Instructor: Christy Hazel   **Office Hours:** M 3-4:30, W 2-3,
Email: chazel@uoregon.edu   R 4-5:10
Office: Fenton 305   & by appointment

Basic information:

- **Class meetings:** 11-11:50am MTWF in Straub 253

- **Class materials:**

    - **Text:** *Linear Algebra and its Applications*, by Lay et. al., 5th edition.
    - **Calculator:** You may use calculators on assignments, but no calculators will be permitted on the quizzes or exams. You do not need to purchase a calculator for this course.

Prerequisites and Expectations: All students enrolled in this course are expected to . . .

- Have taken and passed (with a C− or higher) Math 252.

- Attend and participate in every class meeting.

- Respect the instructor and other students in the course.

- Seek out help from the instructor as needed. This is a fast-paced course; if you start to feel confused, ask questions in class and/or come to office hours. I'm here to help!

Learning Objectives: We will be covering material from Chapters 1–4 in the text. The course begins with the study of solving systems of linear equations by manipulating vectors and matrices. It then goes on to introduce various properties of matrices and vectors with the ultimate goal of introducing linear transformations defined by matrices and vector spaces. By the end of the course, a successful student in this course should be able to . . .

- express a system of linear equations as a matrix equation;

- find the general solution of a system of linear equations using row reduction;

- determine if a set of vectors in $\mathbb{R}^n$ is linearly independent or linearly dependent;

- understand the definitions of vector space, subspace, basis, and dimension;

- understand how to convert a spanning set for a subspace into a basis for the subspace;

- determine if a vector lies in a span;

- find the dimension of a span of vectors;

- find the coordinates of a vector with respect to a basis;

- find the null space and range of a linear transformation.

Grading: Course grades are weighted according to the following scheme.

Homework	20%
Quizzes	20%
Midterm (Friday of Week 6)	25%
Final (Monday of Week 11)	35%

Standard grade assignments will be made (e.g. grades in the 80% to 90% range will be B's, those in the 70% to 80% range are C's, etc.) Plus and minus grades will be awarded in the upper and lower 2% of a bracket. (e.g. A grade of B+ is awarded between 88% and 90%; B- between 80% and 82%). I reserve the right to apply a course adjustment to grades at the end of the term.

Homework: There will be one assignment with three sets of problems assigned each week. The first set will consist of practice problems that you do not need to turn in. The second set will be due on Friday of that week. The third set will be due on Tuesday of the following week. Homework will be posted on Canvas. Your first set of problems is due *Friday of Week 1*.

No late homework will be accepted under any circumstances. If you need to miss class, turn the assignment into me or my mailbox before class (please email me to let me know if you place an assignment in my mailbox).

Quizzes: At the beginning of every Friday class except the exam day, we will have a short quiz over the previous week's assignments. The first quiz will occur at the beginning of class on *Friday of Week 2.*

No make-up quizzes will be offered. Rather, *your lowest quiz grade will be dropped.* This policy is there exactly to account for issues such as over-sleeping, sickness, having a bad week, etc.

Exams: There will one midterm exam and one final exam. The midterm exam will take place on Friday of Week 6, and it will cover the first five weeks of material. The cumulative final exam will take place on Monday, March 18 from 10:15am-12:15pm (Week 11).

No make-up exams will be offered. Exams can only be taken other than the scheduled time if arrangements are made in advance, and a valid and documented reason for not attending the scheduled time is provided.

Student Conduct: Violations of the student conduct code results in the incident being included on your student conduct record as well as a failing grade on any coursework related to the violation or simply a failing grade in the course. **The University of Oregon requires all instances of cheating be reported, no matter how small.** Cheating includes, but is not limited to:

- Looking at another student's exam during a test.

- Copying the work of another person (student or otherwise) and submitting it as your own.

- Using any materials except those explicitly approved during a test-taking situation.

- Resubmitting graded work that was altered after being returned.

- **Copying answers from the internet and turning them in as your own.**

For a list of other descriptions of cheating, see the Student Conduct Code.

Accessibility: For those of you who are currently registered with Accessible Education Center for a documented disability, please present your paperwork to me during the first week of the term (or earlier) so that we can design a plan for you. Those of you with a disability (or who might) but are not registered with AEC should contact them as soon as possible. It is much more likely that measures can be taken to provide adequate special accommodation if the organization is done through AEC. Please let me know if you need additional accommodations.

Sexual Violence: I am a student-directed employee. For information about my reporting obligations as an employee, please see Employee Reporting Obligations. Students experiencing any form of prohibited discrimination or harassment, including sex or gender based violence, may seek information on safe.uoregon.edu, respect.uoregon.edu, titleix.uoregon.edu, or aaeo.uoregon.edu or contact the non-confidential Title IX office (541-346-8136), AAEO office (541-346-3123), or Dean of Students offices (541-346-3216), or call the 24-7 hotline 541-346-SAFE for help. I am also a mandatory reporter of child abuse. Please find more information at Mandatory Reporting of Child Abuse and Neglect.

Tentative Schedule: Below is a tentative schedule of the sections will be covering each week, noting this is likely to change as the term progresses. There is a detailed schedule of assignments, quizzes, and exams given on Canvas. I will also post weekly recommended readings that are more up-to-date than the schedule below.

Week 1	1.1-1.3		Week 6	3.2 (Midterm Exam)
Week 2	1.4-1.6		Week 7	3.3, 4.1-4.2
Week 3	1.7-1.9		Week 8	4.3-4.4
Week 4	2.1-2.2		Week 9	4.5-4.6
Week 5	2.3, 3.1-3.2		Week 10	Catch-up and Review
			Week 11	Final M 10:15am-12:15pm