Lincoln University

MATH 10 – College Mathematics

COURSE SYLLABUS

Spring 2024

Instructor: Ms. Olesya Agafontseva
Lecture Schedule: Wednesdays, 12:30 PM – 3:15 PM
Credits: 3 units / 45 lecture hours
Level: Introductory (I)
Office Hours: Wednesdays, 11:45 – 12:30 by appointment
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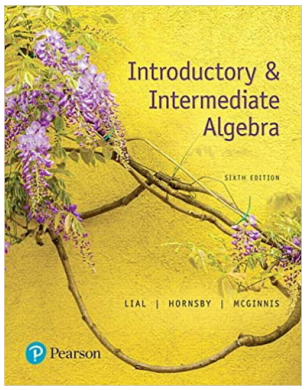
Textbook: Lial, Margaret L.| Hornsby, John| McGinnis, Terry. **Introductory and Intermediate Algebra** 6th edition. Pearson. 2018.
ISBN-13: 978-0-13-449375-6
ISBN-10: 0-13-449375-3
The previous editions are okay.



Last Revision: January 19, 2024

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, Midterm and Final Exams
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, Midterm and Final Exams

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 LU Library website (lincolnuca.libguides.com).

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.

[1] Detailed description of learning outcomes and information about the assessment procedure are available at the Learning Outcomes Assessment section of LU website.

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.

CLASSROOM POLICY AND NETIQUETTE

- Ask questions right away during the class if anything is not clear.
- Come **on time**. Late arrivals are not tolerated. 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.** People not following this rule will be forced to leave the class, and a note will be sent to Athletics Program Director.
- 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 of 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.
- Registering on the class website (CANVAS) is the responsibility of a student.
- Address instructors' and staff members by their titles, such as Dr. or Professor. When in doubt, use Mr. or Ms. Unless specifically invited, don't refer to instructors by their first name.
- Do not write an email to a college instructor or staff member the way you would send a casual text.

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 midterm and final exams 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.

Administrative policies on ABSENCES FROM CLASSES

A student may be DISMISSED after missing 3 consecutive classes registered in a semester.

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

Midterm and Final Exams consist of problem solving.

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

The exams are "open book" and "open notes". Using of electronic devices is not allowed. Simple calculators will be provided.

Midterm and Final exams cannot be retaken.

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 table below:

Activity	Percent
Homework Assignments and Class Activity	18%
Quizzes	2%
Midterm exam	35%
Final exam	45%
Total	100%

MAKE-UP WORK

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

Midterm and Final exams cannot be made up if missed unless there is a documented emergency.

COURSE SCHEDULE

	Date	Topic	Chapters
1	Jan. 24	Diagnostic Test. Prealgebra review.	
2	Jan. 31	The Real Number System. Equations, Inequalities, and Applications	Ch. 1, 2
3	Feb. 7	Graphs of Linear Equations and Inequalities in Two Variables	Ch. 3
4	Feb. 14	Systems of Linear Equations and Inequalities	Ch. 4
5	Feb. 21	Exponents and Polynomials	Ch. 5
6	Feb. 28	Factoring and Applications	Ch. 6
7	Mar. 6	Rational Expressions and Applications.	Ch. 7
	Mar. 13	No Class – Spring Break	

8	Mar. 20	Midterm Exam	Chs. 1-7
9	Mar. 27	Relations and Functions	Ch. 9
10	Apr. 3	Roots, Radicals, and Root Functions	Ch. 10
11	Apr. 10	Quadratic Equations, Inequalities and Functions	Ch. 11
12	Apr. 17	Composition of Functions, Inverse and Exponential Functions	Ch. 12
13	Apr. 24	Logarithmic Functions	Ch. 12
14	May 1	Review for Final Exam	
15	May 8	Final Exam	Chs. 9-12

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.