------|---|----------------------------------|
| Week 1  | M: 01/24        | 1.1-1.4 – Functions and their Graphs, Transformations, Trigonometric Functions                                  | Sun: Introductions, 1.1-1.4      |
| Week 2  | M: 01/31        | 1.5, 1.6 – Exponential, Logarithmic and Inverse Functions   | Sun: MML 1.5-1.6, MML Ch. 1 Quiz |
| Week 3  | M: 02/07        | 2.1-2.3 – Rate of Change, Limits  | Sun: MML 2.1-2.3                 |
| Week 4  | M: 02/14        | 2.4-2.6 – Continuity, Limits Involving Infinity   | Sun: MML 2.4-2.6, MML Ch. 2 Quiz |
| Week 5  | M: 02/21        | <b>MON 02/21 7:30PM-9:30PM: Exam 1 Ch. 1-2 on Zoom</b><br>3.1-3.3 – Tangent Lines, Derivatives                  | Sun: MML 3.1-3.3                 |
| Week 6  | M: 02/28        | 3.4-3.6 – Derivatives of Trigonometric Functions, The Chain Rule  | Sun: MML 3.4-3.6                 |
| Week 7  | M: 03/07        | 3.7-3.9 – Implicit Differentiation, Derivatives of Inverse and Logarithmic Functions                            | Sun: MML 3.7-3.9<br>Ch. 3 Quiz   |
| Week 8  | M: 03/14        | 3.10, 4.1 – Related Rates, Extreme Values   | Sun: MML 3.10, 4.1               |
| Week 9  | M: 03/21        | 4.2-4.3 – First Derivative Test, Concavity and Curve Sketching  | Sun: MML 4.2-4.3                 |
| Week 10 | M: 03/28        | 4.4-4.5 – L'Hôpital's Rule  | Sun: MML 4.4-4.5                 |
| Week 11 | M: 04/04        | 4.6-4.7 – Applied Optimization, Newton's Method   | Sun: MML 4.6-4.7<br>Ch. 4 Quiz   |
| Week 12 | M: 04/11        | <b>MON 04/11 7:30PM-9:30PM: Exam 2 Ch. 3-4 on Zoom</b><br>4.8, 5.1 – Antiderivatives, Area under the curve      | Sun: MML 4.8, 5.1                |
| Week 13 | M: 04/18        | 5.2-5.3 – Sigma Notation, The Definite Integral   | Sun: MML 5.2-5.3                 |
| Week 14 | M: 04/25        | 5.4-5.6 – Indefinite Integrals and Substitution Method, Definite Integral Substitutions and Area Between Curves | Sun: MML 5.4-5.6<br>Ch. 5 Quiz   |
| Week 15 | <b>W: 05/11</b> | <b>FINAL EXAM 7:20-10:00PM on Zoom</b>  |                                  |

**\*\*ITEMS ARE SUBJECT TO CHANGE AND WILL BE UPDATED ON BLACKBOARD ACCORDINGLY.\*\***