

### Instructor Information

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

### Course Information

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| <b>Description</b>                    | Intended for Non-STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Required Textbooks</b>             | <p><b><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></b></p> <p>Contemporary Mathematics by Donna Kirk, OpenStax, 2023.</p> <p>This is an open-source textbook, available for free here:<br/> <a href="https://openstax.org/details/books/contemporary-mathematics">https://openstax.org/details/books/contemporary-mathematics</a>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Additional Materials/Resources</b> | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Corequisites/Prerequisites</b>     | MATH-0332 Intermediate Algebra                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Learning Outcomes</b>              | <p><u>Upon successful completion of this course, students will:</u></p> <ol style="list-style-type: none"> <li>1. Apply the language and notation of sets.</li> <li>2. Determine the validity of an argument or statement and provide mathematical evidence.</li> <li>3. Solve problems in mathematics of finance.</li> <li>4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.</li> <li>5. Interpret and analyze various representations of data.</li> <li>6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Core Objectives</b>                | <p><u>Communication skills:</u> Students will demonstrate effective written, oral and/or visual communication.</p> <p><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.</p> <p><u>Empirical and Quantitative Skills:</u> Students will demonstrate applications of scientific and mathematical concepts.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Lecture Topics Outline</b>         | <p><b>Chapter 1 Sets</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Introduction</a></li> <li>• 1.1 <a href="#">Basic Set Concepts</a></li> <li>• 1.2 <a href="#">Subsets</a></li> <li>• 1.3 <a href="#">Understanding Venn Diagrams</a></li> <li>• 1.4 <a href="#">Set Operations with Two Sets</a></li> <li>• 1.5 <a href="#">Set Operations with Three Sets</a></li> </ul> <p><b>Chapter 2 Logic</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Introduction</a></li> <li>• 2.1 <a href="#">Statements and Quantifiers</a></li> <li>• 2.2 <a href="#">Compound Statements</a></li> <li>• 2.3 <a href="#">Constructing Truth Tables</a></li> <li>• 2.4 <a href="#">Truth Tables for the Conditional and Biconditional</a></li> <li>• 2.5 <a href="#">Equivalent Statements</a></li> <li>• 2.6 <a href="#">De Morgan's Laws</a></li> <li>• 2.7 <a href="#">Logical Arguments</a></li> </ul> <p><b>Chapter 6 Money Management</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Introduction</a></li> <li>• 6.1 <a href="#">Understanding Percent</a></li> <li>• 6.2 <a href="#">Discounts, Markups, and Sales Tax</a></li> </ul> |

- 6.3 [Simple Interest](#)
- 6.4 [Compound Interest](#)
- 6.6 [Methods of Savings](#)

## Chapter 8 Statistics

- [Introduction](#)
- 8.1 [Gathering and Organizing Data](#)
- 8.2 [Visualizing Data](#)
- 8.3 [Mean, Median and Mode](#)
- 8.4 [Range and Standard Deviation](#)

## Chapter 7A Counting

- [Introduction](#)
- 7.1 [The Multiplication Rule for Counting](#)
- 7.2 [Permutations](#)
- 7.3 [Combinations](#)

## Chapter 7B Probability

- 7.4 [Tree Diagrams, Tables, and Outcomes](#)
- 7.5 [Basic Concepts of Probability](#)
- 7.6 [Probability with Permutations and Combinations](#)
- 7.8 [The Addition Rule for Probability](#)
- 7.9 [Conditional Probability and the Multiplication Rule](#)
- 7.11 [Expected Value](#)

### Major Assignments Schedule

See Blackboard for schedule.

### Final Exam Date

May 13, 2025 - 12:30 PM Through May 13, 2025 - 2:00 PM

### Grading Scale

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

### Determination of Final Grade

Attendance - 10%  
Homework - 15%  
Quizzes - 15%  
Exam 1 - 20%  
Exam 2 - 20%  
Exam 3 - 20%

## Course Policies

### Instructor Policies

#### Announcements and Messages:

All relevant information about this course will be communicated to students using announcements posted on Blackboard or through the "Messages" feature on Blackboard. You will receive an email copy of each announcement, but replies to those emails will not be monitored nor receive a response. Students should use the "Messages" feature on Blackboard or their LSCPA email to communicate with the instructor; any communications from personal email accounts (gmail,yahoo,etc.) may be ignored.

#### MyOpenMath:

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.

#### Attendance:

See "Attendance Policy" information listed below. Your attendance will count as 10% of your final grade.

#### Homework:

All homework will be done online using MyOpenMath, accessed through Blackboard. You will have until the end of the semester to finish up any and all of the homework sets (see Blackboard for the exact time/date for the deadline). Your homework average will count as 15% of your final grade.

#### Quizzes:

There will be regular quizzes available to accompany each unit of material. The purpose of these quizzes is to encourage you to stay on pace and to help you focus for the exams. Each set of quizzes will be due by 11:59 PM on the day before their respective exams, and will remain open for ungraded practice after the deadline. There will be no extensions or make-up quizzes for any reason whatsoever. If you use up all three attempts on a quiz and are not able to achieve the score necessary to move on to the next quiz, please contact me immediately in order to resolve the issue. To accommodate unexpected circumstances, your lowest quiz grade will be dropped at the end of the semester. Your quiz score average will count as 15% of your final grade.

**Exams:**

There will be a total of 3 Exams, occurring at regular intervals throughout the semester. Exams will be administered in class and the dates for the Exams are given on the course schedule located on Blackboard. There will be no extensions or make-up exams, for any reason whatsoever. If you are unable to take an exam on the date shown on the schedule, you must let me know beforehand so that we can make other arrangements. Each exam grade will count as 20% of your final grade.

**Final Exam (Optional):**

There will be an optional comprehensive final exam offered for any students who wish to take it. The final exam can be used to replace the lowest of your 3 exam grades, including a score of zero due to a missed exam.

**Attendance Policy**

Students are expected to be present and ON TIME for all class meetings, therefore attendance will be recorded at the beginning of each class meeting through the use of a seating chart established by the end of the first week.

In addition to being present and on time for class, you are expected to be prepared and up to date in the material, remain for the entirety of each class meeting, and to be actively engaged in the daily activities and discussions.

Any behavior which is disruptive or disrespectful to either the instructor or students in this class will not be tolerated, and anyone engaging in such behavior will be dealt with appropriately.

**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](mailto:zanisj@lamarpa.edu)  
Phone: (409) 984-6431