Math 8530: Linear Algebra

Spring 2015

Martin Hall M-203, TTh 11:00-12:15

Instructor	Dr. Matt Macauley (macaule@clemson.edu) OFFICE: Martin Hall O-325 PHONE: (864) 656-1838 (no voicemail!) OFFICE HOURS: MW 1:30-2:30, or by appointment WEBSITE: http://www.math.clemson.edu/~macaule/classes/s15_math8530/		
Textbook	Linear Algebra and its Applications, by Peter Lax.		
Prerequisites	Math 3110 (Linear Algebra) or 4530 (Real Analysis).		
Policies	 Homework assignments will accumulate from lecture to lecture and will be due roughly once a week. I will post the problems on my website. Late homework will <i>not</i> be accepted. Attendance on test days is mandatory. Class attendance at other times is not mandatory, but is strongly recommended. If you get an A on the final exam, then you get an A in the course. All drop/add procedures are your responsibility. Absent Professor Policy: If the instructor has not arrived within 10 minutes of the scheduled class time, you may assume that class has been canceled. All use of cell phones, laptops, and PDAs is prohibited during lecture. Calculators, cell phone policy: http://www.youtube.com/watch?v=FYwpxU_G4Z0 I will NOT post homework solutions. However, I will gladly help you with any of the problems during office hours or whenever I'm around. No whining. 		
Learning Outcomes	This course will be a comprehensive survey of linear algebra at the graduate level. The goals are two-fold – to prepare you for the linear algebra part of the prelim, and to build up a solid linear algebra foundation necessary for your other classes and your research, as Linear algebra is a beautiful subject that appears in nearly all areas of mathematics.		
Grading	The final grade will be calculated as follows:		
	Homework: 20% Midterm 1: 20% Midterm 2: 20% Final exam: 40%		
Homework	Homework assignments will accumulate from lecture to lecture and will be due sev- eral times a week. I will post the assignments on my website, as I like to make all		

Homework assignments will accumulate from lecture to lecture and will be due several times a week. I will post the assignments on my website, as I like to make all materials freely available to everybody (Warning: Websites such as *Course Hero* are a SCAM!). Students can collaborate on their homework problems, but they *must* write up and submit their homeworks separately. Late homeworks will **not** be accepted. You are encouraged to typeset your homework assignments (IATEXpreferred but not required), and you will get an extra night to complete it if you do (okay to hand-draw pictures, though). You should keep all the graded homeworks in case of missing grades due to missing name or typo errors.

Key Dates	January 7 (Wed)	Classes begin; late enrollment fee applies
	January 13 (Tue)	Last day to register or add a class
	January 29 (Mon)	Holiday: MLK Day
	January 21 (Wed)	Last day to drop a class or withdraw from the University
		without a W grade
	March 13 (Fri)	Last day to drop a class or withdraw from the University
		without final grades
	March 16–20 $(M-F)$	Spring break
	April 22 (Wed)	Last day of class
	April 29 (Wed)	Final Exam $(3:00-5:30 \text{pm})$

The official statement on Academic Integrity

As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a *high seminary of learning*. Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. When in the opinion of a faculty member, there is evidence that a student has committed an act of academic dishonesty, the faculty member shall make a formal written charge of academic dishonesty including a description of the misconduct, to the Dean of the Graduate School. At the same time, the faculty member may, but is not required to, inform each involved student privately of the nature

of the alleged charge.