

Math 2574 Honors Calculus IV

Spring 2016

Instructor: Peter Webb
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Course Site: <http://www.math.umn.edu/~webb>
Office Hours: 11:15-12:05 MWF or by appointment.
Text: Edwards & Penney, Differential Equations & Linear Algebra, Third Edition.

Course Content

This course consists of two related parts, linear algebra (matrices, determinants, Gaussian elimination and the various things that can be deduced from it, vector spaces, eigenvalues, diagonalization) and ordinary differential equations (linear equations, various methods of solution, examination and interpretation of the solutions, especially of some frequently met equations). We will cover almost all of chapters 1, 2, 3, 4, 5, 6, 7 of the book. After that, topics will be selected from chapters 8, 9, 10 according to the time available.

Course Assessment

There will be three full-period mid-term exams, to be held on **Thursday February 18**, **Thursday March 31** and **Thursday April 28**. The final exam will be held at the scheduled time as announced in the Class Schedules, which is **1:30-4:30 Monday May 9**. The final exam will probably not be held in our usual classroom. It is one of the common final exams. You will also have homework and quizzes organized by the TA in recitations. Your final grade will be made up of homework and quizzes 20%, mid-term exams 15% each, final exam 35%.

Homework and Quizzes

Homework will be due on Thursdays, starting January 28. I will assign a list of homework questions by either Monday or Wednesday the week before, giving 8 or 10 days before the homework is due. There will also be a short quiz at the beginning of most of the Thursday recitation periods on the topics covered in the homework due that day. The first quiz will be on Thursday January 28 and quizzes will continue each Thursday unless there is an exam, or unless it is Spring Break.

Aside from this, your TA will be in charge of dealing with homework and quizzes and is ultimately responsible for what homework you do, what happens to that homework (whether it is graded or not) and how the quizzes are administered. This means that your TA determines their own policy for things like what happens if homework is late or what happens if you miss a quiz. If you want to know whether it is possible to miss a quiz or something of that kind, ask your TA. The professor for the course will not know the answer! It is my expectation, however, that your TA will drop the lowest quiz score.

Absence from exams

Missing a midterm is permitted only for the most compelling reasons. Except in extraordinary situations, you should obtain permission from the **professor** to miss an exam in advance; otherwise you will be awarded a 0. These situations include absences due to recognized

University related activities, religious holidays, verifiable illness, and family/medical emergencies. With rare exceptions, if you are excused from taking a midterm, your course grade will be determined by giving extra weight to the final exam, not by taking a make-up exam. No make-up quizzes will be given (the lowest score will be dropped). Students missing the final exam either fail the course or get an incomplete, provided they satisfy the conditions for this.

Attendance

Students are expected to attend all lectures and recitations. Attendance may be checked and included in the grade line.

Expectations of written work

In a number of cases in the homework problems and the questions in the exams you will not get full credit if you simply write down the correct answer. To get full credit you will need to write an explanation of how you got your answer. Where explanations need to be given, these should be written out in sentences i.e. with verbs, capital letters at the beginning, periods at the end, etc. and not in an abbreviated form.

I encourage you to form study groups. However everything to be handed in must be written up in your own words. If two students hand in identical assignments, they will both receive no credit.

Prerequisites

Math 1572H or Math 2573H, honors student and permission of University Honors Program.

Computers and Calculators

Calculators will be allowed on some (probably all) quizzes and exams. Other electronic equipment may not be used or be available during quizzes and exams.

Incompletes

These will only be given in exceptional circumstances. A student must have satisfactorily completed all but a small portion of the work in the course, have a compelling reason for the incomplete, and must make prior arrangements with the **professor** for how the incomplete will be removed, well before the end of the quarter.

Academic Dishonesty

Academic dishonesty in any portion of the academic work for a course shall be grounds for awarding a grade of F or N for the entire course.

Date of this version of the schedule: 1/15/2016