

Instructor Information

Instructor	Paul Hay
Email	haypa@lamarpa.edu
Phone	(409) 984-6549
Office	Student Center - Room: 418
Office Hours	Monday and Wednesday -- 9:30 AM - 12:00 PM Tuesday and Thursday -- 9:30 AM - 10:30 AM Friday -- 10:00 AM - 1:00 PM Other times available by appointment.
Additional Contact Information	All emails must be sent with an official lamarpa.edu email address. Emails from personal accounts may be ignored.

Course Information

Description	In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.
Required Textbooks	<i>Textbook Purchasing Statement: A student attending Lamar State College Port Arthur is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.</i> College Algebra 2e, Jay Abramson, Openstax, 2021 This textbook is available for free under a Creative Commons license at: https://openstax.org/details/books/college-algebra-2e
Additional Materials/Resources	No additional materials required.
Corequisites/Prerequisites	TSIA 2 complete in Mathematics
Learning Outcomes	Upon successful completion of this course, students will: • Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses. • Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations. • Apply graphing techniques. • Evaluate all roots of higher degree polynomial and rational functions. • Recognize, solve and apply systems of linear equations using matrices.
Core Objectives	• <u>Critical Thinking Skills:</u> Students will engage in creative and/or innovative thinking, and/or inquiry, analysis, evaluation, synthesis of information, organizing concepts and constructing solutions. • <u>Communication Skills:</u> Students will demonstrate effective written, oral and visual communication. • <u>Empirical and Quantitative Skills:</u> Students will demonstrate applications of scientific and mathematical concepts.
Lecture Topics Outline	Chapter 2 Equations and Inequalities • Introduction to Equations and Inequalities • 2.1 The Rectangular Coordinate Systems and Graphs • 2.2 Linear Equations in One Variable • 2.4 Complex Numbers • 2.5 Quadratic Equations • 2.6 Other Types of Equations • 2.7 Linear Inequalities and Absolute Value Inequalities Chapter 3 Functions • Introduction to Functions • 3.1 Functions and Function Notation • 3.2 Domain and Range • 3.3 Rates of Change and Behavior of Graphs • 3.4 Composition of Functions

- 3.5 [Transformation of Functions](#)
- 3.7 [Inverse Functions](#)

Chapter 4 Linear Functions

- [Introduction to Linear Functions](#)
- 4.1 [Linear Functions](#)
- 4.2 [Modeling with Linear Functions](#)
- 7.1 [Systems of Linear Equations: Two Variables](#)

Chapter 5 Polynomial and Rational Functions

- [Introduction to Polynomial and Rational Functions](#)
- 5.1 [Quadratic Functions](#)
- 5.2 [Power Functions and Polynomial Functions](#)
- 5.3 [Graphs of Polynomial Functions](#)
- 5.4 [Dividing Polynomials](#)
- 5.5 [Zeros of Polynomial Functions](#)
- 5.6 [Rational Functions](#)
- 5.7 [Inverses and Radical Functions](#)

Chapter 6 Exponential and Logarithmic Functions

- [Introduction to Exponential and Logarithmic Functions](#)
- 6.1 [Exponential Functions](#)
- 6.2 [Graphs of Exponential Functions](#)
- 6.3 [Logarithmic Functions](#)
- 6.4 [Graphs of Logarithmic Functions](#)
- 6.5 [Logarithmic Properties](#)
- 6.6 [Exponential and Logarithmic Equations](#)
- 6.7 [Exponential and Logarithmic Models](#)

Major Assignments Schedule

Important Dates:

Feb 9 -- All homework and quizzes for Chapter 2 due before 11:59 pm.

Feb 10 - 16 -- Chapter 2 exam available. Must be completed before 11:59 pm on Feb 16.

Mar 16 -- All homework and quizzes for Chapter 3 due before 11:59 pm.

Mar 17 - 23 -- Chapter 2 exam available. Must be completed before 11:59 pm on March 23.

Apr 15 -- All homework and quizzes for Chapter 4 & 5 due before 11:59 pm.

Apr 16 - 22 -- Chapter 4 & 5 exam available. Must be completed before 11:59 pm on Apr 22.

May 4 -- All homework and quizzes for Chapter 6 due before 11:59 pm.

May 5 - 13 -- Final exam available - call the Testing Center to make an appointment. Must be completed before 5:00 pm on May 13..

Final Exam Date

May 5, 2025 - 8:0 AM Through May 13, 2025 - 5:0 PM

Grading Scale

90 - 100=A 80 - 89=B 70 - 79=C 60 - 69=D Below 59 = F

Determination of Final Grade

10% -- Homework Average
 15% -- Quiz Average
 15% -- Chapter 2 Exam
 15% -- Chapter 3 Exam
 15% -- Chapter 4 & 5 Exam
 30% -- Final Exam

Course Policies

Instructor Policies

My Open Math:

All graded assignments in this course will be administered on Blackboard using an open source assessment program provided by My Open Math. The schedule of availability and due dates for each assignment (Homeworks, Quizzes, Exams) is posted on Blackboard. If you have any questions about the schedule or due dates, please message your instructor for clarification. Time extensions and make-up work will not generally be available, so make sure that you are informed and be sure to check in regularly to ensure that you are aware of any possible changes and/or other necessary information.

Homework:

Each section of the text is accompanied by a graded homework practice assignment. Homework and Quiz assignments will be due the day before their respective chapter exams become available. Please refer to Blackboard for exact due dates. The average of your homework scores will count as 10% of your final grade.

Quizzes:

Each chapter of the text is accompanied by one or more graded quizzes. Homework and Quiz assignments will be due the day before their respective chapter exams become available. Please refer to Blackboard for exact due dates. I will drop your lowest quiz score at the end of the semester, and the average of your quiz scores will count as 15% of your final grade.

Mid-Term Exams:

There will be three mid-term exams scheduled at regular intervals throughout the semester. Each of the mid-term exams will count as 15% of your final grade.

Final Exam:

There will also be a comprehensive final exam which will count as 30% of your final grade. The Final Exam must be taken on campus in the testing center located in the Student Success Center building. The testing center is open Monday - Friday 8:00 AM - 5:00 PM. You must arrive at least one hour before closing time to take your exam. If you are unable to make it to campus due to any unusual yet verifiable circumstances (out-of-state travel for work, overseas military deployment, etc.), you must let me know as soon as possible (that is, during the first few days of the semester) so other exam proctoring arrangements can be made.

Attendance Policy

Since this is an online course and we will not be meeting in person, the rate and pace of attendance is left somewhat up to the student. It is the sole responsibility of the student to make sure that they are current and up to date in the material and to participate in all posted assignments and activities, and they are expected to do so out of their own desire to learn and succeed. The student's online participation will be observed to an extent, and for any borderline cases of assigning final grades, this record will be taken into consideration.

Additional Information

The syllabus may be updated, as needs arise, throughout the semester. Any major changes will be accompanied by an announcement on Blackboard.

Institutional Policies

MyLSCPA

Be sure to check your campus email and Course Homepage using MyLSCPA campus web portal. You can also access your grades, transcripts, academic advisors, degree progress, and other services through [MyLSCPA](#).

Academic Honesty

Academic honesty is expected from all students, and dishonesty in any form will not be tolerated. Please consult the LSCPA policies (Academic Dishonesty section in the Student Handbook) for consequences of academic dishonesty.

ADA Considerations

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the [Disability Services Coordinator](#), Room 117, in the Student Success Center. The phone number is (409) 984-6241.

COVID 19 Information

The Lamar State College Port Arthur (LSCPA) Student Code of Conduct COVID 19 Policy requires students who have been diagnosed with COVID 19 to report their condition directly to their local health department. Students should also contact their course faculty to report their quarantine status. In addition, this policy requires all students to wear face coverings when directly exposed to COVID 19 in compliance with the criteria included in the policy. For more information please refer to the COVID 19 link on the LSCPA website.

Facility Policies

No food or tobacco products are allowed in the classroom. Only students enrolled in the course are allowed in the classroom, except by special instructor permission. Use of electronic devices is prohibited.

HB 2504

This syllabus is part of LSCPA's efforts to comply with Texas House Bill 2504.

Mandatory Reporting of Child Abuse and Neglect

As per Texas law and LSCPA policy, all LSCPA employees, including faculty, are required to report allegations or disclosures of child abuse or neglect to the designated authorities, which may include a local or state law enforcement agency or the Texas Department of Family Protective Services. For more information about mandatory reporting requirements, see [LSCPA's Policy and Procedure Manual](#).

Title IX and Sexual Misconduct

LSCPA is committed to establishing and maintaining an environment that is free from all forms of sex discrimination, including sexual harassment, sexual violence, and other forms of sexual misconduct. All LSCPA employees, including faculty, have the responsibility to report disclosures of sexual misconduct, including sexual harassment, sexual assault (including rape and acquaintance rape), domestic violence, dating violence, relationship violence, or stalking, to LSCPA's Title IX Coordinator, whose role is to coordinate the college's response to sexual misconduct. For more information about Title IX protections, faculty reporting responsibilities, options for confidential reporting, and the resources available for support visit [LSCPA's Title IX website](#).

Clery Act Crime Reporting

For more information about the Clery Act and crime reporting, see the [Annual Security & Fire Safety Report](#) and the [Campus Security website](#).

Grievance / Complaint / Concern

If you have a grievance, complaint, or concern about this course that has not been resolved through discussion with the Instructor, please consult the Department Chair.

Department Information

General Education and Developmental Studies

Chair: [Dr. Steven Zani](#)
Email: zanisj@lamarpa.edu
Phone: (409) 984-6431