Lincoln University

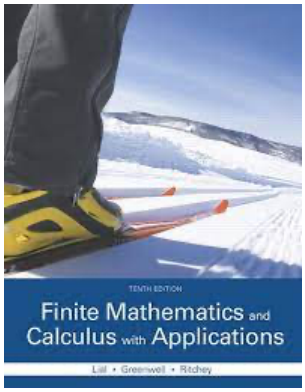
MATH 15 – Finite Mathematics

COURSE SYLLABUS

Fall 2021

Instructor: Ms. Olesya Agafontseva
Lecture Schedule: Wednesdays, 12:30 PM – 3:15 PM
Credits: 3 units / 45 lecture hours
Level: Introductory (I)
Office Hours: By appointment
e-mail: oagafontseva@lincolnuca.edu

Textbook: Lial, Margaret L.| Greenwell, Raymond N.| Ritchey, Nathan P.
Finite Mathematics and Calculus with Applications 10th edition.
Pearson. 2016.
ISBN-13: 978-0133863420
ISBN-10: 0133863425
The previous editions are okay.



Last Revision: August 20, 2021

CATALOG DESCRIPTION

Topics include matrix theory, linear systems, linear programming, probability, decision theory, and game theory. Also applied calculus is covered. (3 units)

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 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. If you miss a class, you are responsible for getting notes on the material covered from a classmate or the instructor.

[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

- Please 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.
- Registering on the class website (CANVAS) is the responsibility of a student.
- Students are to remain in class during the entire session with the exception of 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.
- If you use a computer in class, please use it 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 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.
- Do everything reasonable to make our class better organized and efficient.

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.

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

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.

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	10%
Quizzes	10%
Midterm exam	35%
Final exam	45%
Total	**100%**

MAKE-UP WORK

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

COURSE SCHEDULE

	Date	**Topic**	**Chapters**
1	Aug. 25	Diagnostic Test. Algebra review.	
2	Sep. 1	Linear Functions	Ch. 1
3	Sep. 8	Systems of Linear Equations and Matrices	Ch. 2
4	Sep. 15	Matrices. Solutions of linear systems	Ch. 2
5	Sep. 22	Linear programming: The Graphical Method	Ch. 3
6	Sep. 29	Mathematics of Finance	Ch. 5
7	Oct. 6	Logic	Ch. 6
8	Oct. 13	Midterm Exam	Ch. 1-3, 5-6
9	Oct. 20	Sets and Probability	Ch. 7
10	Oct. 27	Counting principles. Binomial probability.	Ch. 8
11	Nov. 3	Nonlinear Functions	Ch. 10
12	Nov. 10	Limits, continuity, derivatives	Ch. 11
13	Nov. 17	Graphs and the Derivatives	Ch. 13
14	Nov. 24	No Class – Thanksgiving Break	
15	Dec. 1	Review	
16	Dec. 8	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.