

MATH 322H
HONORS MATRIX ALGEBRA
SPRING 2019

Instructor: Prof. Bert Guillou
email: bertguillou@uky.edu
Office: 773 Patterson Office Tower
Office Hours: M 1-2, R 10:30-11:30, or by appointment.

Course info: MWF 10:00-10:50, 335 Whitehall Classroom Building.

Text: *Linear Algebra and Its Applications, 5th ed.*, David C. Lay, Steven R. Lay, and Judi J. McDonald

Test dates (estimate):

- (1) Test 1: Friday, Feb. 8,
- (2) Test 2: Friday, Mar. 8,
- (3) Test 3: Wednesday, Apr. 10.

Final exam: Thursday, May 2, 8:00-10:00 AM

The main topics for this course will be

- solving systems of linear equations
- theory of vector spaces and linear transformations
- Determinants
- eigenvalues, eigenvectors, and diagonalization
- inner product spaces, orthogonal projection, and least squares approximation
- the spectral theorem
- advanced topics, such as Fourier series

Homework: There will be both written and online homework (WebWork) for this class. WebWork can be accessed from a Module in the course page on Canvas.

Written homework will be due at the beginning of class each **Wednesday**. Assignments will be posted on Canvas. I will grade selected problems from each assignment and will give partial credit. The lowest homework score will be dropped at the end of the semester.

You are encouraged to discuss assignments with other students, but your solutions must be written up independently. Copying a written solution from another student (or another source) and submitting it as your own will be considered cheating. Please see the UK office of Academic Ombud Services website (www.uky.edu/Ombud) for information about plagiarism.

Quizzes: There will be a weekly quiz, at the end of class on Fridays, starting Jan. 18. There will be no quiz the week of an exam.

Grading policy: Your grade will be made up of the following components:

- (1) Quizzes - 5%
- (2) Written Homework - 7.5%
- (3) Online Homework - 12.5%
- (4) Midterm exams - 17% each
- (5) Final exam - 24%

Academic Integrity: Don't cheat! It is an extremely serious offense. As a minimum response, I will give a zero to the offender.

No cellphones, computers or calculators allowed during 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.

Disabilities: Students with disabilities who require accommodations to participate in this class are asked to see me as soon as possible. In particular, any accommodations for exams must be arranged a week in advance and will require a letter from the DRC.

Non-Discrimination Statement: Discrimination is prohibited at UK. If you experience an incident of discrimination we encourage you to report it to Institutional Equity & Equal Opportunity (IEEO) Office, 13 Main Building, (859) 257-8927.

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