Math 221 Section 01 will meet in CCMB 227 at 9:35 - 10:25 MWF.

Professor: Peter Cholak `<Peter.Cholak.1@nd.edu>`
Course web page: www.nd.edu/~cholak/math221
Office: CCMB 223; Phone: 1-6507
Office hours: MWF immediately after class, drop in (when available), and by appointment.

Course Linear Algebra and its Applications, 2nd edition (Updated),
Text: David C. Lay (Addison Wesley).

Grading: There will be 2 in-class exams, 1 final exam, and 6 take-home quizzes. The lowest quiz score will be dropped. In addition, there will be daily homework assignments. Your grade will be determined by your exam and homework scores as follows:

Final Exam		for 150 points
2 in-class exams	100 points each	for 200 points
5 quizzes	20 points each	for 100 points
Homework		for 50 points
Total:		550 points

The letter grade you will ultimately receive for the course will be determined "on a curve," but I will not modify numerical scores.
After grading each exam, I will describe the curve; i.e. I will indicate, for example, the range of scores that earn a "B" on the exam. On the other hand, I will not indicate which scores earn a "B-" or a "B+"; determination of $\pm$ grades will only be made at the end of the course.

Exam The final exam will be on Wednesday, December 13, 2000 from 7:30 pm until
dates: 9:30 pm. The final location will be annouced later. The dates of the "in-class" exams are as follows:

Exam 1	Friday, October 13, 2000
Exam 2	Wednesday, November 22, 2000

The first exam is the Friday before fall break and the second in the Wednesday before Thankgiving break. There will be no homework during these breaks.

Topics: The following gives an approximate outline of the topics to be covered in the course. I'll tell you a few days in advance of each exam precisely which sections will be covered. I will cover a section a day.

Topic	Chapter in the text	Exam
Linear equations	1	1
Matrix algebra	2	1
Determinants	3	1
Vector spaces	4	partially on 1
Eigenvalues/vectors	5	2
Orthogonality	6	partially on 2
Symmetric matrices	7	final

Makeups: You can make up the exams only if you have a university approved excuse (i.e. ill at the infirmary, a participant at an away game, etc) and have an official note or letter to this effect. You may *not* make up any of the quizzes (after all they are take-home and you can drop), homework (after all in most cases this will have little effect on your final grade) or the final (you better be there!).

Homework: Homework will be assigned daily and due *two* class periods later (i.e. if assigned on Wednesday it is due on the following Monday.) This is done to allow you the time to ask questions about the homework. *However, in general, I will not answer questions about an assignment on the day that assignment is due.* If you miss a class when the homework is assigned it is still your *responsibility* to find out the homework assignment and complete it in time. Hint: check the cousre web page. The homework will not be graded by me but by a corrector. I will only have you hand in the even problems assigned. The answers to the even problems are not in the book. Occasionally, I will place two copies of the answers to the even problems in a folder on my book. Please, you can only take these items long enough to have them photocopied! As a general rule unless you do exceptionally well or poorly on the homework, your homework grade will have little effect on your course grade. However, in order to do well in any mathematics class it is very important to keep up with the homework!

Mathematica: Linear algebra involves lots of computation. On the exams and final you will need to be capable of doing the needed computations by hand or with a simple calculator. However on the homework and take-home quizzes you might want to use Mathematica (or Maple or Matlab) to check your work. Our textbook comes with some nice Mathematica notebooks which I have placed on the course web page. These notebooks include many of the problems found in the book and greatly simplify the amount of computation. There will be no "Mathematica assignments" but I hope that you will use it as a tool to check your work and it might be useful on the take-home quizzes. I will show anyone how to work the linear algebra features of Mathematica at anytime in my office. (If desired, I might consider getting a computer classroom and giving a hands-on demo.)

Slides: I may occasionally use overhead transparency slides in class to avoid the transcription of large tables of numbers from my notes to the board. These slides should permit both student and lecturer to focus on the ideas being discussed rather than on arithmetic and copying. On the other hand, it may be more difficult for you to take notes when I do this. This shouldn't be too serious of a problem as there are similar examples in the book. However, I will place two copies of the slides in a folder on my door. Please, you can only take these items long enough to have them photocopied.

The Code: **Honor** As always you are bound by the *Honor Code* (If you are unclear how this code will effect you in this class, please see me)! The in-class exam(s) and final are "closed book" and no books, notes or *calculators* are allowed. However you may work together on the homework, quizzes and your in-class presentation. While you can talk with others in this class about the homework and quizzes problems you *must* each individually write up the solutions. You may *not* talk to others who have had this class in years past nor can you look at the answers from past years. You will only be cheating yourself.