18.06 Linear Algebra, Fall 2012

Lecturer: Alan Edelman (office 2-343, email: edelman@math.mit.edu)
Lecture hour: MWF at 11am in room 26-100
Course Administrator: Geoffroy Horel (office: 2–490, email: gh@math.mit.edu)

**Course Web Page:** [http://web.mit.edu/18.06/](http://web.mit.edu/18.06/) (handouts, announcements, etc.).

**Textbook:** Introduction to Linear Algebra (4th edition) by Gilbert Strang.

**Recitations:** You must enroll in a specific section (they are listed on [web.mit.edu/18.06/](http://web.mit.edu/18.06/)). Your homework and exams will go to that section. Changes are made through the Stellar Course Management Website:


A link to the course management website is also available on the 18.06 web page.

**Your recitation instructor (not your lecturer!)** is the person to ask all questions about homework and grades.

**Homework:** Assignments will be due on Thursdays by 4PM. Please put them in the box for your section in 2–255. Please staple them (you may use the UMO stapler). They are due every week and are returned in recitation. Late homework will not be accepted and no extensions are granted.

The homeworks are essential in learning linear algebra. They are not a test and you are encouraged to talk to other students about difficult problems—after you have found them difficult. Talking about linear algebra is healthy. But you must write your own solutions.

**Exams:** There will be three one-hour exams at class times on:

- Wednesday October 3 (in class, details TBA.)
- Wednesday November 7 (Walker Memorial)
- Monday December 3 (Walker Memorial)

Students will not be excused if they are signed up for two classes at the same time. The 18.06 exam must be taken during the 18.06 class time. The use of calculators or notes is not permitted during the exams.

**Grading:** Problem sets 15%, three one-hour exams 45% (15% each), final exam 40%.

**SOFTWARE:** Some homework problems will require you to a numerical linear algebra tool. Examples of these include Julia, Maple, Mathematica, MATLAB, Octave, Python, R, Scilab. These are available at MIT on Athena and other systems. Julia is a new system, and therefore not fully ready yet, so in exchange, I am willing to offer a dropping of the lowest two homework grades, even after the lowest grade is dropped, in favor of a perfect grade for the two assignments, for students who use Julia for every assignment. Note the TAs are unlikely to be very helpful with Julia, but the prof may be willing to help out.


The above web page has more information on one popular system, MATLAB, including a tutorial. (No previous MATLAB or any numerical algebra experience is required in 18.06. The exercises will not be programming-intensive. Exams will not ask for any one language, but may cover concepts that are language independent.)

**Videos:** Videos of Professor Strang’s lectures in an earlier year are available on the course web page and also at [ocw.mit.edu](http://ocw.mit.edu).