Math 240-0101: Linear Algebra.
University of Maryland, Summer 2015.

Instructor. Adam Lizzi, alizzi@math.umd.edu.

Office. MATH 4202.

Lectures. Monday, Tuesday, Wednesday, Thursday, and Friday, 11:00am – 12:20pm, in MATH 0409.

Office Hours. Monday, Wednesday, and Friday, 2:30pm – 3:30pm, in MATH 4202.
Additional office hours are available by appointment (just send me an e-mail and we'll work it out).

Course Website. I will maintain a page for the class at http://www2.math.umd.edu/~alizzi.

Textbook. Linear Algebra and its Applications, David C. Lay, fourth edition. We'll cover most of the first seven chapters, with some skipped sections here and there. (Check the schedule online.)

Goals of Course. This course will cover the basic things one can do with linear algebra: solve systems of linear equations, describe certain functions between vector spaces, and find useful coordinate systems in which to express said functions. Just as the main object in a calculus class is the derivative, the main object in a linear algebra class is the matrix. We'll learn what matrices are, what they describe, what properties they could have, and what tests and calculations tell us whether any given matrix has one of those properties.

Exams. There will be three midterm exams during the course, with a final exam on the last day of class. All of the exams will be taken during class, replacing lecture for that day. The midterm exams will occur on Friday, June 12, Wednesday, June 24, and Friday, July 10. The final exam is on Friday, July 24. Please try to make coming to class on those days a priority.

Quizzes. There will be quizzes roughly twice per week, typically given at the beginning of class. They're meant to be easy problems that check whether you have a basic understanding of what's going on. Be aware that the difficulty level of exams may not correlate with the difficulty level of quizzes.

Homework. On the web page there will be suggested problems for each section of the textbook. A small number of them will be designated to be turned in – on the order of two to five questions per section. Those questions will be due either on the upcoming Monday or Thursday; the due dates will be marked on the web page. My goal is not to drown you in homework, but I do want to try to get you into a habit of thinking about this course a little bit outside of class every day.

Advice. (1) Work together. Collaboration is the best way to achieve understanding of a concept. In collaborating, the chance to explain a piece of a problem to someone else often arises. This is how mathematics takes root in your brain. Listening to me five times a week is important too, but you can't assess what you know or don't know without trying to do problems yourself.

(2) Don't get left behind. We're condensing a fourteen-week class into eight weeks. It's going to move pretty quickly. Come to office hours if you're feeling lost. Avoid coming to class with unresolved confusion and then getting nothing out of that day's lecture.
**Grading Rubric.** Your grade will be determined primarily by your performance on the exams: each midterm counts as 15% of your grade, while the final will count for a further 25%. The final thirty percent of the grade will be split between homework and quizzes.

To recap:

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<th>Percentage</th>
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<tbody>
<tr>
<td>Quizzes</td>
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<td>Homework</td>
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<td>Three exams</td>
<td>45%</td>
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<tr>
<td>Final</td>
<td>25%</td>
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You will get an A if you have an average above 90%. You will receive a B at worst if you have an average above 80%. You will receive a C at worst if you have an average above 70%. You will receive a D at worst if you have an average above 60%. It is possible that some people may receive these letter grades with lower scores, but this will be handled at the end of the term.

**Important dates.** The last day to drop the course without incurring a “W” grade is Friday, June 5. June 5 is also the last day to apply to take the course for no credit, or to take the class on a pass/fail basis. The last day to drop the course without petitioning the dean is Friday, June 26.

**Religious Observances, Discrimination, Sexual Harassment.** I will make all efforts to accommodate any conflicts that may arise due to religious observances, provided they are brought to my attention in advance. I won't discriminate against any of my students nor will I put up with a classroom atmosphere that suggests such behavior would be tolerated; the same goes for sexual harassment. Links to the University's policies regarding these matters can be found on the course website.

**Disability services.** If you qualify for accommodations because of a disability, show me a letter from Disability Services in a timely manner and I will address your needs. See the course website for links to the relevant offices.

**Honor Code.** I believe strongly in the honor code and expect everyone at the University to abide by it. Cheating of any sort, including but not limited to plagiarism on homework, will be reported to the Honor Council. See the course website for more information.