# Math 3592H    Linear Algebra and Differential Equations      Fall 2013

**Instructor**:       Peter Webb
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**Course Site:**      http://www.math.umn.edu/~webb
**Library Page:**     https://www.lib.umn.edu/course/MATH/2243
**Office Hours**:     1:25-2:15 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, vector spaces, eigenvalues, diagonalization) and ordinary differential equations (linear equations, Wronskian, solution by eigenvalues and eigenvectors). We will cover most of chapters 1, 2, 3, 4, 5, 6, 7 and 10.

## Course Assessment

There will be three full-period mid-term exams, to be held on **Thursday October 3, Thursday November 7** and **Thursday December 5**. The final exam will be held at the scheduled time as announced in the Class Schedules, which is **1:30-4:30 Friday December 13** (see http://onestop.umn.edu/calendars/final_exams/common.html). The final exam will probably not be held in our usual classroom.
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

Your TA will be entirely in charge of arrangements for homework and quizzes and is ultimately responsible for what homework you do, what happens to that homework (whether it is graded or not) and the administration of quizzes. 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!

There will be suggested homework problems assigned for every section of the book which we study. The approximate week during which we will study each section of the book is shown on a separate calendar, which also shows a list of suggested questions. Whether you do all those questions, or some others, or whatever, is up to your TA.

There will be a short quiz at the beginning of most of the Thursday recitation periods on the topics covered in the homework the preceding week. The first quiz will be on Thursday September 12 and quizzes will continue each Thursday unless there is an exam, or unless it is Thanskgiving. It is my expectation 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. If you are excused from taking a midterm, your course grade will be determined by giving extra weight to the final exam. No make-up exams or quizzes will be given. Except in extremely exceptional situations, all students missing the final exam will fail the course.

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

**Prerequisites**
Grade of at least C- in Math 1272, 1282, 1372, or 1572.

**Computers and Calculators**
You may find a scientific calculator useful in doing some of the homework problems, and on the quizzes and exams. Graphing calculators are **not** allowed on the exams, and you may also **not** use your cell phone or a computer or a tablet as 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 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. For more information on this see http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.pdf

**Tutoring**
There is free tutoring available through the SMART Learning Commons. For more information, visit http://www.tc.umn.edu/~smartlc/plc-schedule/subject/MATH/2243/ or go to the library course page for this course listed near the top of this schedule. The other option is to hire a private tutor. You can obtain a list of the private tutors from the Undergraduate Math Office by emailing ugrad@math.umn.edu.

Date of this version of the schedule:  8/29/2013