Syllabus M303 Linear Algebra
Spring 2004, C. Judge

Course Information
- **Text:** *Linear Algebra and its Applications,* 3$^{\text{rd}}$ *Edition* by David Lay
- **Classroom:** Woodburn Hall 008
- **Class time:** Tues/Thurs 8:00-9:15
- **Office Hours:** Monday 10:30-11:30, Wednesday 2:00-3:00, (or by appointment).

Instructor Information
- **Instructor:** Professor Chris Judge
- **Office:** Rawles 241
- **Phone:** 855-2353
- **E-mail:** cjudge@indiana.edu
- **Web page:** http://poincare.math.indiana.edu/~cjudge

Topics
- Systems of linear equations and matrices
- Vector spaces, linear independence, bases, and dimension
- Linear transformations, matrix representations, and change of bases
- Column and null space
- Determinants and volume
- Orthogonality
- Eigenvectors, eigenvalues, diagonalization
- Optimization and singular value decomposition

Grading
- 2 midterm exams each worth 20% of total grade (40% in total).
- Final exam worth 30%
- 12 homeworks (drop two lowest scores) in total worth 15%
- 12 quizzes (drop two lowest scores) in total worth 15%
- Final grade will be based on 60,70,80,90 scale.

Some rules

- If you miss an exam, you (or your surrogate) must notify me as soon as possible. You will not be excused unless you document extraordinary circumstances that prevented you from attending.
- No quiz will be made up (since 2 will be dropped).
- Homework is due in class on the day that it is assigned. Late homework will not be accepted (as two will be dropped).

Tentative Schedule[1]

Date(s)	Sections and/or exam
Aug 30 + Sept 2	1.1, 1.2, 1.3
Sept 7+9	1.4, 1.5, 1.7
Sept 14+16	1.8, 1.9 2.1
Sept 21+23	2.2, 2.3, Review
Sept 28	**Exam 1**
Sept 30	3.1 3.2
Oct 5+7	3.2, 3.3, 4.1
Oct 12+14	4.2, 4.3, 4.4
Oct 19+21	4.5, 4.6, 5.1
Oct 26+28	5.2, 5.3, 5.4
Nov 2	Review
Nov 4	**Exam 2**
Nov 9+11	5.6, 6.1, 6.2
Nov 16+18	6.3, 6.4, 6.5
Nov 23	7.1
Nov 30+Dec 2	7.2, 7.3, 7.4
Dec 7+9	Review
Dec 16	**Final Exam** 8-10AM in usual classroom, cumulative

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[1]Any adjustment to the date or content of an exam will be announced in class and/or by e-mail. You are responsible for keeping track of any adjustment.