Spring 2-1-2018

M 221.02: Introduction to Linear Algebra

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This syllabus contains information about this class. Please read this carefully and keep it for future reference (in case you loose it, a copy of the syllabus will be posted on the class Moodle page). In case you have questions, please do not hesitate to ask me. A good time for questions is right after class or during office hours.

Instructors: Javier Perez Alvaro (Office: Math 205A, Phone: 243–5562)
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Office Hours: See http://www.umt.edu/people/perezalvaro for up-to-date office hours

Prerequisite: M172 or M182, or consent of instructor

Moodle Page: https://moodle.umt.edu/course/view.php?id=21416
                    Homework assignments and other information pertinent to this course (such as office hours and tentative schedule) will be posted at this web site.

Text: *Introduction to Linear Algebra*, by Gilbert Strang.

Learning Outcomes: The learning goals for this course are:

- Solve systems of linear equations and solve matrix equations;
- Identify linearly dependent and independent sets of vectors;
- Compute bases for column, row and null spaces;
- Represent linear transformations with matrices;
- Compute and use determinants;
- Compute eigenvalues and eigenvectors, and determine if a matrix is diagonalizable;
- Determine and use orthogonality;
- Use linear algebra to solve basic applied problems;
- Prove elementary statements in linear algebra.

Grading:

- Tests: There will be three 50 minute in-class exams during the semester. All of these exams are closed book exams.

- Final Exam: There will be a final exam on all material covered in the course. This exam is scheduled for Monday, May 7, 3:20 pm – 5:20 pm.

- Homework: There will be weekly homework assignments. Homework will not be collected but will motivate in-class quizzes.

- QUIZZES: There will be weekly quizzes based on assigned homework and examples worked in class. Quizzes will start at the beginning of the class period, so please be on time. There will be no make-ups for missed quizzes. The lowest three scores will be dropped. Quizzes will be announced at least two class periods prior to a scheduled quiz.

ASSESSMENT: 15% Quizzes
60% Three Exams
25% Comprehensive Final Exam

GRADE SCALE:

$\geq 93\%$	90%	87%	83%	80%	75%	70%	65%	62%	58%	55%	$\leq 55\%$
A	A^-	B^+	B	B^-	C^+	C	C^-	D^+	D	D^-	F

UNIVERSITY DATES AND DEADLINES: You should be aware of the important dates and deadlines posted by the **Registrar's Office**.

IMPORTANT NOTE: Announcements made in class are considered addenda to this syllabus. Make sure you stay informed as to the progress of the class.

HONESTY: All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://www.umt.edu/vpesa/Dean of Students/default.php.

ACCOMMODATION: The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors and Disability Services for Students (DSS). If you think that you may have a disability adversely affecting you academic performance, and you have not already registered with DSS, please contact DSS in Lommassen 154. I will work with you and DSS to provide an appropriate accommodation.