

NCSU Mathematics Department

MA 405-001 – Introduction to Linear Algebra and Matrices

Spring 2008, MWF 3:00-3:50 pm, HA 201

Instructor: Dr. Bojko Bakalov, office HA 138, phone 513-7442,
email bojko_bakalov@ncsu.edu

Grader: Warren Acoose, email wdacoose@ncsu.edu. Please refer to the grader all questions about the grading of your exams.

Course Webpage: <http://www4.ncsu.edu/~bnbakalo/ma405.html>

Office Hours: MF 1:50-2:50, W 4:00-5:00, or by appointment, in HA 138.

Course Objectives: This is a first course in linear algebra and matrices. The course will start with solving linear systems using Gauss elimination. Students will be introduced to basic concepts such as row echelon form, determinants, vector spaces, linear independence, bases, dimension, orthogonality, eigenvalues, and reduction of matrices to diagonal forms. At the end of the course students will master the basic concepts of linear algebra and matrices needed to apply elsewhere.

Co-requisite: MA 242. Credit is not allowed for both MA 305 and MA 405.

Text: *Linear Algebra with Applications*, by Steven J. Leon, 7th edition, Prentice Hall, 2005, ISBN 0131857851. Also available in paperback, ISBN 0131936239.

Tutoring is available free of charge at the Multimedia Center HA 244; see <http://www.math.ncsu.edu/mmc/tutoring.php> for the tutoring schedule.

Homework will be assigned regularly but will not be collected or graded. Selected problems will be discussed in class. *A key to success in this course is doing as many of the homework problems as you can!*

Tests: There will be **four tests** and a cumulative **final exam** (on May 2 from 1-4 pm in HA 201). Calculators are not permitted on exams.

If you miss a test, I will need a letter documenting the reason. Makeup tests can only be given for reasons such as illness, family emergency, participation in a University-sponsored event, required court attendance or military duty, or religious observances as certified by the Department of Student Development. If you know you will be absent on a test date, you must clear the absence with me in advance and schedule a makeup date. In the case of an unanticipated absence on a test date, you must give me documentation and schedule a makeup date as soon as possible. Keep the day and time of the final exam in mind when scheduling plane tickets or making other obligations as the university has

strict policies on missing the final exam. See the University policies at http://www.ncsu.edu/policies/academic_affairs/pols_regs/REG205.00.4.php

Grade will be determined from a raw score of test grades using the 10 point scale with +/- grading. The lowest of the four tests will be automatically dropped, and each of the three other tests will count for 20% while the final exam will count for 40%. The best way to prepare for the exams is to do your homework and to take and study the practice tests.

Attendance: Students are expected to arrive on time, to contribute to group work and class discussions, and to stay until the class ends. Attendance at all meetings of the class is expected. Occasional absences will be approved if they meet University policies (see http://www.ncsu.edu/policies/academic_affairs/pols_regs/REG205.00.4.php).

Adverse Weather: Announcements regarding scheduled delays or the closing of the University due to adverse weather conditions will be broadcast on local radio and television stations and posted on the University homepage.

Cell Phones: Pagers, cellular phones and other types of telecommunication equipment are prohibited from use during class. Make sure that any pagers, phones or other equipment are turned OFF during the class period. If you have a special need to have your pager or phone on during class, please let me know.

Academic Integrity Statement: Students are required to follow NCSU policy available at http://www.ncsu.edu/policies/student_services/student_discipline/POL11.35.1.php. *“Academic dishonesty is the giving, taking, or presenting of information or material by a student that unethically or fraudulently aids oneself or another on any work which is to be considered in the determination of a grade or the completion of academic requirements or the enhancement of that student's record or academic career.”* (NCSU Code of Student Conduct). The Student Affairs website has more information (http://www.ncsu.edu/student_affairs/osc/AIpage/acaintegrity.html).

Statement for Students with Disabilities: Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disabilities Services for Students (http://www.ncsu.edu/provost/offices/affirm_action/dss). For more information on the NCSU policy on working with students with disabilities, see http://www.ncsu.edu/provost/hat/current/appendix/appen_k.html

Class Evaluations: Online class evaluations will be available for students to complete during the last two weeks of class. Students will receive an email message directing them to a website where they can login using their Unity ID and complete evaluations. All evaluations are confidential; instructors will never know how any one student responded to any question, and students will never know the ratings for any particular instructors.