Description: This course continues Math 2320 with further concepts and theory of linear algebra. Topics include inner product spaces, orthogonality, Gram-Schmidt Process, linear transformations and their matrix representation, change of basis and similarity, further study of eigenvalues and eigenvectors, canonical forms, with applications to linear differential equations and quadratic forms. (3 credit hours / 3 hours lecture plus 1.5 hours recitation per week)

Schedule:

lecture	1:00-2:30TR in LA 280
recitation	1:00-2:30F in LA 280

Textbook: *Linear Algebra: A Modern Introduction (3rd ed)* by David Poole

Instructor: Dr. J. Irving

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Office Hours:

11:30–12:30M	11:00–12:00T	2:30–4:00T
1:30–2:30W	2:30–3:30R	9:30–10:00F

(office hours are subject to change)

Assessment: Your final grade in the course is based on 8 recitation assignments, 2 in-class midterm tests, and a final exam. A final numeric grade will normally be computed according to the following formula.

15%	Recitation Assignments
15%	Midterm Test #1 (*February 6*)
15%	Midterm Test #2 (*March 13*)
55%	Final Examination

However, in exception to the above scheme, a grade of less than 25% on either midterm exam or a grade of less than 40% on the final exam will result in a failing grade in the course.

Numeric grades will be converted to standard letter grades as outlined by Academic Regulation 5 in your 2013-2014 Academic Calendar.

Midterm Tests: The two midterm tests will be held in class on *Thursday, February 6* and *Thursday, March 13*. The first test will cover the first 4 weeks of course material. The second test will cover the material from weeks 5 through 8.

Final Exam: The final examination will be a 3 hour comprehensive test scheduled during the official examination period.

Recitations: Recitations will run throughout the course except during the midterm weeks and the last week of the course (March 31–April 3). The nature of the recitations may vary from week to week, but in every session students will be expected to complete an assignment and submit their work for grading. These recitation assignments will vary from individual quizzes to group explorations of new topics.

Each of the 9 recitation assignments shall carry the same weight. However, only the best 7 of 9 scores throughout the term will contribute to a student's final grade (according to the formula indicated above).

Some guidance will be provided in the lectures as to the content of upcoming recitations so that students can prepare appropriately.

Homework: Problems from the textbook will be suggested on a weekly basis as homework exercises. These problems will **not** be submitted for grading. Nevertheless, they are an instrumental part of the course and should be attempted by every student.

Careful attention to the suggested homework exercises will be the greatest driver of success in the course. However, students are cautioned that there is no guarantee that problems appearing on tests will be drawn directly from the homework.

Missed Tests: Except in very special cases such as illness or bereavement (which must be appropriately documented), all tests and examinations must be written during the scheduled periods. Do not make travel or other arrangements which could potentially be in conflict. Moreover, **all** requests for special arrangements must be made **prior** to the relevant test or examination. No accommodations will be granted for requests made after-the-fact.

Because only the best 7 of 9 recitation assignments are used to compute a final grade, there will be no allowance to "make up" missed recitation assignments, even if the absence is for valid reasons. If a student misses more than 2 recitations, then the weighting from the remaining missed recitations will be shifted to the final examination.

Fairness: Copying work from another student is always prohibited and offenders will be subject to academic discipline. This applies to collaborative assignments as well as tests. (If you need to look at someone else's answer to write down your own, then you are very likely copying from them.)

No aids will be permitted during tests and exams. This includes notes, calculators, and electronic devices such as iPods, cell phones, etc. Any student found to be in possession of such aids during a testing period will be deemed to be cheating, regardless of whether he/she was caught using the device.

All students should be familiar with Academic Regulation 19 of the Academic Calendar concerning integrity and student responsibility.

Recording: Except in case of a documented disability, the students are not allowed to record lectures or photograph the whiteboard.