

**Fall 2006 MTH U115 APPLICATIONS IN ALGEBRA  
SYLLABUS**

**Section    Topic**

- 7.1        Sets
- 7.2        Venn Diagrams
- 7.3        Introduction to Probability
- 7.4        Basic Concepts of Probability
- 8.1        Multiplication Principle & Permutations
- 8.2        Combinations
- 8.3        Probability Applications of Counting Principles
- 2.3        Addition & Subtraction of Matrices
- 2.4        Matrix Multiplication
- 2.4        Organizing & Using Data in Matrices

**MIDTERM EXAM (Tentative Date – October 20)**

- 2.5        Matrix Inverses (2x2)
- 2.5        Using Matrix Inverses to Solve Systems of Equations
- Cryptography
- 10.1       Markov Chains
- Graphing Linear Equations
- Point of Intersection (Elimination & Substitution Methods)
- 3.1        Systems of Inequalities
- 3.2        Solving Linear Programming Problems
- 3.3        Applications of Linear Programming

**Important Dates**

Wednesday 9/20 Last Day to File a Final Exam Conflict Form  
Monday 10/9 Columbus Day - No School  
Wednesday 11/22 Classes End at 11:35 AM for Thanksgiving Recess  
Monday 11/27 Classes Resume  
Wednesday 12/6 Fall Classes End  
Thursday 12/7 Reading Day  
Friday 12/15 Final Exam 10:30 AM - 12:30 PM