Lincoln University

Course Title:	College Mathematics	**Instructor:**	Prof. Serge Ruiz
Course No:	MATH 10	**Phone:**	949-232-3323
Units:	3 units (= 45 lecture hours)	**E-mail:**	sruiz@lincolnuca.edu
Class Hours:	Tuesdays and Thursdays, 09:00 am – 11:45 am	**Office Hours:**	After class or on request
Semester:	Summer 2014	**Office Number:**	Room 402

REQUIRED MATERIALS

Textbook: _College Algebra_, by Michael Sullivan, Pearson, 9th Edition, 2011 ISBN-10:0321716817

Required Tools: Microsoft Excel Spreadsheets

Optional: A scientific calculator

Website: elearning.lincolnuca.edu

COURSE DESCRIPTION

Elementary Algebra: fundamental algebraic concepts and operations, number bases, linear equations and inequalities, functions, graphing. Intermediate Algebra: study of algebra including exponents and radical polynomials, geometric series, rational expressions, quadratic equations and logarithms (3 units)

LEARNING OBJECTIVES

The students will review the basic concepts and techniques of elementary and intermediate algebra, get complete coverage of the function and graph concepts, and learn how to apply them. Particular emphasis will be placed on the practical use of mathematics in business and in economics. The goal is to introduce students to problem solving and mathematical modeling using algebra and to build a solid foundation in the principles of mathematical thinking.

INSTRUCTIONAL METHODS

Lecture method is used in combination with the practical use of a calculator, business software, and the Internet resources to solve application problems. The emphasis will be on learning by doing. Every student must participate in an intensive classroom activity. Reading, writing, and problem solving assignments will be made weekly throughout the course.

OTHER REQUIREMENTS

All students are required to attend the class. Continuous assessment is emphasized. Written or oral quizzes will be given every week. Students must complete all assignments and take all quizzes, mid-term exam and final exam ON THE DATES DUE. Talking in class, using cell phones, coming late, leaving the room at times other than at break time is not allowed. Plagiarism/cheating will result in the grade F and a report to the administration.

ASSIGNMENTS & QUIZZES

Most assignments will be from the textbook. Each assignment is due at the beginning of the following class. You can return your assignments electronically if you desire. Quizzes will take place at the beginning of the course, after collecting assignments and answering questions. Quizzes are designed to last 20 minutes and are based on the material in the assignment.

TESTING

Classroom activities	every week	10%
Quizzes	as scheduled	10%
Assignments	every week	10%
Mid-term exam	as scheduled	30%
Final exam	as scheduled	40%

There will be no make-up for a missed quiz or participation in a classroom activity. No make-up exams will be given unless you have the instructor's prior approval obtained in person before the exam date, with the exception of an extreme emergency. Late assignments will get no credit or reduced credit. ***Students will not be allowed to use computers or cellular phones during tests.***

GRADING

Grades will be determined according to the following percentages awarded for completed work:

100-93	92-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-60	59-0
A	A-	B+	B	B-	C+	C	C-	D+	D	F

OTHER COMMENTS

- Please participate. You will be asked to go to the board to solve exercises.
- Please come on time. Late arrivals disturb everyone else.
- To avoid distracting noise in class, cellular phones must be turned off or the ringing mode silenced.
- Questions and comments during the class are welcome. Do not hesitate to ask questions – do not leave anything unclear for you.

SCHEDULE OF TOPICS

Please read every chapter of the textbook   before you come to class

Session	Date	Topics	Chapters
1	06/10	Real Numbers, Algebra Essentials, Geometry Essentials, Polynomials.	R1-R4
2	06/12	Factoring Polynomials. Rational Expressions. Nth Roots. Rational Exponents.	R5-R8
3	06/17	Linear Equations, Quadratic Equations and Solving Inequalities	1
4	06/19	Distance and Midpoint Formulas; Graphs of Equations in Two Variables	2
5	06/24	Functions: The Graph of a Function; Graphing Techniques, Transformations	3
6	06/26	Mathematical Models: Building Function; Quadratic Equations and Their Properties	4
7	**07/01**	**Midterm Exam**	**R1-8, 1-4**
8	07/03	Polynomial Functions and Models. Properties of Rational Functions	5
9	07/08	Composite Functions. One-to-One Functions	6
10	07/10	Exponential and Logarithmic Functions	6
11	07/15	Compound Interest, Exponential Growth and Decay; Newton's Law	6
12	07/17	Systems of Linear Equations, Matrix Algebra	8
13	07/22	Sequences; Induction; the Binomial Theorem	9
14	**07/24**	**Final Exam**	**1-9**

MODIFICATION OF THE SYLLABUS

This syllabus was updated on April 1, 2014. The instructor reserves the right to modify this syllabus at any time during the semester. An announcement of any changes will be made in the classroom.