



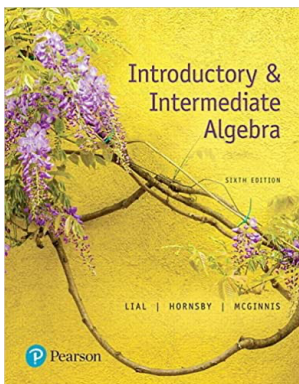
# Lincoln University

## MATH 10 – College Mathematics

### COURSE SYLLABUS

Summer 2022

**Instructor:** Ms. Olesya Agafontseva  
**Lecture Schedule:** Tuesday/Thursday, 12:30 PM – 3:15 PM  
**Credits:** 3 units / 45 lecture hours  
**Level:** Introductory (I)  
**Office Hours:** Before the class, by appointment  
e-mail: [oagafontseva@lincolnuca.edu](mailto:oagafontseva@lincolnuca.edu)  
**Textbook:** Lial, Margaret L. | Hornsby, John | McGinnis, Terry.  
**Introductory and Intermediate Algebra** 6<sup>th</sup> edition.  
Pearson. 2018.  
ISBN-13: 978-0-13-449375-6  
ISBN-10: 0-13-449375-3  
(*Previous editions are okay.*)



**Last Revision:** June 7, 2022

### 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<sup>1</sup>**

	<b>Course LO</b>	<b>Program LO</b>	<b>Institutional LO</b>	<b>Assessment</b>
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 quantitative methods to solve practical problems.	GELO 3	ILO 1a, ILO 2a	Quizzes, Homework, Practice test, 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, Practice test, Final Exam

**INSTRUCTIONAL METHODS**

**This is a direct classroom instruction course.**

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](http://ctl.lincolnuca.edu) 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. If you miss a class, you are responsible for getting notes on the material covered from a classmate or the instructor.

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

**CLASSROOM POLICY**

- Participate. What you put into the class will determine what you get out of it – and what others get out of it.
- Ask questions right away during the class if anything is not clear.
- Please come **on time**. Late arrivals disturb everyone else. Attendance will be taken each class at a time chosen by the instructor.
- Students are to remain in class during the entire session except for breaks.  
**Students are not allowed to come and go during class session.**
- To avoid distracting noise in class, cellular phones **must** be turned off or the ringing mode silenced.
- **Cell phones are not to be used in the classroom during instructional time.**
- You can use a computer in class **only** to take notes, to access course materials from the course webpage, or to locate information relevant to the class discussion.
- All class participants are expected to exhibit respectful behaviors to other students and the instructor. Inappropriate or disruptive behavior will not be tolerated, nor will be lewd or foul language.
- Students engaging in disruptive behavior in class will be asked to leave and may be subject to other penalties if the behavior continues.
- No eating is permitted during lecture.
- Do everything reasonable to make our class better organized and efficient.
- Instructor may dismiss a student from the course after missing 3 consecutive class meetings.

**REQUIREMENTS**

Continuous assessment is emphasized. Written quizzes will be given every class session. Problem solving homework assignments will be given after each class. 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. Quizzes will take place at the beginning of each class, after collecting assignments and answering questions. Quizzes are designed to last 15 minutes and are based on the material in the assignments.

**EXAMS**

Final exam consists of problem solving.

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

The exam is “open book” and “open notes”. Using of electronic devices is not allowed.

**GRADING POLICY**

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

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

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 tentative table below:

Activity	Percent
Quizzes and class participation	5%
Homework Assignments	35%
Final exam	60%
<b>Total</b>	<b>100%</b>

**MAKE-UP WORK**

Assignments are to be completed on time during the course. Late submissions are not accepted.

Final exam cannot be made up if missed unless there is a documented emergency.

**COURSE SCHEDULE**

	Date	Topic	Chapters
1	June 14	Diagnostic test. Prealgebra review, real numbers	Ch. 1
2	June 16	Equations, inequalities and applications.	Ch. 2
3	June 21	Graphs of linear equations and inequalities in two variables	Ch. 3
4	June 23	Systems of linear equations and inequalities	Ch. 4
5	June 28	Exponents and Polynomials	Ch. 5
6	June 30	Factoring and applications	Ch. 6
7	July 5	Rational expressions and applications	Ch. 7
8	July 7	Equations, inequalities, graphs and systems revisited. Midterm practice test.	Ch. 8
9	July 12	Relations and functions	Ch. 9
10	July 14	Roots, radicals, and root functions	Ch. 10
11	July 19	Quadratic equations, inequalities and functions	Ch. 11
12	July 21	Composition of functions, inverse and exponential functions	Ch. 12
13	July 26	Logarithmic function. Review for Final exam	Ch. 12
14	July 28	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.