

# Math 322 Matrix Algebra Spring 2019

Professor Margaret Readdy  
825 Patterson Office Tower  
phone: 859-257-4680  
margaret.readdy@uky.edu

Office Hours: MW 10-10:50 and by appointment  
<http://www.math.uky.edu/~readdy/322/>  
secretary: 859-257-3336

Lectures MWF 9:00 am in CB 335

Text: David Lay, Steven Lay, Judi McDonald, **Linear Algebra and Its Applications**, 5th edition.

You may also use an earlier edition of the text, keeping in mind the homework problems, the numbering of the problems and the number of authors may have changed.

Material: Chapters 1 through 7. Some material will be omitted.

This course will focus on the algebra of matrices. Topics include vector spaces, solving linear equations, matrix factorizations, determinants, eigenvalues and eigenvectors, diagonalization, inner product spaces, Gram-Schmidt and symmetric matrices.

Prerequisite: Math 114 Calculus II

Exams: There will be two in-class exams tentatively scheduled on Friday, February 22, 2019 and Friday, April 5, 2019.

Final Exam: Wednesday, May 1, 2019 from 8:00 am - 10:00 am.  
The final exam is cumulative.

Homework: Homework is assigned, but not graded. You are expected to keep up with course readings and assignments. Students are encouraged to form study groups and discuss homework and the course material with each other.

Quizzes: A short quiz will be given during the last fifteen minutes of each Friday lecture, except during exam weeks. This will cover material from the previous week's Monday, Wednesday and Friday lectures.

The lowest two quiz grades will be dropped. If you miss a quiz due to an absence (excused or not), this will be one of the two quiz grades which will be dropped.

Grading Scale: Each component of your coursework (exam 1, exam 2, quizzes, final) will be curved using the scale:

A 90-100%, B 80-89%, C 70 - 79%, D 60-69%, E Below 60%.

Pluses will be awarded if you are at the upper end of a particular grade, while minuses for being at the lower end.

Course Grade: Each component of your coursework (quizzes, exam 1, exam 2, final) will be given a letter grade ranging from A+ to E, where A+ = 4.3, A = 4.0, A- = 3.7, B+ = 3.3, B = 3.0, ..., E = 0. Your course grade will be computed using the following weighted average of the letter grades:

Quizzes	15 %
Exam # 1	25 %
Exam # 2	25 %
Final Exam	35 %

At the instructor's discretion, a particular component of your coursework may be curved.

Absences: Faculty Senate Rule 5.2.4.2 defines acceptable reasons for excused absences to be: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor. As required by University rules, you must present full documentation in order to request makeup work for a valid absence. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to University-related trips or a major religious holiday is required no later than 7 days prior to the absence.

Cheating: Don't do it. It is an extremely serious offense. As a minimum response, I will give a zero to the offender.

Devices: No digital devices of any kind (cellphones, computers, calculators, etc) are allowed during quizzes and exams. By University policy the use of such constitutes cheating.

Laptops and/or cellphones are not allowed to be used at anytime in the classroom without the instructor's prior consent.

Plagiarism: Plagiarism includes copying from outside sources, including internet sources. If charged, at minimum you will receive a zero. Maximum penalties include being suspended, dismissed or expelled from the University. For further information, consult the Faculty Senate rules.

Classroom  
Decorum:

Code of Student Conduct (AR 4.10), Section V, Letter J, Instructional Setting Behavior:

*“Students who engage in conduct that results in disruption of an instructional setting may be directed by the instructor to leave the class for the remainder of the instructional setting period.”*

Examples include but are not limited to reading email during class, texting, taking phone calls, updating your facebook page, using a fidget spinner, reading the newspaper, interrupting classmates and speaking aloud without being called upon. An attitude of respect for and civility towards other students in the class and the instructor is expected at all times. If what you are doing would be inappropriate behavior on a job interview, then it is very likely inappropriate behavior in the classroom.

Photography  
& Recording

Video and audio recordings are not permitted during the class unless the student has received prior permission from the instructor. Recording of other students is prohibited. Any distribution of recordings is also prohibited. Students with specific recording accommodations approved by the Disability Resource Center should present their official documentation to the instructor.

All content for this course, including handouts, assignments, powerpoint lectures and videos, are the intellectual property of the instructor and cannot be reproduced, sold or used for any purpose other than educational work in this class without prior permission from the instructor.

Any violation of the class photography & recording policies will result in your final course grade being reduced by one letter grade as a minimum penalty.

Students  
with  
Disabilities:

Students with disabilities should provide your instructor with a Letter of Accommodation from the Disability Resource Center. The DRC can be reached via phone (859-257-2754) or email ([drc@uky.edu](mailto:drc@uky.edu)).

The instructor reserves the right to modify this syllabus at any time.