MATH 258 CACULUS AND ANALYTIC GEOMETRY II

INSTRUCTOR: Logan Axon EMAIL: axon@gonzaga.edu PHONE: 509-313-3897 OFFICE: 221 Herak OFFICE HOURS: 2-3 MWF, 9:30-10:30 Tu, 3-4 M in the Math Lab (Herak 224), and by appointment TEXTBOOK: <u>Essential Calculus</u> 2nd ed. by Stewart WEB SITE: http://web02.gonzaga.edu/faculty/axon/258

DESCRIPTION: Calculus II is a continuation of Calculus I. Students will develop further sophistication in the use of calculus to model and solve problems. Specific topics to be covered include inverse functions, techniques of integration, applications of integration, and series.

OUTCOMES: Early topics in the class will emphasize calculations, particularly the evaluation of integrals. Students will learn to evaluate integrals using the techniques of integration by parts, trigonometric substitution, and partial fractions. Students will also learn to create sound mathematical arguments in the context of this class, particularly in determining the convergence or divergence of sequences and series. Students will apply logarithmic and exponential functions in the solution of problems from biology, chemistry, and physics. Other applications will include using integration to solve problems in physics and engineering. Students will also develop their skills at mathematical writing as they communicate increasingly complex solutions to problems in this class.

GRADES: Grades will be based on scores on exams, WeBWorK (online homework sets), quizzes, and worksheets. There will be four exams during the semester, each worth 13% of the final grade. In addition, a cumulative final exam will count for 26% of the grade. The remaining 22% of the grade will come from scores on WeBWorK, quizzes, and worksheets. All quizzes will be announced the class before they are given (no pop quizzes). In general there will be at least one quiz or worksheet each week, usually preceded by a WeBWorK assignment. An approximate schedule for the semester is on the course website. No extra credit will be given. Final grades will be assigned using the following scale (with a + or - for the top and bottom scores within appropriate ranges):

Score	Grade
90-100	A
80-90	В
70-80	С
60-70	D
0-60	F

HOMEWORK : WeBWorK assignments will be assigned approximately weekly. These homework sets are automatically and instantaneously corrected and you are allowed to retake them. You should take advantage of this and make sure to get a perfect score on each of 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, however it is nearly impossible to learn calculus without (lots of) practice and so students are strongly encouraged to *do the practice problems*. Even more practice problems are available by request. Students are also encouraged to bring questions about the homework and practice problems to office hours and class.

Students occasionally find Kahn Academy or other on-line instructional material helpful. Unfortunately on-line lessons can be hard to find at the level of this course; I would be happy to help you find material at the right level.

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 online.

ATTENDANCE : Students are expected to attend all classes. All absences should be excused in advance or by a note from a responsible party. Excessive absences (more than 8) will result in the student receiving a grade of V (which works just like an F in GPA calculations). ADDITIONAL BUSINESS : The policies and procedures outlined are subject to change; all changes will be announced in class. The College of Arts and Sciences has suggested that the following be included in all course syllabi. It is important and you should read it at least once.

HARASSMENT, DISCRIMINATION, AND SEXUAL MISCONDUCT: Consistent with its mission, Gonzaga seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and Gonzaga's policy prohibit harassment, discrimination and sexual misconduct. Gonzaga encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to someone from the Campus and Local Resources list found in the Student Handbook about what happened so they can get the support they need and Gonzaga can respond appropriately. There are both confidential and non-confidential resources and reporting options available to you. Gonzaga is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please visit the following websites: http://www.gonzaga.edu/eo and http://www.gonzaga.edu/titleix.

NOTICE TO STUDENTS WITH DISABILITIES AND/OR MEDICAL CONDITIONS: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability/medical condition requiring an accommodation, please call 509-313-4134 or visit the Disability Resources, Education, and Access Management (DREAM) office (room 209 Foley Library).

ATTENDANCE: I follow the university's standard policy on absences: the maximum allowable absence is two class hours (100 minutes) for each class credit. For a three-credit class meeting three times a week, the maximum number of absences allowed is six. For a three-credit class meeting twice a week, the maximum number of absences allowed is four. The grade for excessive absences is "V", which has the same effect as "F" (Fail) and is counted in the GPA. See also "Class Attendance Policy" on page 68 of the University's online catalogue.

ACADEMIC HONESTY: Academic honesty is expected of all Gonzaga University students. Academic dishonesty includes, but is not limited to, cheating, plagiarism, and theft. Any student found guilty of academic dishonesty is subject to disciplinary action, which may include, but is not limited to, a failing grade for the test or assignment in question, a failing grade for the course, or a recommendation for dismissal from the University. See also "Academic Honesty" on page 67 of the University's online catalogue.

COURSE EVALUATION: At Gonzaga, we take teaching seriously, and we ask our students to evaluate their courses and instructors so that we can provide the best possible learning experience. In that spirit, we ask students to give us feedback on their classroom experience near the end of the semester. I will ask you to take a few minutes then to carry out course/instructor evaluation in class. Please know that I appreciate your participation in this process. This is a vital part of our efforts at Gonzaga to improve continually our teaching, our academic programs, and our entire educational effort.