

American University of Beirut
Faculty of arts and Sciences
Mathematics Department
MATH 203: Mathematics for Social Sciences I

Textbook: Applied Mathematics for Business, Economics and Social Sciences. Frank S. Budnick, 4th ed.

Course Objectives:

This is an introductory course that helps students to review and develop some basic mathematical concepts, definitions and symbols that represent variables used in the real world. Mathematical proofs are minimized except when needed.

The purpose of this course is to help students understand, appreciate and perform mathematical analysis. It is organized so that a type of analysis is discussed with respect to its mathematical procedure and then with respect to its application in business and economics.

In this course students are expected to:

- Review basic concepts of Algebra.
- Form and Solve equations and inequalities, Understand their meaning and some of their applications in business and economics.
- Solve systems of equations using different methods.
- Identify different types of functions; know their characteristics, graphs and some applications.
- Understand limits, asymptotes, average rate of change, and compute the derivative of a function using the limit approach.

Grade Distribution:

Exam I 25 %

Exam II 25 %

Class Evaluation: Drop quizzes, Homework, Attendance... (10 %)

Final Exam 40%

Schedule:

Week	Section	Suggested Exercises
1	A.1, A.2, A.3	p. A-9 2,11,21,29,31,35,39,45,47,55,59,65,69,73,83,87,93.
2	A.4,A.5, App.B	p. A-15 3,7,11,19,23,29,31,33,36. p. A-18 solve the odd exercises. p. A-2 11,5,11,13,19,23,27,31,33,35,41,43,49,53,57,59,67.
3	1.1,1.2,1.3	Solve the odd exercises
4	1.5,2.1,2.2	p.29 3,7,13,17,21,27. p.40 5,11,17,19,23,26,29. p.51 5,9,17,25,37,47,55.

5	2.3,2.4,2.5	p.54 3,9,17,26,28,29. P.63 3,6,11,17,18,27,29,31 → 37. P72. 1,3,4,5,6.
6	2.6,3.1	Study solved examples p.72-75.
7	3.2,3.3	
8	3.4,Elimination procedure (3x3)	Study the solved examples p.113-116. Study p.128-133.
9	4.1,4.2	p.149 1,5,11,17,23,27,29,33,37,39. P150. 41,43,46,47,53,57,63. p.160 3,5,13,19,23,29,31,32,37,41.
10	4.3,5.1	p.168 1,3,7,11,13,17,19,20.
11	7.1,7.2	p.265. 1,3,4,11,13,17,22,28. p.274 1, 3, 5,7,10.
12	7.3	p.288 5,11,19,23,27,37,45,49,61,63,65,71,75,77.
13	15.1,15.2	p.670. 3,4,5,7,10,13,17,23,25,27. p.683. 3,7,13,19,23,25,31,39,41,47.
14	15.3,15.4	p.689 1,5,11. p.692 23, 27, 35. p.701 1,7,15.
15	Revision	

Course Regulations:

Regular attendance is expected .Home work, class work, drop quizzes, assignments will be part integral part of the final evaluation.

Students are responsible for all the material presented in class, including announcements about course procedure.