MATH 343, Spring 2014

Course Information

WVU catalog description: Introduction to Linear Algebra
Textbook: Kolman and Hill, *Elementary Linear Algebra with Applications, 9th edition.*
Course website: http://wvumath251.referata.com/wiki/Math_251(Fall_2013)
   (also linked from my webpage)
Instructor: Casian Pantea (Casi) http://math.wvu.edu/~cpantea/
Class schedule: Mondays, Wednesdays, Fridays 10:30-11:20AM in Hodges Hall 316
Office hours: Mondays, Wednesdays 5-6PM, and by appointment, in Armstrong Hall 305B
Additional help: Math learning center, Monday-Thursday 8AM-3PM, Friday 8AM-2PM

Prerequisites

A firm grasp of Math 156.

Course Goals

Students will

• understand and apply the theory of linear systems (matrix operations, echelon form, Gauss-Jordan reduction, elementary matrices).
• understand and apply the notion of determinant.
• learn the basic theory of vector spaces (linear independence, basis and dimension, coordinates, linear transformations)
• *learn to understand and to write proofs of algebraic facts, and use these facts for computation.*

Evaluation

Grading scheme

• 30% Final exam
• 50% Two best midterm exams
• 10% Homework assignments
• 10% Quizzes
• The following scheme will be used to assign letter grades:

A	$90 - 100\%$
B	$80 - 90\%$
C	$70 - 80\%$
D	$60 - 70\%$
F	$0 - 60\%$

Quizzes

- There will be six 15-minutes quizzes (one every two weeks), out of which the best five will count towards your grade.
- Quizzes will test the material covered during the previous two weeks.
- No make-up quizzes will be given.

Homework

- Homework will be assigned once every two weeks, and due two weeks later (please see the course schedule below for exact dates).
- Your best five homework papers will count towards the final grade.
- Late turn-ins will not be accepted.

Midterms

- There will be three 50-minutes in-class midterm exams, on February 3, March 7 and April 16.
- Midterm exams will test material covered after the previous midterm (they are not cumulative).
- Your best two midterm exams count towards the final grade, each weighted at 25%.
- Calculators are not allowed.
- No make-up midterm will be given.

Final Exam

- Tuesday April 29 2013, 3-5PM in Hodges Hall 316.
- Final is cumulative (i.e. all material covered during the semester will be tested)

Doing well in this class

Although the prerequisites for the class are minimal, the material is dense and not trivial, especially if you have not seen mathematical proofs before. As is often the case in math courses, we will constantly build upon previous stuff; therefore, not leaving gaps in your understanding of the material is crucial for succeeding. This will require a sustained effort on your part, and in addition to attending lectures, you are encouraged to take advantage of instructor's office hours and the drop-in Math Learning Center. Of course, this is not a substitute for also working on your own; it is essential to think about the material, read the suggested texts, and solve homework problems by yourself. This last bit is a prerequisite to being able to solve problems under the pressure of a quiz or an exam.

Accessibility Needs

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with the Office of Disability Services (304-293-6700).