# Math 2085 Linear Algeba Fall 2017 MWF 10:30 - 11:20 Lockett 239

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Office Hours:	9:30 - 10:30 TTh; 1:30-2:30 MW
	Other times by appointment

## Text

Jim Hefferon, *Linear Algebra*, *Third Edition*, ISBN 978-1-944325-03-9. A free electronic copy of the text can be found on the text's webpage http://joshua.smcvt.edu/linearalgebra/ The text is specifically at http://joshua.smcvt.edu/linearalgebra/book.pdf, while the answers to the exercises can be found in the solutions manual at http://joshua.smcvt.edu/linearalgebra/jhanswer.pdf.

## Syllabus

We will cover most of Chapters 1 - 5.

#### Examinations

There will be 3 in-class exams and a 2-hour final examination. Tentative Exam dates are:

Exam 1	September 18
Exam 2	October 16
Exam 3	November 15
Final Exam	December 8 (Friday) 10:00 - 12:00

## Homework

The homework assignments and any supplementary materials for the course will be posted on the class website http://www.math.lsu.edu/~adkins/m285.html. You should check this website regularly for the assignments and any supplementary materials. Homework exercises are an integral part of the course. The assigned homework problems will be of two types. Those from the text are to be done for practice, but they will not be collected since solutions are available in the solutions manual. Some problems will be assigned for collection and grading. I may choose to grade only a portion of the assigned problems (due to time constraints), however you are expected to do all of the exercises. Any assigned exercise, whether collected or not, may reappear in some fashion on an exam. Occasional quizzes may be given and they will be included in the homework grade. The homework grade will be the sum of the homework scores, scaled to 100 points.

#### Grade

A grade curve for each exam will be determined at the time of the exam. Additionally, a grade curve will be determined for the cumulative total of all graded homework. The raw score on each exam will be translated to a number T between 0 and 100 by the following procedure, which is best illustrated by means of a numerical example. Suppose, *as an example*, that the exam has a total possible of 75 points and the grade curve is given by the table:

А	66 - 75
В	56 - 65
С	47 - 55
D	38 - 46
$\mathbf{F}$	0 - 38

Suppose your raw score on the exam was 52, which would be a  $\mathbf{C}$  on the above curve. Just linearly interpolate the interval [47, 56] to the interval [70, 80], which is the standard range for  $\mathbf{C}$  on the 10 point scale. Thus, 52 is interpolated to

$$70 + 10 \times \frac{52 - 47}{56 - 47} = 76.$$

Thus, the normalized score T would be 76. Note that this is not the same as the percentage, which would be 69% in this case. As another example, the raw score 72 (an **A**) would be normalized to the score

$$T = 90 + 10 \times \frac{72 - 66}{75 - 66} = 97.$$

The raw and the normalized scores will be given to you on each exam at the time it is returned.

The course grade is computed from a weighted average of the normalized scores on the three exams, the homework and the final exam. If  $T_1$ ,  $T_2$ , and  $T_3$ , denote your normalized scores on the 3 in-class exams, H denotes your normalized score on the homework, and E denotes your normalized final exam score, then your score G for the course is determined by the formula:

$$G = .18(T_1 + T_2 + T_3) + .18H + .28E.$$

Thus, each in-class exam counts 18%, the homework counts 18%, and the final exam counts 28%. If it is to your advantage to do so, the lowest of the four exam scores will be replaced by the final exam score E. The number G will then be translated into the course letter grade by the scale:

$$\begin{array}{lll} \mathrm{A}+& G\geq 97\\ \mathrm{A}& 93\leq G<97\\ \mathrm{A}-& 90\leq G<93\\ \mathrm{B}+& 87\leq G<90\\ \mathrm{B}& 83\leq G<87\\ \mathrm{B}-& 80\leq G<83\\ \mathrm{C}+& 77\leq G<80\\ \mathrm{C}& 73\leq G<77\\ \mathrm{C}-& 70\leq G<73\\ \mathrm{D}+& 67\leq G<70\\ \mathrm{D}& 63\leq G<67\\ \mathrm{D}-& 60\leq G<63\\ \mathrm{F}& G<60\\ \end{array}$$