

Math 316-O, **Linear Algebra**, CRN 21954

MW 5:45-7:00pm, ED 131  
Spring 2009

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**OFFICE HOURS:** MW 3:00-5:00pm or by appointment

**COURSE DESCRIPTION:** Math 316 is a three credit introductory course to the fundamentals of linear algebra. Topics include solutions of linear systems of equations, matrices, vector spaces and subspaces, dimension and bases, determinants, eigenvectors and eigenvalues and orthogonal projection. Applications are an important component of this course.

**PREREQUISITE:** Math 211

**GOALS & OBJECTIVES:** To continue to build understanding of key concepts of linear algebra and apply these to various real world applications.

**TEXTBOOK:** Linear Algebra and its Applications, by Gilbert Strang, 4<sup>th</sup> ed., Thomson Brooks/Cole

**Website of this course:** <http://www.lions.odu.edu/~hkaneko/teaching/Spring09/316.htm>

**HONOR SYSTEM:** By enrolling in this course you agree to adhere to the honor code on all written work: "I pledge to support the Honor System of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community, it is my responsibility to turn in all suspected violators of the Honor Code. I will report to a hearing if summoned." During exams, spread out and don't sit next to another student, if possible. Keep your eyes on your own paper and don't talk with other students. The Pledge Signature Line will be required on all written work turned in for a grade. However, you are free to collaborate on any homework exercises not turned in for a grade.

**ANY STUDENT CAUGHT COMMITTING AN HONOR CODE VIOLATION WILL RECEIVE AN F FOR THE COURSE, AND REFERRAL TO THE HONOR COUNCIL.**

**CLASS POLICIES:**

- Attendance will not be taken.
- Show all work on arriving at your answers.
- Suggested problems will be assigned regularly.
- Each student is responsible for all assignments given and material covered in class.
- Calculators may **not** be used on quizzes and tests.
- Bi-weekly quizzes (about 15 minutes long in class or take-home) will be given. The vast majority of quiz problems will be taken from the assigned homework problems.

**WRITING POLICIES:** The quizzes and tests may require that you respond in writing to present a solution, derivation or proof. All such work, whether it uses standard or symbolic writing, must be presented in a clear and logical form, and be reasonably free of spelling, grammar and punctuation errors.

**GRADING SYSTEM:** A: 92-100%, A-: 90-91  
B+: 88-89, B: 82-87, B-: 80-81  
C+: 78-79, C: 72-77, C-: 70-71  
D+: 68-69, D: 62-67, D-: 60-61  
Below 60%: F

There will be: 2 tests + biweekly quizzes (=1 test) = 70%  
1 final exam, (comprehensive) = 30%

A lowest quiz grade will be dropped. No make-up quizzes or tests. If you miss a test for a valid and documented reason, your score on the final may be substituted for that test.

**IMPORTANT DATES:**

MLK Day – Monday, Jan. 19

Spring Break – Monday, March 9 – Saturday, March 14.

Easter – Sunday, April 12

Last Day of Classes – April 28

**FINAL EXAM: Tuesday, May 5, 2009, 3:45-6:45pm**

**DISABILITY SERVICES:** The instructor realizes that a student may have special needs. All reasonable accommodations will be made. Please inform the instructor of your special needs. Only those students who have been documented at the Office of Disability Services (683-4655) will be eligible for these accommodations.

**Homework Problems will be assigned at the beginning of each chapter.**

**The first 5 chapters will be studied except sections 1.7, 2.5, 3.5, 5.5 and 5.6. Supplementary materials and additional exercises will be provided to compliment the textbook.**