

University of Wisconsin-Oshkosh
Department of Mathematics

Math 204: Mathematics for Business Analysis I/Fall 2007

SECTION 013

CLASS TIMES: MW 6:00-8:00pm. Room: S 303

INSTRUCTOR

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OFFICE HOURS: MW 5:00-6:00 and by appointment.

COURSE DESCRIPTION AND OBJECTIVE

This course introduces mathematical techniques useful for business applications. It is designed for students planning to major in business and related subjects. This course emphasizes on computational skills, ideas and problem solving rather than mathematical theory. A major objective of the course is to provide students with substantial experience in modeling and solving real-life problems. Specific topics covered in the course are listed in the **COURSE TIMETABLE**.

PREREQUISITES

Math 103 or Math 108 with a grade of C or better.

REQUIRED MATERIAL

- **Textbook:** Raymond A. Barnett, Michael R. Ziegler and Karl E. Byleen *Finite Mathematics for Business, Economics, Life Sciences and Social Sciences*, 11th edition, Pearson Prentice Hall, 2008.
- **Calculator:** A graphing calculator is required. I will be using a TI – 83+, but the student can choose a different one and assume the responsibility for learning to use it.

CLASS ATTENDANCE, PARTICIPATION, & PREPPARTION

Regular attendance is expected along with active class participation. Participation in class is an important part of your learning experience. For successful completion of this course, you should follow a disciplined approach to studying. Here are some tips:

- Spend some time on the course **every day**, whether you have class or not.
- Read the chapter in the text (prior to being covered in class).
- Learn the terminology and notation so you don't have to "translate" during the lecture.
- Work out the example problems and compare your work to solution in the text.
- Work more than the minimum required sets of problems.
- Pay attention to the steps of solution, not just the final answer.
- Even though you are allowed a cheat sheet, it is best to study as if the exam is totally closed book.

CLASS DISCUSSION QUIZZES

Quizzes will be given on a regular basis in the class. Students will form 3-person teams to work on these quizzes (2 in exceptional cases.) A number of these quizzes will be collected to reward points for attendance and active class participation as shown in the table below.

Minimal attempt	2 point
About one-half of the problems completed with solutions shown/explained	5 points
Most of the problems completed with solutions shown/ explained	8 points
All problems completed with solutions shown/explained	10 points

The quizzes will be discussed during the lecture. **Solutions will not be posted.** Some of the points on each exam will be given to questions similar to the worksheets. Quizzes done by a single person or

more than 3 persons will not be given credit. **No worksheet will be accepted after the class. No make up quiz will be given. One miss will be allowed.**

If you miss a class it is your responsibility to find out what was covered and assigned.

HOMEWORK PROBLEMS

Homework will be assigned in class and should be done before the next class period. Current homework problems will be discussed at the beginning of the lecture. **Solutions will not be posted.** You may also check your solutions with me in my office. ***Your knowledge of homework problems will be tested on the exams.*** Some of the points on each exam will be given to questions similar to the homework problems. Working with other students on the assignments is highly recommended

TUTORS

Tutors are also available free of charge in Swart 113.

CLASSROOM CODUCT

Please turn off cell phones and any audible device during class. Also note that private conversation during class is distracting to both the instructor and the other students. Likewise, walking in late and leaving before the class has ended impede the learning of all students. If you know that you will need to leave class early please sit near the exit.

EXAMS

There will be four exams on the dates shown below. All exams are closed book and closed note. You will be allowed to use **one half page of notes containing definitions and/or formulas only.** **Document containing solutions to problems (examples, homework, quizzes, etc.) are not allowed.**

As a general policy, there are no make-up exams. Anyone missing an exam will receive a zero score.

Make-up exam may be considered on exceptional basis only for the following reasons:

- a. Participation in an authorized University activity.
- b. Confinement due to illness, *under a doctor's care.*
- c. Death in the immediate family.
- d. Participation in legal proceedings that requires your presence.

Documentation is required (e.g., letter from a university official, a doctor, a lawyer, or a funeral director). This policy will be strictly enforced.

GRADING

Exam 1: Oct. 1 (M)	22%
Exam 2: Oct 24 (W)	22%
Exam 3: Nov 12 (M)	22%
Exam IV: Dec 12 (W)	22%
Attendance & Quizzes	12%

SCORE	GRADE
92 – up	A
87 - < 92	AB
82 - < 87	B
77 - < 82	BC
70 - < 77	C
60 - < 70	D
< 60	F

COURSE TIMETABLE**NOTE:** This timetable is *tentative* and will be updated during the semester. Updates will be announced in the class.

Day	Date	Material	Section	Homework
W	Sept 5	Introduction to the course, requirements, policies, Linear Equations and Inequalities, Graphs and Lines	1-1-1.2	
M	Sept 10	Graphs and Lines, Linear Regression Functions	1.2-1.3	
W	Sept 12	Functions	2.1	
M	Sept 17	Graph and Transformations, Quadratic Functions	2.2-2.3	
W	Sept 19	Quadratic Functions, Exponential Functions	2.3-2.4	
M	Sept 24	Exponential Functions ,Logarithmic Functions	2.4-2.5	
W	Sept 26	Logarithmic Functions, Simple Interest	2.5, 3.1	
M	Oct 1	Exam I – Chapters 1-2 Compound Interest	3.2	
W	Oct 3	Compound Interest, Future Value of an Annuity; Sinking Funds	3.2-3.3	
M	Oct 8	Present Value of an Annuity; Amortization	3.4	
W	Oct 10	Systems of Linear Equations in Two Variables, Systems of Linear Equations and Augmented Matrices	4.1-4.2	
M	Oct 15	Gauss-Jordan Elimination, Matrices: Basic Operations	4.3-4.4	
W	Oct 17	Inverse of a Square Matrix	4.5	
M	Oct 22	Matrix Equations and Systems of Linear Equations	4.6	
W	Oct 24	Exam II - Chapters 3 and 4 Linear Inequalities in Two Variables	5.1	
M	Oct 29	Linear Inequalities in Two Variables, System of Linear Inequalities in Two Variables	5.1-5.2	
W	Oct 31	Linear Programming in Two Dimensions: Geometric Approach	5.3	
M	Nov 5	Sets, Basic Counting Principles	7.2-7.3	
W	Nov 7	Basic Counting Principles , Permutations and Combinations	7.3-7.4	
M	Nov 12	Sample Spaces, Events, and Probability,	8.1	
W	Nov 14	Union, Intersection, and Complement of Events; Odds	8.2	
M	Nov 19	Exam III – Chapters 5, 7, and 8.1-8.2		
W	Nov 21	Thanksgiving Recess -No Class		
M	Nov 26	Conditional Probability and Independence, Bayes' Formula	8.3-8.4	
W	Nov 28	Random Variable, Probability Distribution, Expected Value Graphing Data	8.5 11.1	
M	Dec 3	Measures of Central Tendency, Measures of Dispersion	11.2-11.3	
W	Dec 5	Bernoulli Trials and Binomial Distributions, Normal Distributions	11.4-11.5	
M	Dec 10	Normal Distributions, Review	11.5	
W	Dec 12	Exam IV- Chapters 8.3-8.5, and 11		