Math 322 Matrix Algebra Section 004

Instructor: Fernando Xuancheng Shao
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Office: Patterson Office Tower 777
Office Hours: MW 4-5pm, or by appointment (if you want to set up an appointment with me, you might find my [Availability Calendar](#) useful).

Lecture: MWF 11:00--11:50, CB 335

Textbook:

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 that the homework problems and the numbering of the problems may have changed.

Material:

Chapters 1 through 7; some sections 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.

Homework:

Weekly homeworks will be posted on Canvas. You will be divided into groups of up to 4; each group will submit one solution and each member of the group will receive the same credit.

Quizzes:

A short quiz will be given during the last 10 minutes of each Friday lecture, except during the first week, the last week, and the exam weeks. 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.

Exams:

There will be two in-class exams, which will be scheduled soon. The final exam will take place as scheduled by the registrar's office; it will be 2-hour long and cumulative.

Grading:

The course grade will be computed as follows:

- 25% Homework
- 15% Quizzes
- 15% Exam #1
- 15% Exam #2
- 30% Final Exam

The letter grade will be determined by applying the usual 10% scale to the percent grade.

Absences:

Senate Rules 5.2.4.2 defines the following as acceptable reasons for excused absences: (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.

Academic Integrity and Cheating:

Please see the University of Kentucky Policy on Academic Integrity and Cheating here.

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.

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 during a job interview, then it is very likely inappropriate behavior in the classroom.

Students with Disabilities:

If you have a documented disability that requires academic accommodations, please see your instructor as soon as possible. In order to receive accommodations in this course, you must provide your instructor with a Letter of Accommodation from the Disability Resource Center. The Disability Resource Center coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at drc@uky.edu. To access their web site click here.