M 221-01: Introduction to Linear Algebra (Fall 2010)

Class: MWF 10–11am, 1-148 Wilson Hall

Instructor: Lukas Geyer, 2-254 Wilson, Tel. *5342,
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Office Hours: MF 9-10am, W 1-2pm, or by appointment

Website: `http://www.math.montana.edu/~geyer/2010/fall/221.html`

Required Text: Gilbert Strang, *Introduction to Linear Algebra (4th ed)*, Wellesley - Cambridge Press

Prerequisites: M 166 or M 172

This class is an introduction to the theory of matrices and vectors, commonly known as Linear Algebra. The goal is to cover most of chapters 1–6 in the textbook. Topics include linear equations, vector spaces, orthogonality, determinants, eigenvalues, and eigenvectors. Various applications to problems in science and engineering will be given.

The following is a rough schedule, subject to change.

Monday	Wednesday	Friday
08/30: 1.1	09/01: 1.2	09/03: 1.3/Quiz 1
09/06: Holiday	09/08: 2.1	09/10: 2.2/Quiz 2
09/13: 2.3	09/15: 2.3	09/17: 2.4/Quiz 3
09/20: 2.5	09/22: 2.6	09/24: 2.7/Quiz 4
09/27: Review	09/29: **First Test**	10/01: 3.1/Quiz 5
10/04: 3.2	10/06: 3.3	10/08: 3.4/Quiz 6
10/11: 3.4	10/13: 3.5	10/15: 3.5/Quiz 7
10/18: 3.6	10/20: 4.1	10/22: 4.2/Quiz 8
10/25: 4.3	10/27: 4.4/Quiz 9	10/29: Review
11/01: **Second Test**	11/03: 5.1	11/05: 5.2/Quiz 10
11/08: 5.2	11/10: 5.3	11/12: 6.1/Quiz 11
11/15: 6.1	11/17: 6.2	11/19: 6.4/Quiz 12
11/22: 6.4	11/24: Holiday	11/26: Holiday
11/29: 6.7	12/02: 6.7/Quiz 13	12/04: Review
12/06: **Third Test**	12/08: Review	12/10: Review

Final Exam: Thursday, December 16, 6–7:50pm.

Homework will be assigned but not graded. However, students are strongly encouraged to do the homework problems. In particular, the quizzes will be made up of selected homework problems.

Grade: 10 points for the best 10 quizzes (the three lowest score will be dropped), 100 points for the two highest test scores each (the lowest will be dropped), and 200 points for the final exam, making for a possible total of 500 points.

The letter grades are determined from the points as follows: **A** 465–500 pts, **A-** 450–464 pts, **B+** 435–449 pts, **B** 415–434 pts, **B-** 400–414 pts, etc.