Math 104 - Calculus II - Course Policies

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Office Hours: Posted on webpage

And by appointment (Really!)

TEXT: APEX Calculus, Version 4.0, available at https://www.apexcalculus.com

Overview

This course is a continuation of the single-variable topics covered in Calculus I and a look at how some of these concepts can be extended to multivariable functions. We will only scratch the surface of multivariable calculus, but this should whet your appetite for the follow-up course Math 236 Multivariable Calculus.

One of the most fundamental, and most slippery, topics in mathematics is the relationship between the finite and the infinite. A recurring theme throughout the semester will be the relationship between an approximation and the exact value. One of the most beautiful aspects of calculus is that by taking better and better approximations and extending from the finite to the infinite, we will often be able to find a precise solution.

See the Daily Syllabus on the course webpage for a detailed listing of the topics we will cover during the semester.

Course Goals and Expectations

Two of the goals of this course are that you learn to read a math text and that you learn to communicate mathematics with other students. Mathematics is a very personal discipline that is best learned by *doing* rather than by observing. Therefore, the class will be structured with some lectures to emphasize particular topics, but much of the time will be spent on in-class work. You will have a reading assignment for nearly every Monday, Wednesday, and Friday class meeting, and it is **extremely** important that you complete the reading before class.

One of the features that makes your Wheaton education so special is that we have face-to-face time in small classes to explore material together. The purpose of the pre-class assignments is to shift some of the delivery of content outside the class meetings so that you can build your understanding more deeply during the interactions in class. The class meetings are not intended to be a complete encapsulation of the course material, but instead will focus on the major concepts from the reading and clarifying the more subtle ideas in the course.

The Tuesday meetings will not cover new material, but will be used primarily as lab days where you will work on problems to reinforce the course material. The three In-Class Exams will be given during the Tuesday time slot.

You should expect to put in approximately 2 hours outside of class for each hour in class. In other words, expect to spend about 8 hours per week on calculus outside of class. There will be some weeks where you spend more time (e.g. preparing for exams), and there may be some weeks where you do not spend the full 8 hours.

The Honor Code

We operate under the Wheaton Honor Code for all of your academic work at Wheaton. This carries certain freedoms and responsibilities for both you as a student and me as a professor. I take this quite seriously.

Most likely, no Honor Code issues will arise this semester. If you are uncertain about whether a particular situation falls under the Honor Code, then please consult with me. However, if an Honor Code issue does come up, I will assume that you are prepared for the full consequences. Remember that you should write out, and sign, the following statement on all course work:

"I have abided by the Wheaton College Honor Code in this work."

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Working with Other Students

I strongly encourage you to work with other students outside of class because I believe mathematics is best learned through collaboration. However, you should not turn in identical work to your partner(s); the answers that you give to the homework assignments should represent your own thinking about solutions.

You should cite anytime that you work with another student on a Problem Set. If you fail to do this, it will be viewed as a violation of the Honor Code.

Evaluation

The assignments for the semester fall into two broad groups: Exams and Daily/Weekly Assignments. Your final grade will be determined by

Three In-Class Exams	50%
Comprehensive Final Exam	20%
Reading Assignments	5%
WeBWorK Assignments	10%
Problem Sets	15%

Exams

- In-Class Exams: The purpose of the exams is for you to demonstrate your understanding of the course material
 and, just as importantly, to give you feedback on where your understanding is strong and where you may need
 more work.
 - I will give you a set of sample problems before each exam, and we will have a question and answer session before each exam. For each exam, you will be allowed to bring an 8.5"×11" piece of paper, handwritten on one side, which you will turn in with the exam.
- Final Exam: The purpose of the Final Exam is for you to review the entire semester's content and see connections among the topics from throughout the semester. The Final Exam will be comprehensive and will be based on the three In-Class Exams and the material covered at the end of the semester after the third In-Class Exam.

Daily/Weekly Assignments

- Reading Assignments: The purpose of reading the text *before* class is that if you are familiar with the basic concepts and definitions, then the class meetings can be devoted to the major ideas and subtleties of the material. Mathematical understanding is built in stages, and you will absorb the material more quickly if the class meetings are your *second* exposure to the fundamental ideas.
 - The reading assignments are posted on the course webpage and include two or three basic questions that you should be able to answer after you have read the section. You will submit your responses through Wheaton onCourse. See the *Suggestions for Reading a Math Book* on the course web page for more information.
 - Notice that the Reading Assignments are due at 8:00 pm the night before class! This will give me enough time to review your responses before our class meetings.
- WeBWorK Assignments: WeBWorK is an online system that gives you immediate feedback on whether or not you have answered the problem correctly. The WeBWorK problems are primarily computational in nature, and the goal of these assignments is to give you some experience with the nuts and bolts calculations to help build intuition for the major calculus concepts.

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On most Wednesdays, a new WeBWorK assignment will become available on the server, but the assignments will not close until the Friday before the next exam. It is clearly best to complete each assignment before the next one opens, but you have this extra time to make sure that you have the opportunity to build a solid computational basis for your understanding of the course topics before the next exam.

While I am a strong proponent of WeBWorK, I also know that any online system can occasionally be frustrating because it is not very forgiving with small typos or minor mistakes in notation. Therefore, you can earn full credit for a WeBWorK assignment by getting at least half of the problems completely correct.

• **Problem Sets**: You will also have a Problem Set due most Wednesdays that consists of problems from the textbook that are more conceptual and require more explanation. These problems should be well-written and well-justified and will be graded by an advanced math student. You will be allowed to drop **one** Problem Set at the end of the semester.

We may also have a few short quizzes during the semester that will be included in your Problem Set grade. I will announce any quiz at least two class meetings in advance.

The WeBWorK Assignments and Problem Sets will be the most beneficial to you if you work on them throughout the week, not just on the few days before they are due. I strongly encourage you to discuss the homework with other students, come to office hours, and take advantage of peer tutoring in the Kollett Center, but the answers you turn in should represent your own work.

Class Attendance

Although class attendance is not a specified percentage of your grade, I will keep a class roll to help me determine borderline grades at the end of the semester. If you do miss class, you are responsible for the material that was covered.

Getting Help with Calculus

Please come see me during my office hours! If you have a conflict and cannot make my office hours, please call or email me and we can set up an appointment for another time. You should also take advantage of the tutoring hours in the Kollett Center.

Accommodations for Students with Disabilities

Wheaton is committed to ensuring equitable access to programs and services and to prohibit discrimination in the recruitment, admission, and education of students with disabilities. Individuals with disabilities requiring accommodations or information on accessibility should contact Autumn Grant, Associate Director for Accessibility Services at the Filene Center for Academic Advising and Career Services: accessibility@wheatoncollege.edu or (508) 286-8215.

Campus Counseling Center

The Counseling Center is a confidential resource on campus for all students, providing short term solution focused therapy, case management, emergency services and support. The Counseling Center is open Monday – Friday, 8:30 - 12:30 and 1:30 - 4:30. Students can call (508-286-3905) or stop by 42 Howard Street (the white building between Beard and Art Haus) to make an appointment or seek emergency services during office hours.

Counseling Center staff is available to support students with a wide range of challenges including, but not limited to, anxiety, depression, sleeping and eating concerns, identity exploration, substance use and concentration challenges. The Center welcomes any student to come and have a discussion regarding what their needs are, and the Center will help with next steps of care, whether here on campus, or locally off campus. Outside of office hours, mental health concerns and emergencies should be directed to the Area Coordinator On Call via calling Public Safety at x3333 or 508-286-3333.

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