

Mathematics 308 Winter 2006

Matrix Algebra with Applications

Instructor: John Palmieri, Padelford C-538, 543-1785, email

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Class time and place: MWF 11:30, Thomson 135

Office hours: TBA, drop-in, and by appointment

Web page: <http://www.math.washington.edu/~palmieri/Math308/> or
<http://faculty.washington.edu/jpalmier/Math308/>

Text book: *Introduction to Linear Algebra* by Johnson, Riess, and Arnold, 5th edition.

Examinations and grading: There will be two 50-minute exams, on Monday, January 23 and on Friday, February 17. The final exam will be on Wednesday, March 15, 2:30–4:20. There will be weekly homework assignments, due Monday at 3:15pm in my office (Padelford C-538). There will be quizzes on most Mondays. All quizzes and exams will be closed-book, in-class exams, no calculators allowed. The homework is worth 10% of the grade; quizzes are 25%, the midterms are 15% each, and the final is 35%.

Goals of the course: Learn basic linear and matrix algebra: systems of linear equations, matrices, determinants, vector spaces, eigenvalues and eigenvectors. This material is ubiquitous in mathematics, the sciences, engineering, and some kinds of economics, so if you want to study any of these fields, you need to know this stuff.

Plan for the course: We will be discussing Chapter 1 (matrices and systems of equations), Chapter 3 (the vector space \mathbf{R}^n), and Chapter 4 (determinants and eigenvalues). You should already be familiar with the contents of Chapter 2 (vectors) – review this material on your own if you need to.

Classroom format: I will expect each of you to read the book. On Wednesdays and Fridays, I'll mainly lecture, giving you an overview of the material in that week's reading. I would appreciate questions about the reading, either by email or in class, so that I can focus these discussions on the parts which you find difficult or confusing. Mondays will be problem/quiz sessions: we will discuss the homework problems and the practice problems, and there will be a quiz at the end of class.

Homework, practice problems, and quizzes: Each week I will assign some reading, some practice problems, and some homework problems. Do not turn in the practice problems; instead, do as many as you need to do in order to thoroughly learn the material. The homework problems are due on Monday at 3:15pm in my office (although you can turn them in earlier if you want). On most Mondays there will be a quiz; the quiz will be based on the current practice problems and on the homework that you turned in on the previous Monday.