George Mason University
Department of Mathematical Sciences

Analytic Geometry and Calculus I

Spring 2022

Course: MATH-113, section 001.

Total Credits: 4.

Purpose: A thorough introduction to real functions in one variable, limits, continuity, derivatives, applications of derivatives in optimization problems (calculating maximum and minimum) and basic integration. This course serves as a *Mason CORE Course* for quantitative reasoning skills.

Prerequisites: Go to: `http://catalog.gmu.edu/` , click on "Course" and write "MATH 113":

- Thorough understanding of high school algebra and trigonometry.
- C or better in MATH 104, 105, XS or better in MATH 105 or a score of 07 in "Math Placement Trancedentals". Prerequisite enforced by registration system.

Times and Places: MW 10:30 am – 12:20 pm Planetary Hall 129.

Period: From January 24. to May 18.

Dates to keep in mind:

January 31:	Last day to add classes
February 7:	Last day to drop (100% tuition refund)
February 14:	Last day to drop (50% tuition refund)
March 1:	Last day to drop (no tuition refund)

Professor:

Geir Agnarsson
Office: Exploratory Hall (EXPL), room 4412.
Phone number: (703) - 993 - 1477
email: `gagnarss@gmu.edu`

Office-hours: MW 12:20 – 1:20 pm, or by appointment.

Required Text: Joel R. Hass, Christopher E. Heil, Maurice D. Weir: *Thomas' Calculus: Early Transcendentals, Single Variable*, 14th Edition, Pearson, (2018).

NOTE! The book comes with *MyMathLab*, additional online material at additional cost. This online system is not required in this course.

Material: Selected preliminaries and most of Chapters: 1,2,3,4,5.

Blackboard (Bb): All homework (HW) and short announcements for this class will be posted on the course Bb.

Homework: HW will be assigned every week on the course Bb on Wednesdays. They will not be graded, but will be discussed by your Teaching Assistant (TA), Tenzin Zomkyi in the recitation (RCT) sessions the following week. Her email address is: `tzomkyi@gmu.edu` and her office and office hours will be made available soon.

NOTE! It is IMPOSSIBLE to learn the material for this course without doing the HW.

Quizzes: Each week your TA will have a 10 – 15 minute quiz (QZ) at the end of each recitation session. These will be graded.

Examinations (EX): There will be two midterm exams (MT1 and MT2) and a final exam (FL). Each of the exams will cover the material roughly from the last exam and up to the current point in lecture. Each will be 50 minutes long and take place in the class room.

Midterms:
First (MT1) – Wednesday, March 2., 11:30 – 12:20 pm, Planet 129.
Second (MT2) – Wednesday, April 6.,11:30 – 12:20 pm, Planet 129.

Final: Wednesday, May 11., 10:30 – 11:20 pm, Planet 129.

Grading: Your final letter grade for this course will be based on largest number of the following:

1: QZ 10% + MT1 50% + MT2 20% + FL 20%,
2: QZ 10% + MT1 20% + MT2 50% + FL 20%,
3: QZ 10% + MT1 20% + MT2 20% + FL 50%.

Policy:

- Absence from an exam, without proper explanation, is an automatic zero on that exam.
- In order to pass the class one MUST TAKE THE FINAL!

Collaboration: Needless to say, collaboration of any kind during a midterm exam or the final exam, is cheating. You are to abide by the GMU's Honor Code, see `https://oai.gmu.edu/mason-honor-code/`

During an exam you are not allowed to help anyone nor receive any help from anyone, except possibly from the exam proctor. You also cannot use any helping device, be it notebooks, textbooks, cheat-sheets or programmable calculators, unless otherwise clearly stated on the exam.

HOWEVER, healthy discussion about the homework problems among your classmates is allowed and encouraged! Be sure though, to write your own solutions.

Available Help: For help with some of the HW you can see me or your TA during office hours, or drop in the Mathematics Tutoring Center, located in the Johnson Center room 344, For more info on help in general, go to the WebSite `https://science.gmu.edu/academics/departments-units/mathematical-sciences/math-tutoring`.

Courtesy: Please use common sense and be courteous to your fellow classmate. During lectures be quiet and please turn off your cellular phones or put the ringing on silent mode!

Geir Agnarsson
January 23, 2022