Calif ornia State University, Northridge

MATH 262: Introduction to Linear Algebra, Fall 2009

Class Number: 16174; Schedule: MW 7:00pm–8:15pm in CR5123.

Instructor: Dr. Vladislav Panferov, office SN 129, phone (818)677-2326
Email: `vladislav.panferov@csun.edu`
Office hours: Mon 12-1pm, Wed 12-2pm, or by appointment (email).
Course webpage: `www.csun.edu/∼panferov/math262/`

Course description: Linear systems, their solution by Gauss elimination, reduced row-echelon forms. Vectors and matrices, determinants, matrix operations. Vector spaces, linear transformations, kernels and images. Orthogonality and the method of least squares. Eigenvalue problems. Symmetric matrices and quadratic forms.

Text: O. Bretscher, Linear Algebra with Applications, 4th ed, Pearson Prentice Hall, 2009 or 3rd ed, 2005.

Recommended references: Schaum's Outline of Linear Algebra, S. Lipschutz, M. Lipson; 3E, McGraw-Hill, 2000. Linear Algebra and Its Applications, G. Strang, 4E, Brooks Cole, 2005.

Prerequisite: Calculus, MATH 150B.

Grading: 10% homework assignments, 40% two midterm tests, 15% quizzes (given in class), 35% final exam (cumulative).

The percentages are generally translated into letter grades using the following scale: 90-100% A; 80-89% B, 70-79% C, 60-69% D, 0-59% F. This scale may be modified at instructor's discretion, but any such change may only result in increasing the individual grades.

Homework: The homeworks are essential for your success in the course. Problems for the homework will be assigned after each lecture. Selected problems will be collected (usually due the next week). Problems for the homework will be announced on the course webpage. Check that page regularly for updates. Only a few problems from each assignment will be graded.

Tests/exams: There will be two in-class midterm tests, tentatively scheduled for October 12 (Monday) and November 18 (Wednesday). This schedule may be adjusted, and the changes will be announced in class and on the course webpage. All exams will be closed books/notes.

Make-ups: There will be no make-up exams, unless in some truly exceptional cases, when you have to miss an exam due to the the circumstances beyond your control. If such case you should let me know about it (by email) as soon as possible.

Final exam: On Monday December 14, 2009; 08:00 PM - 10:00 PM in CR5123.

Calculators: A graphing calculator or a computer software such as MATLAB may be useful for solution of some of the homework problems. However, graphing calculators will <u>not</u> be allowed on midterm or final exams. A basic scientific calculator is OK (example, TI-30XII, or similar).