

Math 107H Calculus II

Section 003

Lecture: MTWRF 9:30-10:20 Oldfather (OldH) 305

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WWW pages for this class: <http://www.math.unl.edu/~mbrittenham2/classwk/107f10/>

(There you will find copies of nearly every handout from class, lists of homework problems assigned, dates for exams, etc.)

Office Hours: (tentatively) Mo 1:00-2:00, Tu 11:00-12:00, We 3:00 - 4:00, and Th 11:00-12:00, and whenever you can find me in my office and I'm not horrendously busy. You are also quite welcome to make an appointment for any other time; this is easiest to arrange just before or after class, or via email.

Text: *University Calculus*, by Hass, Weir, and Thomas (Addison-Wesley, 2007).

ACE outcome 3: This course satisfies ACE Outcome 3. You will apply mathematical reasoning and computations to draw conclusions, solve problems, and learn to check to see if your answer is reasonable. Your instructor will provide examples, you will discuss them in class, and you will practice with numerous homework problems. The exams will test how well you've mastered the material.

Advanced Placement Program: If this is the first college mathematics course that you have attempted, then you may be eligible for 5 hours of free credit for Math 106, provided you get a grade of C, P or better in Math 107H this semester. To be considered for this credit, you should register with the Department of Mathematics, 203 Avery Hall by the end of the third week of classes.

This course, as the name is meant to imply, is a continuation of Calculus 1. We will pick things up slightly before where that course left off, and essentially work our way through the second third of the text. In particular, we will cover the following chapters of the book (although not necessarily in this order):

- Ch. 6, Applications of Definite Integrals
- Ch. 7, Techniques of Integration
- Ch. 8, Infinite Sequences and Series
- Ch. 9, Polar Coordinates and Conics
- Ch. 10, Vectors and the Geometry of Space
- Ch. 11, Vector-valued functions and Motion in Space

Homework will be assigned from each section, as we finish it. It is an essential ingredient to the course - as with almost all of mathematics, we learn best by doing (again and again and ...). Cooperation with other students on these assignments is acceptable, and even encouraged. However, you should make sure you are understanding the process of finding the solution, on your own - after all, you get to bring only one brain to exams (and it can't be someone else's). For the same reason, I also recommend that you try working each problem on your own, first. Some portion of the homework will be collected and graded; it will count 60 points toward your final grade.

Quizzes will typically be held one day each week (probably Friday), at the end of class, unless that week includes an exam (in *our* class...). They will cover material presented in class through the previous Wednesday (or appropriate corresponding day). Your lowest two quiz grades will be dropped before computing your quiz score, which will count 100 points toward your grade. A missed quiz will count as zero (and will therefore be the first grade dropped); a make-up quiz can be arranged only under the most unusual of circumstances.

Midterm exams will be given three times during the semester, in the evenings, from 7pm to 9pm. Specific dates will be worked out at the beginning of the semester. Each exam will count 100 points toward your final grade. You can take a make-up exam only if there are compelling reasons (a doctor

SAYS you were sick, jury duty, etc.) for you to miss an exam. Make-up exams may be harder than the originals (because make-up exams are harder to write!).

Finally, there will be a regularly scheduled **final exam**, on Thursday, December 16, from 10:00am to 12:00noon. It will cover the entire course, with a slight emphasis on material covered after the last midterm exam. It will count 140 points toward your grade.

Your course grade will be based upon this total of $60 + 100 + 3 \times 100 + 140 = 600$ points, and will be converted to a letter grade, taking into account the overall average of the class. However, a score of 90% or better will guarantee some kind of **A**, 80% or better at least some sort of **B**, 70% or better at least a flavor of **C**, and 60% or better at least a **D**.

Stay current! In mathematics, new concepts continually rely upon the mastery of old ones; it is therefore essential that you thoroughly understand each new topic before moving on. Our classes are an important opportunity for you to ask questions; to make sure that you are understanding concepts correctly. Speak up! It's your education at stake. Make every effort to resist the temptation to put off work, and to fall behind. Every topic has to be gotten through, not around. And it's a lot easier to read 50 pages in a week than it is in a day. Try to do some mathematics every single day. **Class attendance** is probably your best way to insure that you will keep up with the material, and make sure that you understand all of the concepts. [And on a more pragmatic note, the instructor writes the exams, so it pays to know what the instructor said!] Even more, **stay ahead!** You are strongly encouraged to read the section to be covered in class prior to its presentation in lecture; this will both improve your ability to follow the lecture and help to focus your attention on any areas where extra effort on your part will be required.

Cell phones should be silenced for the duration of all classes, and extreme restraint should be exercised in answering a call during class. If you feel that you must answer a call, please excuse yourself from the room before beginning to take the call.

Due to the vast range of **calculators** available these days, with widely differing capabilities, the use of calculators will not be allowed in quizzes or exams. In the end, it is not *what* the answer is but *how we arrive at* the answer which will be most important to us; so only the most routine arithmetic computations need to be carried out before we will declare ourselves to "have" the answer to a problem.

The **Math Resource Center** (MRC) is located in Avery 013B, and students in Math 107 are encouraged to use this resource if they have questions related to this course, or as a place to meet and discuss material from the course. Hours for the MRC are MTWR 12:30 - 8:30 pm, F 12:30 - 2:30 pm, and Su 1:00 - 5:00pm.

Departmental Grading Appeals Policy: The Department of Mathematics does not tolerate discrimination or harassment on the basis of race, gender, religion or sexual orientation. If you believe you have been subject to such discrimination or harassment, in this or any math course, please contact the Department. If, for this or any other reason, you believe your grade was assigned incorrectly or capriciously, appeals may be made (in order) to the instructor, the Department Chair, the Departmental Grading Appeals Committee, the College Grading Appeals Committee, and the University Grading Appeals Committee.

Some important academic dates

Aug. 23 First day of classes.

Sept. 3 Last day to withdraw from a course without a 'W'.

Sept. 6 Labor Day - no classes.

Oct. 15 Last day to change to or from P/NP.

Oct. 18-19 Fall break - no classes.

Nov. 12 Last day to withdraw from a course.

Nov. 24 Student holiday - no classes.

Nov. 25-28 Thanksgiving Vacation - no classes.

Dec. 11 Last day of classes.

Dec. 13-17 Final exam week.

Dec. 16 Math 107H final examination.