MATH 103C: Applied Algebra
Section 030 — Summer 2024

Instructor Information

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Office Hours: 1:00pm-4:00pm MTWR

Class Information

Dates: 06/04/24 – 07/09/24
Time: MWF 8:00am-9:15am / 11:30am – 12:45pm
Classroom: BOGH 305
MyLab Math Course ID: patterson13487

Course Description

This course will focus on solving equations and inequalities; function properties and graphs; linear, quadratic, polynomial, exponential, and logarithmic functions, applications, system of equations and inequalities. *Prerequisites: See University Catalog*.

Course Objectives

After this course, you should be able to. . .

- To develop a matured perspective on how to approach mathematical problems and concepts.
- To improve your ability to engage in mathematical thinking, reasoning, communication, and problem solving.
- To learn how to take abstract questions, make them concrete, and use Mathematics to analyze these questions.
- To encourage you to become a reflective mathematics student.
- To understand Mathematics not only as a tool for solving problems but as an art and science in and of itself.
- To learn to [self] assess mathematical problems, solutions, and concepts.

Textbook, Calculators, & Software

Textbook: *Algebra for College Students, 9th Edition*, by Lial/Hornsby/McGinnis.

Calculator: TI-30XIIS, No other calculator permitted.

Software: MyLab Math by Pearson

Phone and Device Policies

Following University guidelines, all electronic devices should be turned off and put away during class. Use of such devices can result in dismissal from class. If there is an issue which requires you to need a phone in class, discuss this with your instructor. The use of phones or other devices during exams will result in a zero for that exam.

Class Attendance and Participation

It is essential to your success in this course that you attend each lecture and participate in the discussions. Therefore, you are expected to attend each lecture and to show up on time. Should you need to miss a class for any reason, you are responsible for any material covered, any work assigned, or any course changes made during the lecture. Do not expect the instructor to provide notes from any class that you might miss. More than three unexcused absences from lectures could result in receiving an 'F' in the course, as University policy. Furthermore, excessive lateness will also count as an absence.

Homework

The only way to learn Mathematics is to do Mathematics! It is essential for students to complete all of the homework assignments and labs. The purpose of the homework is for you to practice the concepts covered in class. There may be some problems that will be written and submitted. Completing all the homework problems is the best way to practice and prepare for the class. You are encouraged to work with others on homework. Mathematics is a social activity! However, do not simply use others to do your work but rather use others to help work through and engage in the concepts. It is imperative that you complete BOTH the textbook assignments and the assignments in MyLab Math in order to be adequately prepared for the exams.

Exams

There are four exams and a final exam. You are expected to be present, seated, and ready to take the exam before the exam begins. You are not permitted to use any outside materials, resources, or electronic devices (including but not limited to mobile phones, smartwatches, etc., but not including a calculator) on the exams. Any violation of this policy is a violation of the university's Academic Integrity Policy. Once an exam has begun, you may not leave the room for any reason until you have submitted your exam for grading.

Make-ups will be allowed for exams only in the case of an excused absence (generally a doctor's excuse which I have called and verified or an official university excuse). The student must contact me by the class meeting following a missed exam to discuss the reason for missing the exam and to determine the possibility of a make-up exam. Make-ups will be another exam or the comprehensive final exam as specified by me.

The final exam is comprehensive and will only be given at the announced time. *There will be no exceptions.*

Grading

The course grade is determined by the following components:

Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
Exam 4	100 points
Homework	50 points
Final Exam	150 points
Total Possible	600 points

In the event of a question regarding an exam grade or final grade, it will be the responsibility of the student to retain and present graded materials which have been returned for student possession during the quarter.

Grade Scale

Final grades will be assigned according to the following scale based on points earned out of total possible points:

A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	0 – 59%

Mathematics Help

Be proactive about your success in the course! If you need help, there are many resources available to help you. Your first primary contact for help is the instructor. If you are struggling, attend office hours or send an email. Do not wait to bring issues, course related or otherwise, to the attention of the instructor. If you cannot attend office hours, send an email to the instructor to try to make other arrangements. You may also find help at the BARC (Bulldog Achievement Resource Center): https://www.latech.edu/current-students/barc/.

Students with Disabilities

Louisiana Tech University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. My goal as your instructor is to create a learning environment that is equitable, inclusive and welcoming. If you believe that you need accommodations for a disability, please contact the Department of Testing and Disability Services (TDS) located on the third floor of Wyly Tower. Please contact them at your earliest convenience to ensure there is no disruption to your academics. https://www.latech.edu/current-students/disability-services/

Counseling Services

If at any point during the semester, you feel overwhelmed with your class work, feel thoughts of depression/suicide, experience sexual assault/rape, experience problems with substance abuse or relationship abuse, or have any other struggles with physical/mental health, ***please seek help***! The Counseling Center Services at Louisiana Tech University are a resource offering assistance with any issue that may arise. There is ***never*** any shame in seeking help. If you or someone you know is struggling with any of these issues, speak out! The Counseling Center Services website can be found at https://www.latech.edu/counseling-services/ and is located in Keeny Hall.

Academic Integrity

Louisiana Tech University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The university policy governs the integrity of work submitted in exams and assignments. To learn more about our university policy visit https://www.latech.edu/student-advancement-affairs/student-conduct-integrity/.

Hazing

In compliance with Acts 635, 637, and 640 of the 2018 Regular Session and Act 382 of the 2019 Regular Session of the Louisiana Legislature and the 2019 Board of Regents Uniform Policy on Hazing, the System reaffirms its policy that any form of hazing of any student enrolled at any institution of the System is prohibited. Violation of this Policy can result in both disciplinary action imposed by the organization and/or institution as well as criminal charges.

Emergency Alert

Louisiana Tech University's crisis notification system, uses text messages, phone, and email alerts to provide rapid notification and instructions to members of the University community in the event of a critical incident in progress. Critical incidents could include an individual who is considered armed and dangerous, a hazardous materials incident, an explosion, or any other event in which there is an immediate threat of physical harm or death to campus community members. To sign up, visit https://www.latech.edu/student-advancement-affairs/university-police/emergency-notification-system/

Email Policy

Louisiana Tech University has established email as a primary vehicle for official communication with students, faculty, and staff. All email communication in this course should be done using your @email.latech.edu email account. Due to federal laws, such as FERPA, emails coming from a non-latech email may not receive a response. Please, title emails with Math 102-103C: [Email Issue], where "email issue" is a summary title of the content of the email. This is to help ensure that your email is noticed and responded to.

Important Dates

- Exam 1: 06/11/24 (first meeting)
- Exam 2: 06/18/24 (second meeting)
- Academic Drop Deadline: 06/24/24
- Exam 3: 06/25/24 (second meeting)
- Exam 4: 07/03/24 (second meeting)
- Final Exam: 07/08/24 (first meeting)

Exam dates are tentative and subject to change.

Respect Policy

I respect your time:

- I will come prepared to help you understand the course material and prepare you for quizzes/exams.
- Communication is key: I cannot help you if I do not know what is going on.
- I am here to help you, this is your time, so let me know what I can do to help you succeed.

Respect my time:

- Be on time to class.
- Pay attention when I am talking to you.
- Come to class prepared by doing the work and going to office hours when you need help.

Respect each other:

- Do not be disruptive. If you need to take a call or text someone (in an emergency) , take it outside.
- Work with each other to find solutions. You learn more by helping each other.
- Allow one another to make mistakes. This is an important part of the learning process.
- Use respectful language when talking with one another.

Tips for Success

- Be proactive about your success in the course.
- Do not procrastinate! Begin your assignments and studying early!
- Attend every class.
- Ask questions whether it is during class, office hours, at the BARC or via email to your instructor.
- Form a study group! Working together will help you and others better understand the course material as you can work through different difficulties and offer each other clarifications on concepts.
- Do problems! Reading through your notes is not enough. Seek out new problems and work through them carefully. When you are done, check your answer. If you are wrong, examine carefully what misunderstanding occurred and how to avoid it in the future. If you were correct, examine if there was a faster way, check to see if your solution 'flowed' and was easy to read, and think over what concepts/computations were used and what 'type' of problem the exercise was.
- Every time you approach a new concept, carefully think how it could be applied in your own field of study.

Suggested Homework Problems

These are suggested exercises you try from the textbook.

Chapter 1	Section 1.1	19 - 41 odd, 57 - 81 odd
	Section 1.5	9 - 39 odd, 43 - 55 odd, 65, 71, 72
	Section 1.6	19 - 29 odd, 35 - 45 odd, 55 -61 odd
Chapter 2	Section 2.2	1, 3, 15, 16, 25 - 39 odd, 45 - 48 all, 55 - 75 odd, 81 - 89 odd, 97
	Section 2.3	15 - 25 odd, 31 - 79 odd
Chapter 4	Section 4.1	9-141 eoo
Chapter 5	Section 5.1	9 - 71 odd OMIT 35, 37, 39
	Section 5.2	19 - 57 odd
	Section 5.3	7 - 63 odd, OMIT 25, 27, 29
	Section 5.5	3 - 45 odd
Chapter 6	Section 6.4	3 - 47 odd
Chapter 7	Section 7.1	13 - 43 odd, 53 - 71 odd
	Section 7.2	11 - 77 odd
	Section 7.3	45-63 odd
	Section 7.7	13 - 20
Chapter 8	Section 8.1	5 - 37 odd, 55, 56, 61, 75, 77, 79
	Section 8.2	5 - 37 odd
Chapter 2	Section 2.5	17 - 67 odd, OMIT 53
	Section 2.6	5 - 61 odd, 65
Chapter 9	Section 9.1	1-6 all, 7-33 oddd
	Section 9.2	5-37 eoo
	Section 9.3	7-11 odd, 25-30 all, 43-49 odd
	Section 9.5	7-22 all, handout
Chapter 10	Section 10.2	19-37 odd
	Section 10.3	5-27 odd, 43-81 odd, 83-88 all
	Section 10.4	13-35 odd
	Section 10.6	5-15 odd, 29-37 odd, 41-52 all
Chapter 3	Section 3.1	21 - 61 odd, 79, 81
	Section 3.2	7-17 odd