Advanced Calculus I MATH 315, section B01 Summer Session B, 2020 Professor J. Lawrence Mathematical Sciences lawrence@gmu.edu

This course is online only, on Blackboard.

**Text**: An Introduction to Analysis, by William R. Wade, fourth edition, publ. Pearson, 2018. We will cover most of chapters 1 through 7.

Prerequisites: MATH 213 or 215 (Calculus III) and MATH 290.

This is a course in analysis of functions of one real variable. Students will practice the art of utilizing theorems of the course in reasoning about the subject matter, and will be expected to understand and supply proofs of statements connected with it. Course topics include: the real number system; sequences; limits; topology of the reals; continuity, differentiability, and integrability of functions of one real variable; infinite series.

**Grades**: A numerical score will be computed as the arithmetic average of four grades: your quiz grade, your first and second test grades, and your final exam grade. This score may be augmented, based upon your contributions to, usually written, class discussions on Blackboard, to yield your final numerical grade.

 $A^{+}: 97\text{-}100$   $B^{+}: 87\text{-}89$   $C^{+}: 75\text{-}79$  F: below 60 A: 93-96 B: 83-86 C: 70-74  $A^{-}: 90\text{-}92$   $B^{-}: 80\text{-}82$  D: 60-69

There will be almost daily quizzes and other written work. The first and second **tests** will (tentatively) be on June 17 and July 8, both Wednesdays. The **final exam** will be on Friday, July 24.

Integrity is expected. GMU's revered honor system is over 150 years old - much older than GMU itself. Here is relevant policy concerning academic integrity in this class. On tests and quizzes, your work is expected to be exactly that: your work, done without assistance. However, on homework, outside assistance or assistance from other class members is condoned. (That said, homework is most helpful to you if you try extremely hard to work all the problems without any assistance, not even the assistance of the answers in the back of the book. Attempt all the problems in this way, and only then look in the back!)

Contact the **Office of Disability Services** if you are a student with a disability and need academic accommodations. For more information visit http://ods.gmu.edu.

The **Math Tutoring Center** is currently operating online. Additionally, the math department maintains a list of **tutors** for hire. For information on these and other resources, visit the Department of Mathematical Sciences web page and click on *Tutoring*, under *Resources*.