



determinants. We will cover these topics in more details, along with many other topics from linear algebra.

**Course Material** We aim to cover the topics in chapters 1-7 of the Meyer text. To put this another way, we aim to cover much of chapters 1 - 8 of the Bretscher text. Particular topics will include  $LU$  factorization; a discussion of vector spaces, subspaces, and the so-called Fundamental Theorem of Linear Algebra; the Gram-Schmidt Procedure; The Singular Value Decomposition.

**Homework** Assigned each Friday, due the next Friday at the start of class. Homework will be collected and graded for completeness (but not in complete detail). However, homework will be the basis of the weekly quizzes as well as the midterm exams. .

You are **ENCOURAGED** to talk with each other and with the Instructor about the homework, but **I really believe it's best if you write up solutions yourself, using your own words.**

**Quizzes** There will be a weekly quiz each Monday after the Friday when homework is turned in. This quiz will take 5-10 minutes and will consist of problems similar to homework problems. If you can do the homework, you will be able to do the quizzes. Your lowest quiz score will be dropped before calculating the final grade (this will allow you to miss a quiz, or to do poorly on a quiz).

**Exams** There will be three midterm exams, each given in class. **The dates of the midterm exams will be announced during the first week of classes and this document updated on the course webpage.** UPDATE: These dates are: Midterm I on February 23; Midterm II on March 30; Midterm III on May 4. In every case the midterm will cover through material covered in the previous Friday's lecture.

**NO MAKEUP EXAMS CAN BE GIVEN.** If you need to miss a midterm exam, you should get the instructor's permission, in writing, ahead of time - but such permission will be given only in the most serious of circumstances. Absences from a midterm exam not discussed ahead of time will result in the score of 0 for that exam. Medical emergencies should be documented by a note from the Doctor and should be situations where the student could not have taken the exam.

**Grading** Course grades are computed as follows: 5% homework; 20% quizzes, 75% midterm exams (25%each). Students should bring any questions about grading to the Instructor within one week of the graded material's earliest return to students in the class. (So e.g. if a student is not present to collect an exam, they have one week from the time of the missed class where that exam was returned to ask about grading for the exam.) .

**Reserve Texts** : There are many excellent texts in Linear Algebra. You are encouraged to focus mainly on our course texts - as the lectures and course material are centered very much on these texts. There are however other places for you to consult if you want a slightly different presentation of the material. Several texts will be put on reserve in the library on the third floor of Vincent. (You can search for these texts at the Library homepage, <https://www.lib.umn.edu/services/reserves>. See in particular the texts by Olver and Shakiban (Applied Linear Algebra) and the text by Leon (Linear Algebra with Applications).