MATH 232 - Linear Algebra - Fall 2012

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Office Hours: MWF 12:00 - 1:30
MW 2:30 - 4:30
or by appointment

Textbook: *Linear Algebra*, by Jim Hefferon. You will find an electronic copy (pdf) of this textbook on Blackboard.

Learning Objectives: This class serves as an introduction to linear algebra, which has become one of the most important courses in the modern undergraduate mathematics curriculum. Topics covered include the geometry of linear equations and Euclidean n-space, vector spaces, matrices, determinants, and linear transformations. We will emphasize a mixture of computation, understanding, and theory throughout the semester, while introducing a number of applications of linear algebra.

Class Expectations: These are simple: you should attend every class, you should be alert and pay attention during class, you should ask questions when you are confused or curious, and you should try your best to answer the questions that are presented to you. Officially speaking, I have no attendance policy. However, it should go without saying that the best chance you have for success in this class is to follow the guidelines I have suggested above. Class is most enjoyable, and most productive, when all of you are in class and we are all participating in the learning process.

Homework: You will be assigned homework problems approximately once a week. These will be collected and graded, though some assignments may only be partially graded. These assignments will often be separated into two parts: computational and writing. The writing part of the assignment will usually entail writing proofs or other similar things, and will require you to use proper punctuation, grammar, and the like. These two types of homework assignments will be graded separately, and should be turned in separately. (I will give you the relevant details when the first assignment(s) are due. All of the assigned homework problems are essential for mastering the material we shall discuss this semester. Homework should be submitted by 4:30 pm on the designated day. Late homework will be accepted at my discretion. Your homework should be presented neatly and coherently, and should NOT resemble the work of a first grader.

> **Note:** The solutions to most of the homework problems in this textbook can be found online without too much trouble. However, you are **NOT** allowed to use them. I expect, thought the power of the honor code, that you will abide by this.

Collaboration: You may work with your classmates on the homework. In fact, I encourage you to do so. Discussing these problems/ideas with others will be an excellent way to understand them better. However, it is neither permitted nor beneficial to simply copy someone elses work.

Help Outside of Class: I am here to help you in any way that I can. Interaction with students outside of class is an essential, and enjoyable, part of my job. Please, please take advantage of the office hours I have provided, or set up appointments with me. If my door is open, feel free to drop in.

Exams: There will be three take-home exams given throughout the semester (including the final). The dates for those are tentatively scheduled on **October 5th, November 9th**, and **December 14th**. More details about the exams will be provided before they are given.

Honor Code: Students are expected to write and sign the Honor Pledge on all academic exercises. The pledge reads: "I have adhered to the Honor code in this assignment."

Students With Disabilities: The college will make reasonable accommodations for persons with documented disabilities. Students should notify the Office of Disability Services and come see me as soon as possible to discuss any disability related needs.

Technology: There are many programs that can be quite useful when dealing with linear algebra. Some of the assignments you will be given may involve working with Mathematica. More details will be provided when and if it becomes relevant. When working on your homework, feel free to use calculators/Mathematica/other programs to assist you. Keep in mind, however, that you will need to provide the details of the work on all assignments to get full credit.

Grading: Your final grade for the semester will be determined as follows:

Computational Homework	10 %
Writing Homework	20 %
High Exam	30 %
Middle Exam	25 %
Low Exam	15 %