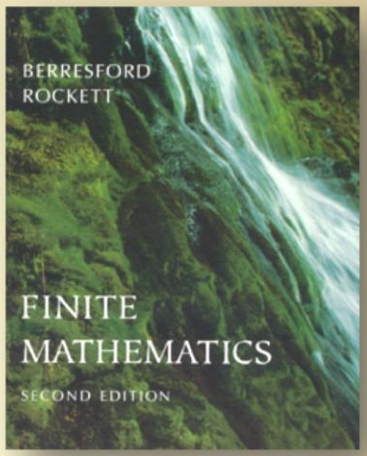
MA103 Finite Mathematics

Fall 2007

Syllabus

- Class Meeting Hours
  - Monday, Tuesday, Wednesday, Thursday 9:00 – 9:50 PM, West Science 2901
- Instructor
  - Roxin Zhang
  - New Science Building 3013
    rzhang@nmu.edu
- Computer and Calculator Requirements
  - A computer with Excel and TI-Interactive installed
  - A scientific calculator is needed for day-to-day work

- Prerequisite
  - MA100 (C- or better) or recommendation by Math Placement
- Textbook
  - Finite Mathematics, 2nd Ed
    Berresford Rockett



- Tests and Quizzes
  - 5-6 Biweekly Quizzes or Projects (drop one lowest quiz)
  - One Midterm (multiple choice)
  - One final exam (multiple choice), Tuesday Dec 13, 8:00 – 9:50am
  - Grade:
    - Quizzes/Projects 50%, Midterm 20%, Final 25%, Attendance 5%
    - A (>95%), A- (>90%), B+(>85%), B(>80%), …, C- (>60%)

Course Contents

- Review Algebra:
  - Real numbers, functions, exponential and logarithmic functions
- Mathematics of Finance
  - Simple interests, compound interests and amortization
- System of Equations and Matrices
  - Gauss Jordan methods, inverse matrices
- Linear Programming
  - Linear inequalities, Simplex methods, duality
- Probability
  - Sets, counting principles, permutations and combinations, conditional probabilities
- Markov Chain
  - States and transitions, Markov chains
- Statistics

- **Liberal Studies Requirement**

  - This course satisfies the Formal Communication Studies requirement.

    These courses are designed to introduce students to the ways in which information and ideas are expressed using a communication system other than English. Such courses should foster the student's ability to conceptualize and communicate in an orderly, rational manner. Characteristics of a communication system include:

  - 1. Possession of a grammar;
  - 2. Operation from an established set of rules;
  - 3. Reasoning properties such as deduction, inference drawing and problem solving. This includes courses in languages and those in which the central focus of the course is on statistics, computers or formal logic.

- **DISABILITY SERVICES**
  - If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Disability Services Office by: coming into the office at 2001 C. B. Hedgcock; calling 227-1700; or e-mailing disserv@nmu.edu.
  - Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines.