Math 531-01, Winter 2010

Course Syllabus, Call # 23656

Title: Advanced Linear Algebra
Classroom: JB 385
Meeting time: 6–7:50 PM, MW
Instructor: Dr. Corey Dunn
Dr. Dunn’s Office: JB 322
Dr. Dunn’s E-mail: cmdunn “at” csusb.edu
Dr. Dunn’s Phone: (909) 537-5368
Final Exam Date: Wednesday, 3/24, 6–8 PM in our classroom
Exam Date: 2/10
Other Important Dates: 1/18: MLK Jr. Day, no class
Furlough Days: 2/12, 2/22, 3/10, 3/2.
Office Hours: MW from 2-4 PM, or by appointment.

Course Website:


General Information

1. **Information on Grading:** The grades will be given as follows: the A range will be between 90% and 100%, the B range will be between 80% to 90%, the C range between 70% to 80%, etc. A + or - will be added to grades as appropriate (for example, 90% to 92% may be given an A-, grades between 78% and 80% may be given a C+, although this is up to my discretion.) The grade breakdown will be as follows:

   Homework Average: 30%
   Exam: 30%
   Final Exam: 40%
2. **Information on Homework:** I will assign problems from the book and also occasionally make up some problems myself. Most of these will be proof-type problems and usually I will collect homework once we cover the material and have a reasonable amount of time to work on the problems. The lowest homework score will be dropped, and the rest will be averaged to account for 30% of your final grade.

3. **Information on Exams:** There will be one midterm exam which begins at the start of class.

4. **Information on the Final Exam:** The final exam will be cumulative, at the date given above.

5. **General information regarding the class:**

   (a) **Prerequisite:** Math 331 completed with a grade of C or better.

   (b) **Course Content:** We will cover inner product spaces, dual vector spaces, canonical forms (Jordan canonical form, in particular), spectral theory and quadratic forms. Time allowing, we will also visit current areas of research in this field of mathematics. Although there will be prerequisite material all throughout our text, this material will appear mainly in Chapters 5–7, possibly with additional material (freely available) as the course progresses.

   (c) I can guarantee that if YOU are the person whose cell phone goes off, then everyone will know it. PLEASE save yourself the embarrassment of your cell phone going off by turning it on silent before class starts. Not vibrate–silent mode. It’s embarrassing to you, and disruptive to the class.

   (d) If you are in need of an accommodation for a disability in order to participate in this class, please contact Services to Students with Disabilities at UH-183, (909)537-5238.

   (e) **The 25-35 Student Advice:** Study 25 hours a week if you are taking three courses, 35 if you are taking four. This is about 2 hours/unit/week. Time in class and studying is equivalent to a 40-50 hour work week; quite reasonable. Make sure you are learning. You know something if you can talk about it and teach it to someone else. If you cant, you dont. Test yourself before exams; dont let the instructor be the first to test your knowledge. Plan to graduate in four years.

   (f) **Information regarding furloughs.** On the dates listed above I will be forced to take an unpaid day of vacation, and I am contractually forced
to both not work that day and not exceed a certain amount of work in a certain amount of time. This means that I will NOT be working on those days listed above (no office hours, no grading, not answering emails–nothing), and class is cancelled on any of those days which fall on a class day–that may sound like fun, but what it means is that you are being asked to learn 100% of this class with only 90% of the class periods, and I will do what I can to make up the difference, but I can’t overwork myself to make that happen...in fact, I’m being forced not to overwork to help you. I will discuss the general impact of these furloughs in class, but you should know that the state’s representatives and the Cal State Chancellor’s office made this decision (although it was voted upon by a large body of people). If you are outraged that your education does not appear to be important to your state representatives and by the Chancellor’s office (as I am), I encourage you to contact those offices and voice your opinion.

(g) In general, I think this course is going to be awesome! I really can’t stress enough how important it will be to stay on top of your homework and to see me when you have difficulties. This is the only reason I have office hours, and, unless there is an unavoidable conflict, I will always be there. Email is the best way to contact me, as I check it often. Good luck, and ROCK ON!!!