Math 204 MATHEMATICS FOR BUSINESS ANALYSIS I
FALL 2007

SECTION	TIME	DAYS	ROOM
001	8:00 – 9:00 am	MTW F	Swart 240
003	9:10 – 10:10 am	MTW F	Swart 240

INSTRUCTOR: Dr. K.L.D. Gunawardena

OFFICE: Swart 205 **PHONE:** 424-1056 **E-MAIL:** gunaward@uwosh.edu

OFFICE HOURS: 10:20 – 11:20 am MTW F, and other times by appointment

TEXT: *Finite Mathematics for Business, Economics, Life Sciences and Social Sciences*, 11th edition by Raymond A. Barnett, Michael R. Ziegler and Karl E. Byleen

CALCULATOR: TI-83 / TI-83 Plus / TI-84 / TI-84 Plus Graphing Calculator is required

EXAMS: There will be four examinations:

EXAM	TOPICS	DATE
Exam 1	Chapters 1,2	September 26, 2007
Exam 2	Chapter 3	October 12, 2007
Exam 3	Chapters 4,5	November 6, 2007
Exam 4	Chapters 7,8,11	December 14, 2007

Make-up exams will not be given except when the student has a valid reason for the absence.

PRE & POST TESTS: There will be a **pre-test** on **September 10** and a **post-test** on **November 20.** These tests are for assessment purposes. **The tests are required and for each test missed the student's highest quiz score will be dropped.**

QUIZZES: There will be quizzes throughout the semester. There will be **NO** make-ups on quizzes.

HOMEWORK: Problems from the text will be assigned each day. While the solutions to assigned problems will not be collected, you should do the problems in order to learn the proper application of the techniques and concepts covered in the text.

GRADING POINTS:

Exams 1-4 [100 points each] 20%
Quizzes [10 points each] 20%

While attendance is not required, it is important that you attend class and take part in class activities. I have observed that students who attend classes regularly get good grades, while those with poor attendance get poor grades.

GRADING SCALE:

PERCENTAGE	GRADE	PERCENTAGE	GRADE
90 – 100	A	58 - 65	C
82 – 89	AB	50 - 57	D
74 – 81	B	0 - 49	F
66 – 73	BC		

CELL PHONES:

All cellular phones, pagers and other electronic equipment should be turned off and put away during class period

GENERAL GOALS AND OBJECIVE FOR THE COURSE:

- Identify the basic graphs and properties of polynomial, rational, exponential, and logarithmic functions. Apply the knowledge of functions to business applications such as simple, compound or continuous compound interest, ordinary annuities, finding the maximum or minimum for quantities which are quadratic functions, and finding break even points.

- Perform basic operations with matrices, and use matrix methods to solve systems of linear equations. Apply the knowledge of matrices to business problems such as inventory, production, and total cost.

- Use geometric method to solve linear programming problems. Interpret information as an objective function with constraints, set up the linear programming problem, solve the problem and interpret the result in the context of the problem.

- Use basic counting techniques and calculate probabilities, including conditional probabilities. Apply the mathematical knowledge of probability to business problems and interpret the results.

- Represent data with graphical and numerical summaries. Calculate probabilities for binomial and normal distributions. Apply the statistical skills to problems in various business settings and interpret the results.

COURSE DESCRIPTION: The first course in mathematics for business students is divided into five parts: Functions, Mathematics of Finance, Systems of Linear Equations and Matrices, Linear Programming, Probability and Statistics. The course will cover most of the material in Chapters 1-8 of the text. The course will cover the following topics.

- **Functions:** Linear, quadratic, rational, exponential and logarithmic function. Transformation of functions and graphing.

- **Mathematics of Finance:** Simple and compound interest, future value and present value of annuities, sinking funds, and amortization.

- **Systems of Linear Equations and Matrices:** Solution of systems of linear equations by graphing, substitution, elimination by addition, Gauss-Jordan elimination and use of matrix inverse. The systems of equations considered will have a unique solution, no solution or an infinite number of solutions.

- **Linear Programming:** Systems of linear inequalities in two variables, geometric approach to solving linear programming problems in two variables.

- **Probability and Statistics**: Operations on sets, counting techniques including permutations and combination, basic properties of probability, conditional probability, Bayes formula, random variables and expected values. Graphical description and numerical summaries of data. Binomial distribution and normal distribution.

MY SCHEDULE:

HOUR	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:00 – 9:00	Math 204-001	Math 204-001	Math 204-001		Math 204-001
9:10 – 10:10	Math 204-003	Math 204-003	Math 204-003		Math 204-003
10:20 – 11:20	office hour	office hour	office hour		office hour
11:30 – 12:30					
12:40 – 1:40	Math 201-003		Math 201-003		Math 201-003
1:50 – 2:50		L&S meeting			
3:00 – 4:00		Senate meeting			
4:00 – 5:00		Senate meeting			

DAILY SCHEDULE:

MONDAY	TUESDAY	WEDNESDAY	FRIDAY
		9-5 Sec 1-2 41,43,47,49,51	**9-7** Sec 1-2 57,59,61,63,65
9-10 Sec 1-3 3,5,9,15,17 **PRE-TEST**	**9-11** Sec 2-1 61,63,67,69,123 **QUIZ 1**	**9-12** Sec 2-2 11,23,47,61,65	**9-14** Sec 2-3 9,15,17,23,25
9-17 Sec 2-3 57,59,61	**9-18** Sec 2-4 43,45,47,49,51	**9-19** Sec 2-4 61,63,65,73,75 **QUIZ 2**	**9-21** Sec 2.5 23,33,35,39,41
9-24 Sec 2-5 53,57,75,93,95	**9-25** **REVIEW**	**9-26** **EXAM 1**	**9-28** Sec 3.1 35,39,45,49,51
10-1 Sec 3-2 35,41,43,61,63	**10-2** Sec 3-2 47,69,79,93,97	**10-3** Sec 3-3 21,23,29,31,33 **QUIZ 3**	**10-5** Sec 3-3 25,27,35,37,39
10-8 Sec 3-4 21,23,25,29,31	**10-9** Sec 3-4 35,37,39,43,49	**10-10** **REVIEW**	**10-12** **EXAM 2**
10-15 Sec 4-1 17,23,53,57,61	**10-16** Sec 4-2 19,21,41,47,53	**10-17** Sec 4-3 3,11,13,27,29 **QUIZ 4**	**10-19** Sec 4-3 39,57,67,69,71
10-22 Sec 4-4 27,33,37,53,57	**10-23** Sec 4-5 9,13,17,31,35	**10-24** Sec 4-5 43,45,47,49,51 **QUIZ 5**	**10-26** Sec 4-6 3,5,7,9,11
10-29 Sec 4-6 23,27,49,51,55	**10-30** Sec 5-1 & 5-2 5-1: 31,33,41,45,47 5-2: 17,27,33,39,43	**10-31** Sec 5-3 11,15,17,19,21 **QUIZ 6**	**11-2** Sec 5-3 31,33,35,41,43
11-5 **REVIEW**	**11-6** **EXAM 3**	**11-7** Sec 7-2 & 7-3 7-2: 73,77,79,81,83 7-3: 35,49,55,57,59	**11-9** Sec 7-4 33,41,61,63,65
11-12 Sec 8-1 3,5,13,15,19 **QUIZ 7**	**11-13** Sec 8-1 53,77,83,91,95	**11-14** Sec 8-2 3,5,13,23,29	**11-16** Sec 8-2 31,33,77,81,83
11-19 Sec 8-3 5,7,11,29,31 **QUIZ 8**	**11-20** Sec 8-3 33,37,39,49,59 **POST-TEST**	**11-21** **THANKSGIVING**	**11-23** **RECESS**
11-26 Sec 8-4 11,15,17,21,23	**11-27** Sec 8-4 & 8-5 8-4: 25,27,47,49,51 8-5: 3,7,9,11	**11-28** Sec 8-5 15,23,29,31,37 **QUIZ 9**	**11-30** Sec 11-1 15,27
12-3 Sec 11-2 7,15,19	**12-4** Sec 11-3 11,13	**12-5** Sec 11-4 7,9,19,21,23 **QUIZ 10**	**12-7** Sec 11-4 43,45,49,51,59
12-10 Sec 11-5 13,17,19,21,25	**12-11** Sec 11-5 53,55,59,63,65	**12-12** **REVIEW**	**12-14** **EXAM 4**