

Mathematics 221 SYLLABUS Spring, 2008

Instructor: Fang Chen

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Office Hour: To be announced weekly on the class conference

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Course Content: Mathematics 221 is an introduction to linear algebra. This course will cover systems of linear equations, vectors, matrices, determinants, vector spaces, linear transformations, eigenvalues and eigenvectors, inner product spaces, and applications. We will study these topics over three fields of scalars, real numbers, complex numbers, and the finite field with two elements.

Course Objectives: At the end of the course, the student should achieve the following goals: to know the basic definitions and theorems in the field of linear algebra as described in the course content; to solve basic problems in linear algebra using matrices and matrix operations; to prove the fundamental relationships (theorems) between the concepts in the course.

Textbook: H. Anton, Elementary Linear Algebra, ninth edition.

Attendance: Students are expected to attend all classes and are responsible for all material covered in class as well as any changes made in the schedule regarding homework and tests. Class attendance and consistent preparation for class will determine the success or failure the student realizes in this course.

Learnlink: There is a class conference on Learnlink, **Math221Spring2008**. Outlines of each class will be posted there. This includes topics covered that day, homework assignments, suggestions on studying the textbook, topics to preview before next lecture and other announcements. Students may ask questions and make requests of a general nature on this conference. Individual concerns should be sent directly to your professor. Students should place this conference on their desktop and check it frequently.

Grading:

Tests (2 @ 100 points each)	200
Problem Sets (3 @ 100 points each)	300
Homework	100
Final Exam	200

Total points	800
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A rough guide to assign letter grades:

A: roughly more than 90 %; B: 80 – 89 %; C: 70 – 79 %; D: 60 – 69%; F: below 60 %
Grades of A-, B+, B-, C+, C-, D+ may be assigned.

Tests: There are two closed-book, mid-term tests, each worth 100 points. These will be scheduled at times convenient to both the instructor and students.

Problem Sets: There are three problem sets. The problem sets are take-home and open-book, but they are to be worked on one's own.

Homework: Homework will be assigned on a regular basis and will be collected and graded.

Final exam: A closed-book, cumulative final exam, worth 200 points, will be given at the time scheduled by the registrar.

Written Work: Thoughts are expressed by sentences. Your written work must be in complete sentences. Use mathematical symbols wherever appropriate; do not use a lot of words. Pay attention to how the problems are worked out in the textbook. Your work should be neat and legible. It is common practice to rewrite solutions once they are found.

Calculators: In general, calculators will not be allowed unless the opposite is announced.

HONOR CODE: THE HONOR CODE OF OXFORD COLLEGE APPLIES TO ALL WORK SUBMITTED FOR CREDIT. ALL SUCH WORK WILL BE PLEDGED TO BE YOURS AND YOURS ALONE. THIS IS THE CASE WHEN YOU PLACE YOUR NAME ON WORK SUBMITTED.