

MATH 208
Fundamental Mathematics I
Winter 2015

Instructor*: _____

Office/Tel No.: _____

Office Hours: _____

*Students should get the above information from their instructor during class time. The instructor is the person to contact should there be any questions about the course.

Course Examiner: Dr. D. Sen

Text: *Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences*, 12th Edition, by Barnett, Ziegler, & Byleen.

Caution: It is assumed that you have the pre-requisite of MATH 206 or its equivalent. If you do not, please consult with a course advisor.

Math Help Centre: It has been organized to help students in solving problems. The location is LB 912 and the schedule is posted in the Department.

Assignments: Assignments are given every week. Students are expected to submit electronic assignments through **MyMathLab**. There is not enough class time to do all examples needed for a good understanding of the material, and so students are strongly encouraged to do many problems on their own as their time permits. The suggested supplementary (all odd numbered) problems included in this outline for each lecture are specially selected to complement the assignments. In addition, a solutions manual for all odd-numbered questions is packaged with the text to provide quick and thorough feedback.

MyMathLab: Every student who buys a book will receive an access code to an online system called **MyMathLab**. Access codes can also be purchased in the Concordia bookstore. The system provides you with a full electronic version of the text (an eBook) as well as many exercises and practice problems. Students will use this system to do online assignments. However, students are strongly encouraged to use this free resource to help with problems similar to assignment problems, and in areas where they need extra assistance.

Calculators: Only calculators approved by the Department (with a sticker attached as proof of approval) are permitted in the class test and final examination. The preferred calculators are the **Sharp EL531** and the **Casio FX 300MS**, available at the Concordia Bookstore.

Test: One common midterm test will be held on **Sunday, March 8, 2015 at 10:00 A.M.** Students who could not make it that day for a valid reason, e.g. religious or illness (**doctor's note required**), can write an alternate midterm on **Saturday, March 14, 2015 at 10:00 A.M.** Otherwise missed test cannot be made up. **Midterm test will cover until week 7 inclusively.**

NOTE: It is the Department's policy that test missed for any reason, *including illness*, cannot be made up. If you miss the midterm and alternate test because of illness (*to be confirmed by a valid medical note*), the final exam can count for 90% of your final grade.

Final Exam: There are no exemptions from this three-hour exam.

Final Grade: The final grade will be based on the higher of **(a) or (b)**:

- a) 10% for the assignments, 20% for the midterm test, and 70% for the final exam.
- b) 10% for the assignments, 10% for the midterm test, and 80% for the final exam.

IMPORTANT: PLEASE NOTE THAT THERE IS NO "100% FINAL EXAM" OPTION IN THIS COURSE.

Weeks	Topics		Supplementary Problems	
1	1.2	Graphs and Lines	p. 24:	27, 29, 57, 61, 63, 65.
	2.3	Quadratic Functions	p. 81:	15, 27, 33, 61.
2	2.4	Polynomial and Rational Functions	p. 93:	37, 43, 57, 59.
	2.5	Exponential Functions	p. 103:	29, 31, 33, 45, 49, 51.
3	2.6	Logarithmic Functions	p. 115:	25, 29, 45, 49, 81.
	B.2	Arithmetic and Geometric Sequences	p. 608:	25, 27, 33, 35, 49.
4	3.1	Simple Interest	p. 131:	35, 37, 45.
	3.2	Compound Interest	p. 143:	33, 43, 45, 51, 61, 65, 67.

5	3.3	Future Value	p. 152:	21, 23, 27, 31, 39.
	3.4	Present Value	p. 161:	21, 23, 37, 41, 43.
6	4.1	Systems of Linear Equations	p. 179:	15, 27, 57, 59.
	4.2	Systems of Linear Equations/Augmented Matrices	p. 190:	43, 47, 55, 59, 63, 65.
7	4.3	Gauss-Jordan Elimination	p. 202:	31, 39, 43, 51, 53.
	4.4	Matrices: Basic Operations	p. 214:	33, 37, 55, 57, 65.
8	4.5	Inverse of a Square Matrix	p. 227:	37, 49, 51, 53, 59.
	4.7	Leontief Input-Output	p. 243:	17, 19, 27, 29, 31.
9	5.1	Inequalities in Two Variables	p. 256:	7, 13, 33, 37, 39.
	5.2	Systems of Linear Inequalities in Two Variables	p. 263:	17, 21, 29, 31, 41.
10	5.3	Linear Programming in Two Dimensions	p. 273:	15, 17, 19, 21, 23.
	7.3	Basic Counting Principles	p. 353:	17, 23, 37, 41, 51.
11	7.4	Permutations & Combinations	p. 365:	33, 41, 55, 61, 65.
	8.1	Sample Spaces, Events and Probability	p. 383:	29, 59, 77, 83, 91.
12	8.2	Union, Intersection and Complement of Events	p. 396:	57, 59, 71, 75, 79.
	8.3	Conditional Probability	p. 408:	29, 31, 39, 49, 61.
13	REVIEW			