

INSTRUCTOR: Logan Axon

EMAIL: axon@gonzaga.edu

OFFICE: 221 Herak

OFFICE HOURS: MWF 10-11, Tu 1-2, F 11-12 in the Math Lab, and by appointment

TEXTBOOK: *Essential Calculus* 2nd ed. by Stewart

WEB SITE: <http://web02.gonzaga.edu/faculty/axon/157>

DESCRIPTION: Calculus I will introduce students to differential and integral calculus. Students will learn about limits, continuity, differentiation, and basic integration of algebraic, trigonometric, and the natural logarithmic and exponential functions. Applications include curve sketching, related rates, and optimization problems. The successful student will demonstrate proficiency in finding limits, differentiating, evaluating basic integrals, and applying these skills. This material is in chapters 1–4 and sections 5.1–3 of the textbook.

PREREQUISITE: MATH 147 or permission of the instructor.

NOTE: The prerequisite for MATH 258 Calculus and Analytic Geometry II is a grade of C- or better in MATH 157. A grade of D, while passing, will not allow you to move on to Calculus II.

GRADING: Grades will be based on scores on exams, quizzes, homework sets, and worksheets. There will be four exams during the semester, each worth 14% of the final grade. In addition, a final exam will count for 26%. The remaining 18% of the grade will come from scores on homework sets, quizzes, and worksheets. All quizzes will be announced the class before they are given (no pop quizzes). In general there will be 1 or 2 quizzes/worksheets and one homework set each week. Late work will not be accepted without an excuse. No extra credit will be given. Final grades will be assigned using the following rough scale:

| Score | Grade |
|--------|-------|
| 90-100 | A |
| 80-90 | B |
| 70-80 | C |
| 60-70 | D |
| 0-60 | F |

HOMEWORK: The graded homework will consist of WeBWorK problem sets. These can be accessed at <http://webwork.gonzaga.edu/>. These assignments are graded automatically by the computer and you may retry each problem as often as you want. Consequently, I expect perfect scores on these assignments.

A list of additional suggested homework problems will be posted on the course web page. These homework problems will not be collected or graded. It is nearly impossible to learn calculus without lots of practice and so students are strongly encouraged to solve all of the suggested problems. Students are also encouraged to bring questions about homework problems to office hours and class.

ATTENDANCE AND MAKE-UP WORK: Students are expected to attend all classes. All absences should be excused in advance or by a note from a responsible party. Work missed due to an excused absence may still be completed for a grade: students must arrange to make up work as soon as possible. One make-up exam session will be held during the last week of class. New (more difficult) versions of the exams will be used for this session and students must complete *all* missed exams during this *one* session. Excessive unexcused absences may result in the student receiving a grade of V.

CALCULATORS: Calculators (and all other electronic devices, including cell phones) will not be allowed on any exams or quizzes. You should practice solving the homework problems without a calculator whenever possible. Some homework problems (particularly on WeBWorK) may eventually require some calculation, but you should not need to use any more than a very basic calculator. Students who rely heavily on their calculators to solve homework problems often struggle on the exams.

MATH LAB: Help on the homework, or any other class material is available in the Math Lab which is located in Herak 224. A schedule of tutors and their hours will be posted in the Math Lab and on the door to the Math Lab.

ADDITIONAL BUSINESS: Students with disabilities should work with the DREAM office (x4134) to make sure that all necessary accommodations are made. No special accommodations will be made outside of those arranged through the DREAM office. The policies and procedures outlined herein are subject to change. All changes will be announced in class.

A PRELIMINARY LIST OF SUGGESTED PROBLEMS (ODD ONLY UNLESS SPECIFIED OTHERWISE):

- 1.3: 3–9, 23, 39–37
- 1.4: 1–27, 33–41, 49–55
- 1.5: 3–7, 11–23, 27–33, 37–41
- 1.6: 1–7, 13–33
- 2.1: 3–5, 7ab, 9–19, 25–35, 49
- 2.2: 3–11, 19–25, 33–35, 39
- 2.3: 1–27, 31–41, 45, 47, 63
- 2.4: 1–29, 33–41, 45, 55
- 2.5: 1–47, 51–53
- 2.6: 1–27, 33, 35–37, 41–43
- 2.7: 1–21, 27, 37
- 2.8: 1–3, 17–23, 27
- 3.1: 3–43, 57
- 3.2: 1–5, 9–11, 15–23
- 3.3: 1–5, 9–31
- 3.4: 1–23, 31, 33
- 3.5: 3, 7, 11–19
- 3.6: 3, 7, 23, 25
- 3.7: 1–31, 35, 39–41, 47
- 4.1: 5, 17
- 4.2: 1, 13, 15–17, 19–23, 31–35, 41
- 4.3: 1–29, 39, 59, 61
- 4.4: 3–19, 27
- 4.5: 1–47, 57
- 5.1: 3–17, 21–25, 29–43
- 5.2: 1–47, 51–63
- 5.3: 3–43, 49, 51–55, 61–67, 71