Lincoln University
Fall 2018

COURSE: **MATH 10: COLLEGE MATHEMATICS** (Mon. 9:00 –11:45 AM) 3 units

INSTRUCTOR: Guoliang Fang glfang@lincolnuca.edu
510-628-8037

OFFICE HOURS: Before and after class

TEXT BOOKS: Lecture materials will be provided. The books below are helpful but not required:

The Theory of Interest, by Stephen Kellison 3rd Edition
College Algebra, by Michael Sullivan, Pearson, 10th Edition, 2016

Required Tools: Microsoft Excel Spreadsheets

CATALOG DESCRIPTION:

Elementary algebra: fundamental algebraic concepts and operations, number bases, linear equations and inequalities, functions, graphing, exponentiation logarithms, interest theory. (3 units)

COURSE LEARNING OUTCOMES AND ASSESSMENT:

- The students are expected to develop knowledge in 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.
- Assessment: Attendence(In-class participation, Quizzes), Homework, Midterm, Final exam
- Students will develop knowledge in elementary algebra including fundamental algebraic concepts and operations, number bases, linear equations and inequalities, functions, graphing, exponents and radical polynomials, geometric series, rational expressions, quadratic equations, and logarithms.

INSTRUCTIONAL METHODS:

Lecture method is used in combination with case studies and outside readings, as assigned. The emphasis will be on learning. Every student must participate in an intensive preparation and classroom activity. The emphasis will be on learning by examples and solving problems. Every student is welcome to participate in intensive classroom activities and discussions. Reading and problem solving assignments will be given throughout the course. Video materials will be presented. There may be class discussions and group presentations by students on the project assignments during class.

CLASS ATTENDANCE:

Students are expected to attend class on a regular basis.
Attendance is crucial to performing well in this course, as some of the material presented may not be found in the textbook.
Further, the lecture and classroom demonstrations will emphasize and expand upon important topics found in the textbook.
Pop quizzes will be given randomly.
Thus, it is vital that you take thorough notes in class.

ASSIGNMENTS:

There are 5 homework assignments in this class.

EXAMS:

There will be two exams — a midterm and a final. To assess your learning in this course, exam questions will be derived from the lecture and textbook. Topics covered in lecture will be of major emphasis on the exam, and should be the focus of your textbook readings, though there will be some test questions found in the assigned readings but not covered in the lecture. To avoid guessing, there will be no multiple-choice questions on the exams. Exams may include conceptual or theoretical questions, and questions with applied scenarios. ***All exams are open books and open notes.***

GRADING PLAN:

Percentage	Grade
90-100%	A
80-89%	B
70-79%	C
60-69%	D
below 60%	F

Score Weights	
Attendance	25%
Homework	25%
Midterm Exam	25%
Final Exam	25%

CLASSROOM POLICY:

Be be respectful and courteous to fellow students

I am available and will do my best to help you learn and succeed. Questions and points of discussion are encouraged. I am also highly accessible for discussions if you wish to receive additional information or learn more about a certain topic or need help with data analysis. Please visit me during my office hours, or talk to me immediately after class, if you need study tips or additional help. No appointment is required for my office hours.

TENTATIVE CLASS SCHEDULE:

Week	Content
Class 1	Equality & Word Problems
Class 2	Exponentiation and Interest Theory 1
Class 3	Exponentiation and Interest Theory 2
Class 4	Interest theory and basic finance math 1
Class 5	Interest theory and basic finance math 2
Class 6	Application
Class 7	Theory of Bonds 1
Class 8	Theory of Bonds 2
Class 9	Theory of Annuity introduction
Class 10	Theory of Annuity retirement fund
Class 11	Theory of Annuity mortage 1
Class 12	Theory of Annuity mortage 2
Class 13	Introduction to Stocks
Class 14	Introduction to financial derivatives

Note: Instructor reserves the right to modify the content of this syllabus.

GOOD LUCK!

Syllabus Reviewed: 08/10/2018