

Course syllabus –MA103 Finite Math – Winter 2013

Class Time and location: 12:00-12:50 PM, M ,W,R,F WS 3803

Instructor: Richard Balding

Office: NSF 1111

Phone: 227-1595 (Office)

e-mail: rbalding@nmu.edu

Office hours: M,W,R 10-11:50 am, T 10-10:50 am, F 11-11:50 am
or by appointment

MA 103 outcomes fall into three areas – extension and application of algebra concepts, recognize and use financial formulas and introductory counting, probability and statistics.

At the completion of this course, a student should be able to:

- * Successfully identify and solve linear and quadratic equations, including terminology, function notation and applications.
Assessment – Test Ch 1a
- * Successfully identify and solve exponential and logarithmic equations, including laws of logs, notation and applications.
Assessment – Test Ch 1b
- * Successfully solve systems of equations using algebraic, matrix, Gauss-Jordan and linear programming methods, including applications. Assessment – Test Ch 3-4
- * Successfully differentiate between financial terms such as annuities and amortization and apply the correct formula to solve applications of each. Assessment – Test Ch 2
- * Successfully learn and apply counting techniques to count large (and small) sets, including addition and multiplication principles of counting, permutations and combinations. Assessment – Test Ch 5a
- * Successfully learn and apply the concepts of probability.
Assessment – Test Ch 5b
- * Successfully learn and apply beginning statistics concepts, include data presentation, measures of central tendency and using normal distributions to solve problems. Assessment – Test Ch 6

This course satisfies the Foundations of Natural Science/Mathematics requirement.

Students who complete this course should be able to demonstrate a basic understanding of mathematical logic; use mathematics to solve scientific or mathematical problems in college classes; express relationships in the symbolic language of mathematics; and appreciate the role of mathematics in analyzing natural phenomena.

Requirements:

- 1) Attendance is important. You will receive an attendance grade (as a test grade), based on your per cent attendance. In case of an illness, you will be responsible for keeping up with class work. **On days of tests or quizzes, you must call or e-mail me before class to be excused.**
- 2) Homework will be assigned at the end of most classes. Most of the time the homework will not be collected, but is essential to the learning of the material. The best way to learn math is to do math. A standard rule for success for most students in this course is 2 hours of homework/study for every hour of class – you are done with the homework when you know the material, not when you finish the problems. The homework problems simply give you practice to see if you have learned the material.
- 3) Your final grade will be determined from a combination of the points achieved from your collected homework (if any), quizzes, tests and the final exam. There will be 7 tests (8 counting the attendance grade) and the final (and possibly quizzes on smaller amounts of material). The final will be worth about 1 ½ tests. You may drop the lowest test score (attendance test grade may be counted as a test **only if it is above 80%** - otherwise, it will be the test dropped). Extra credit will only be in the form of extra credit problems on tests. There are no “do overs” on tests.

Required Materials:

- 1) Finite Mathematics (second edition), by Berresford and Rockett, Houghton Mifflin, 2005.
- 2) IBM Thinkpad (TI interactive) or graphing calculator – a scientific calculator may be helpful if using a Thinkpad

Material to be covered:

We will cover most of chapters 1 – 6

Grading scale: (Approximate)

90-100%	A's
80-89.9%	B's
70-79.9%	C's
60-69.9%	D's
below 60%	F

DISABILITY SERVICES

If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1700). 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.