# MA 322: Matrix Algebra, Sections 008 and 009 

Spring 2017

## Instructor Information:

| Instructor: <br> Office: | Dr. erica j. Whitaker <br> Patterson Office Tower 741 (POT 741) <br> Email: |
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| ewhitaker@uky.edu (The best way to reach me! ) |  |
| Telephone: Please include "Math 322" somewhere in the email. <br> Office Hours: Office phone: 859-257-6792; Home phone 606-462-3328 <br>  MWF 1:15 - 2:15, T/Th 2:15 - 3:15 and by appointment |  |
|  | Other times available! Send an email or stop by my office. |

Class Time and Location: Section 9 T/Th 11:00 a.m. - 12:15 p.m., CB 214
Section 8 T/Th 12:30 p.m. - 1:45 p.m., CB 337
Instructor Web Page: http://www.ms.uky.edu/~ejwh226/
(will have a link to our course website. The course website will have resources, including copies of handouts, announcements and important links.)

Textbook: Linear Algebra and its applications by David Lay. You may use either the $4^{\text {th }}$ or $5^{\text {th }}$ edition. We will cover most of chapters 1 through 6.

Grading: Your grade will be calculated out of 510 points, distributed as follows. Dates are tentative.
Quizzes (Jan 26, March 9, April 20)
20 each $\times 3$
Exams (Feb 16 and April 6)
100 each $\times 2$
Homework (including online, written and classwork)
100 total
Cumulative Final exam
150
The final exam for section 9 is Tuesday May $2^{\text {nd }}$ from 1:00 p.m. - 3:00 p.m. The final exam for section 8 is Monday May $1^{\text {st }}$ from 10:30 a.m. - 12:30 p.m.

Your overall letter grade will be based on the following percentages (rounded to the nearest whole percent):

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\text { A } 90 \%-100 \% \quad \text { В } 80 \%-89 \% \quad \text { C } 70 \%-79 \% \quad \text { D } 60 \%-69 \% \quad \text { E } 0 \%-59 \%
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Absences: If you will miss a quiz or exam, you must notify me as soon as possible. For homework and/or classwork, we will have a few drop grades so that missing an assignment or two won't adversely affect your grade. You may need to provide appropriate documentation; see Senate Rule 5.2.4.2 for more information about excused absences.

Calculator: For exams and quizzes, the problems will be designed so as not to require a calculator. You may use a basic, scientific calculator to do arithmetic if you wish. You may not use a graphing calculator, anything with algebra capabilities, anything that can be programmed, or anything that communicates with the outside world (no cell phones).

Homework: The homework will be both online and written, and may include a classwork component.

The online system is WeBWork, which is free to students. Deadlines will vary based on content, and will be posted on our course website, along with a link to the homework. Your login is your link blue ID using CAPITALS (mine would be EJWH226), and your initial password is your student number without the leading 9 .

Written homework will be turned in about once a week. For written homework, you are encouraged to discuss assignments with other students, but your solutions must be written up independently. Copying a written solution from another student 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.

Academic Integrity: Don't cheat! It is an extremely serious offense. All students are expected to follow the academic integrity standards as explained in the University Senate Rules.

Disability Accommodations: If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center ( 725 Rose Street, Multidisciplinary Science Building, Suite 407, 859-257-2754, email address dtbeac1@uky.edu) for coordination of campus disability services available to students with disabilities.

## Course Description (from the catalog)

Algebra of matrices, elementary theory of vector spaces and inner product spaces, the solution of simultaneous linear equations using Gaussian elimination and triangular factorization. Orthogonal projections, pseudo inverse and singular value decomposition, least squares approximation. Determinants, eigenvalues and eigenvectors, diagonalization.

