# George Mason University Department of Mathematical Sciences

# Analytic Geometry and Calculus II

### Spring 2020

Course: MATH-114, section 006.

Total Credits: 4.

**Purpose:** The 2nd course of a series of three-semester calculus sequence. The main topics covered are: (1) Techniques of integration. (2) Applications of integration. (3) Sequences and Infinite Series.

**Prerequisites:** C or better in MATH-113 or U113 or in both MATH-123 and 124.

Times and Places: TR 1:30 – 3:20 pm. Robinson Hall B104.

Period: From January 21. to May 13.

### Dates to keep in mind:

January 28:	Last day to add classes.
February 5:	Last day to drop with $100\%$ tuition refund.
February 11:	Last day to drop (with 50% tuition refund).

#### **Professor:**

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

Office-hours: TR 3:20 – 4:20 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 can come with *MyMathLab*, additional online material at additional cost. This online system is not required in this course.

Material: Selected preliminaries and most of Chapters: 6,7,8, 9 and 10.

WebSite: All homework (HW) and short announcements for this class will be posted on the class-WebSite:

http://math.gmu.edu/~geir/courses/114spring20/. Additional handouts will be posted as pdf-files. Please check this WebSite on a regular basis for class news and additional info that might be posted there as well.

**Homework:** HW will be assigned every week on the class website on Thursdays. They will not be graded, but will be discussed by your Teaching Assistant (TA) Tylor R. Russ in the recitation (RCT) sessions the following week. His email is: truss3@masonlive.gmu.edu.

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

**Computer Assignments:** There will be two computer assignments (CA) for you to hand in, using the MATHEMATICA program. They will be graded. For info on how to download MATHEMATICA onto your personal computers see https://cos.gmu.edu/mathematica/.

**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:** There will be two midterm exams (MT1 and MT2) and a final exam (FL). Each of the midterms will cover the material up to that point in lecture, it will be 50 minutes long and take place in the class room. The final exam will be a two hour cumulative exam also in the class room.

#### Midterms:

First (MT1) – Thursday, March 5., 1:30 – 2:20 pm, Rob. B104. Second (MT2) – Thursday, April 2., 1:30 pm – 2:20 pm, Rob. B104.

Final: Tuesday, May 12., 1:30 – 3:30 pm, Rob. B104.

Grading: Your final letter grade for this course will be based on

QZ 20% + CA 10% + EX 70%,

where the exam grade (EX) will be the largest number of the following:

1: MT1 20% + MT2 20% + FL 30% 2: MT1 20% + FL 50% 3: MT2 20% + FL 50%

4: FL 70%

# **Policy:**

- Absence from an exam, without proper explanation, is an automatic zero on that exam.
- There will be no make-up quizzes nor midterm exams.
- In order to pass the class one MUST TAKE THE FINAL!

**Collaboration:** Needless to say, collaboration of any kind during a quiz, midterm exam or 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 help from anyone, except possibly from the exam proctor. You also cannot use any helping device, be it note books, text books, 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 http://math.gmu.edu/help-with-math.php.

**Courtesy:** Please use common sense and be courteous to your fellow classmates. During lectures be quiet and please turn off your cellular phones!

> Geir Agnarsson January 21, 2020