Math 2574   Honors Calculus IV   Spring 2019

Instructor: Peter Webb
                     350 Vincent Hall, 625 3491, webb@math.umn.edu,
Course Site: http://www.math.umn.edu/~webb
Office Hours: 11:15-12:50 MWF or by appointment.
Text: Edwards & Penney, Differential Equations & Linear Algebra, 4th Edition.
                     The 3rd edition is also something you can work from, if you find a copy. So
                     far the only differences I have seen are some different use of color, and there
                     is a new section 7.4, changing the number of edition 3 sections 7.4-7.6.

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 21, Thursday March 28** and **Thursday April 25**. The final exam will be held at the scheduled time as announced in the Class Schedules, which is **12:00-3:00 Thursday 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 31. 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. See the next paragraph for what to do with this homework list. 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 31 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 (my list is a suggestion), 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 (me!) 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 if you have a compelling reason. Except in extraordinary situations you should obtain permission from the **professor** to miss an exam in advance; otherwise you will be awarded a 0. If you are excused from taking a midterm, one possibility is that your course grade will be determined by giving extra weight to the final exam. I will give make up exams only for reasons sanctioned by the university. This includes university sponsored activities and documented illness. Students missing the final exam will fail the course unless they have a very good reason, in which case see Incompletes below.

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. All exam and quiz questions can be done without a calculator.

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 semester.

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: 1/16/2019