Lincoln University

MATH 10 – College Mathematics

COURSE SYLLABUS

Fall 2020

Instructor:	Ms. Olesya Agafontseva
Lecture Schedule:	Wednesday, 9:00 AM – 11:45 AM
Credits:	3 units / 45 lecture hours
Level:	Introductory (I)
Office Hours:	By appointment
	e-mail: oagafontseva@lincolnucasf.edu
Textbook:	Lial, Margaret L.| Hornsby, John| McGinnis, Terry. **Introductory and Intermediate Algebra** 6th edition. Pearson. 2018. ISBN-13: 978-0-13-449375-6 ISBN-10: 0-13-449375-3
Last Revision:	August 20, 2020

CATALOG DESCRIPTION

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

COURSE 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. Students will be introduced to topics 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. 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.

COURSE LEARNING OUTCOMES[1]

	Course LO	Program LO	Institutional LO	Assessment
1	Communicate effectively verbally in various professional and social contexts.	GELO 2	ILO 1a, ILO 2a	Class activities
2	Demonstrate proficiency in college-level mathematics, be able to represent mathematical information symbolically, visually, and verbally; interpret and apply quantitate methods to solve practical problems.	GELO 3	ILO 1a, ILO 2a	Quizzes, Homework, Final Exam
3	Apply critical thinking skills and common sense to approach and solve real-world problems. Demonstrate proficiency in skills that sustain lifelong learning, particularly to think critically and responsibly in assessing, evaluating, and integrating information.	GELO 5	ILO 1a, ILO 2a, ILO 6a	Quizzes, Homework, Final Exam

INSTRUCTIONAL METHODS

This is a direct classroom instruction course. ***(Exception: Offered online for Fall 2020).***

Lecture method, where every student must participate in an intensive preparation and classroom activity. The emphasis will be on learning by examples and solving problems. Problem solving assignments will be given throughout the course during the class and as a homework.

Assignments and projects require students to actively use resources of the library. Detailed guide to business *resources of the library* as well as the description of Lincoln University approach to *information literacy* are available at the Center for Teaching and Learning website (ctl.lincolnuca.edu).

ACADEMIC HONESTY & INTEGRITY HONOR CODE

The faculty, administration, and staff reinforce academic honesty and principles of academic honor. Independent learning is vital to the requirements of honesty and integrity in the performance of academic assignments, both in the classroom and outside. Students should avoid academic dishonesty in all of its forms, including plagiarism, cheating, and other forms of academic misconduct. The University reserves the right to determine what constitutes a violation of academic honesty and integrity.

ATTENDANCE

Students are expected to attend each class section. If you cannot attend a class due to a valid reason, please notify the instructor prior to the class.

[1] Detailed description of learning outcomes and information about the assessment procedure are available at the Center for Teaching and Learning website (ctl.lincolnuca.edu).

CLASSROOM POLICY

- Come on time.
- Do not use smart phones during the lecture, they must be turned off or the ringing mode silenced.
- No food during the lecture.
- If you miss a class, you are responsible for getting notes/slide printouts on the material covered from a classmate or the instructor.

REQUIREMENTS

Continuous assessment is emphasized. Written quizzes will be given every class session. Problem solving homework assignments will be given every week. Students must complete all home tasks, other assignments, and take all quizzes, and final exam on the dates due.

Zero tolerance to plagiarism and cheating is enforced. Plagiarism or cheating will result in grade "F" (with zero points) and a report to the administration.

ASSIGNMENTS

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

EXAMS

Final exam consists of problem solving.

The exam will cover all assigned chapters, any additional readings or supplementary materials covered in class.

GRADING POLICY

All activities will be graded according to the points as shown below:

Grade	A	A-	B+	B	B-	C+	C	CR	NC
Points	93-100	90-92	87-89	83-86	80-82	77-79	73-76	60-72	0-59

"CR" means "Credit", "NC" means "No Credit".

The exam grade will be given as the percentage points of the correct answers.

The final grade for the course will be given as the total weighted score for all activities according to the percentage shown in the table below:

Activity	**Percent**
Class Attendance	5%
Class Activity	10%
Quizzes	15%
Homework Assignments	30%
Final exam	40%
Total	**100%**

MAKE-UP WORK

Assignments are to be completed on time during the course. Late assignments will result in a reduced grade. Final exam cannot be made up if missed unless there is a documented emergency.

COURSE SCHEDULE

	Date	Topic	Chapters
1	Aug. 26	Prealgebra review, real numbers, equations, inequalities and applications.	Chs. 1,2
2	Sep. 2	Graphs of linear equations and inequalities in two variables	Ch. 3
3	Sep. 9	Systems of linear equations and inequalities	Ch. 4
4	Sep. 16	Exponents and Polynomials	Ch. 5
5	Sep. 23	Factoring and applications	Ch. 6
6	Sep. 30	Rational expressions and applications	Ch. 7
7	Oct. 7	Equations, inequalities, graphs and systems revisited	Ch. 8
8	Oct. 14	Relations and functions	Ch. 9
9	Oct. 21	Roots, radicals, and root functions	Ch. 10
10	Oct. 28	Quadratic equations, inequalities and functions	Ch. 11
11	Nov. 4	Composition of functions, inverse and exponential functions	Ch. 12
	Nov. 11	No Class (Veterans Day)	
12	Nov. 18	Logarithmic function	Ch. 12
	Nov. 25	No Class (Thanksgiving Break)	
13	Dec. 2	Review for Final exam	
14	Dec. 9	Final Exam	

MODIFICATION OF THE SYLLABUS

The instructor reserves the right to modify this syllabus at any time during the semester. Announcements of any changes will be made in a classroom.