Course Info:
MATH 547 - Linear Algebra and Applications
Spring 2016 - Section 002

Time/Place:
M, W, F: 2:30 PM - 3:20 PM, Peabody Hall 104.

Instructor:
Jeremy Louis Marzuola

Contact Info:
E-mail: marzuola@math.unc.edu
Office: Room 324-D Phillips Hall
Office Hours: M, W: 10:30 AM-12:30 PM.

Teaching Assistants:
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Topics:
I. Matrix Algebra and Linear Systems
II. Linear Transformations, Bases and Dimension
III. Orthogonal Projections and Matrix Factorization
IV. Determinants, Eigenvalues and Eigenvectors
V. Symmetric Matrices, Quadratic Forms and SVD
Scheduling:
We will attempt to march forward at roughly one section per day. This will be greatly assisted if some time is put in PRIOR to coming to class reading the section and developing questions. The better prepared everyone is for class, the more time we can spend working on examples and solving problems. This is a large class with > 100 students, so interaction, communication and assessment will be tricky. We will work on various ways to assess class participation, using Piazza and Poll Everywhere.

Prerequisites:
The course requires Math 233 or the equivalent.

Required Course Texts:

Grading:
The course will be graded on weekly homework assignments (20%), two midterm exams (20% each), a comprehensive final exam (30%) and in class participation (10%).

Homework Assignments:
The homework assignments will be due to my office by Friday at 12 PM (turning it in Thursday in class is perfectly fine) beginning January 22nd, 2016. The goal will be to have all homework turned back to the students by the following Wednesday for studying purposes. Homework problems will be posted to the course web-page each Friday afternoon and cover from the previous two class periods. No homework will be collected the week of exams, but will be due the following week.

No late homework assignments will be accepted but the two lowest homework scores from the semester will be dropped. Homework solutions will be posted on Sakai.

Though I encourage communication on the homework assignments, each student should write up the assignment on their own. I encourage interested students to learn Matlab or Mathematica to check (do!) their work as we progress through the material.

Scheduling and Exams:
Holidays for the Spring 2016 fall on January 18, March 14-18 and March 25. The final day of classes is Wednesday, April 28. The midterm exams will be in class on Friday, February 26 and Friday, April 1 and will cover material discussed up to last returned homework. The final exam will occur at the standard schedule time according to the University Registrar Schedule, which is Friday, May 6th, 2016 at 8:00 AM.
Honor Code Statement and Course Policies:
It is expected that each student will conduct themselves within the guidelines of the UNC Honor System. Exams will be closed book and without calculators.

Make-up and Absentee Policy:
Attendance at every class is strongly encouraged. No make-ups will be given for homework assignments. Missed in-class exams can be made up only if a written medical/coach excuse is provided showing you were unable to attend. No changes are permitted for the final exam without appeal to the Dean.