SYLLABUS
Spring 2021

Department of Mathematical Sciences

Introduction to Advanced Mathematics (Math 300 Sec:002)

Instructor: Professor David Carchedi
Office Hours: Friday 3:30-4:30pm
Email: dcarched@gmu.edu

Lectures: Tuesday & Thursday. 1:30 – 2:45 pm.

Text: *A Transition to Advanced Mathematics,* by Smith, Eggen , & St. Andre (8th addition).

Course Description: The purpose of this course is to become familiar with the language of abstract mathematics and to learn how to write well polished and formal proofs. This includes an introduction to logic, set theory, and some aspects of number theory and abstract algebra (and perhaps other subjects), as well as learning mathematical writing skills. We will primarily but not exclusively be following the book.

Term Project: There will be no written exams. Instead, each student will write up a reasonably sophisticated proof, complete with background, lemmas, propositions etc. in the style of a research paper. Problem assignments will happen partway through the course, and the project will go through rounds of revision.

Homework: Homework will be assigned approximately every other week, and should be compiled with LaTeX.

Grading: Your grade for the course will be calculated based on the homework (70%), and the term project (30%).

Disability statement: If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Resources at 703.993.2474, http://ds.gmu.edu. All academic accommodations must be arranged through that office.

Tutoring Center: The Math Tutoring Center is located in the Johnson Center Room 344. Help is available on a walk-in basis. For hours of operation see: http://math.gmu.edu/tutor-center.php

University Honor Code: You are expected to follow the GMU Honor Code: http://oai.gmu.edu/the-mason-honor-code/ . There will be a zero tolerance policy with respect to cheating. Do not do it. If you are caught cheating, I will not hesitate to report you to the Office of Academic Integrity and suggest harsh punishment.

Diversity: You are expected to behave in accordance of the GMU Diversity Statement: http://ctfe.gmu.edu/professional-development/mason-diversity-statement/

Privacy: Students must use their MasonLive email account to receive important University information, including messages related to this class. See http://masonlive.gmu.edu/ for more information..