

Contemporary Mathematics (MATH 1332-3B1)

INSTRUCTOR CONTACT INFORMATION

Instructor: Bradd Henry
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Office Phone: (409) 839-2070
Office Location: Technology Center building, room 236

Office Hours: Monday: 10:30-11:00 am, 12:00-12:30 pm, 1:45-2:45 pm
Tuesday: 10:00-11:00 am, 1:30-3:00 pm, 4:30-5:30 pm, 6:45-7:15 pm
Wednesday: 9:30-10:30 am, 11:30-12:30 pm, 1:45-2:45 pm
Thursday: 10:00-11:00 am, 12:15-1:45 pm, 4:30-5:30 pm
Friday: 10:30-12:00 pm

CREDIT

3 Semester Credit Hours (3 hours lecture, 0 hours lab)

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

TSI Complete in Mathematics or have passed TMTH 374 with a "C" or better.

COURSE DESCRIPTION

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.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to

1. Apply the language and notation of sets.
2. Determine the validity of an argument or statement and provide mathematical evidence.
3. Solve problems in mathematics of finance.
4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
5. Interpret and analyze various representations of data.
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.

Approved: **Initials/date**



CORE OBJECTIVES

1. Critical Thinking Skills: To include creative thinking, innovation, inquiry, and analysis, evaluation, and synthesis of information.
2. Communication Skills: To include effective development, interpretation and expression of ideas through written, oral, and visual communication.
3. Empirical and Quantitative Skills: To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

REQUIRED TEXTBOOK AND MATERIALS

1. MyMathLab access code.
2. Basic 6 function calculator recommended. No graphing calculators.
Remember: **phone** calculators are **not** allowed during tests.

ATTENDANCE POLICY

You will be required to sign a sign-in sheet at the beginning of each class period. **If you do not sign in, you will be marked absent.** If you are more than 15 minutes late for class, you will be marked absent and will not be allowed to sign in. **A roll call may be given at the end of the class period to ensure accuracy of the sign-in sheet.**

In this class, attendance will count as part of your grade. Your attendance grade will be based on the percentage of days you attend. If you arrive on time, remain in class until the class is dismissed by the instructor, and actively participate during the class period (e.g., taking notes, taking tests, or completing any other activity assigned by the instructor), you will earn 100 points for that day. Students who miss class, sleep in class, social network or text in class, or do not take notes or exams will receive a grade of 0 for the day. Absences due to a valid reason such as an illness or emergency will be excused only if the student provides written documentation. *Exception: Medical or dental appointments that coincide with the class period will not be excused.*

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the [Academic Calendar](#). If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

DATE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Weeks 1-2	Introduction and Classroom Policies; Chapter 2 <u>Set Theory</u> symbols and terminology of set theory, the Cardinal number, understanding subsets and complement of a set, find unions and intersections of sets, use Venn diagrams to analyze data	Sections 2.1 – 2.4 notes and practice homework worksheets completed by Thursday, Jan 25, 2024	MyMathLab Sections 2.1 - 2.4 Sunday, Jan 28, 2024
Weeks 3-4	Chapter 3 <u>Logic</u> identify and use statements, use symbols to express compound statements, find truth values of compound statements, construct truth tables	Sections 3.1 – 3.3 notes and practice homework worksheets completed by Thursday, Feb 1, 2024	MyMathLab Sections 3.1 - 3.3 Sunday, Feb 4, 2024 Test 1 chapters 2 and 3 Wed, Feb 7, 2024
Week 5	Chapter 5 <u>Number Theory</u> divisibility rules, understanding prime factors, use prime numbers to find greatest common factor and least common multiple	Sections 5.1 , 5.4 notes and practice homework worksheets completed by Thursday, Feb 15, 2024	MyMathLab Sections 5.1 , 5.4 Sunday, Feb 18, 2024
Weeks 6-7	Chapter 6 <u>Real Numbers</u> basic operations with integers, rounding, order of operations, operations with fractions, convert between fractions and decimals, understand percentages	Sections 6.1 - 6.5 notes and practice homework worksheets completed by Tuesday, Feb 27, 2024	MyMathLab Sections 6.1 - 6.5 Tuesday, Feb 27, 2024
Week 7	Chapter 7 <u>Basics of Algebra</u> understand ratios and proportions, direct, inverse, and joint variation	Section 7.1 notes and practice homework worksheets completed by Friday, March 1, 2024	MyMathLab Sections 7.1 Sunday, March 3, 2024
Week 8	review for test 2, review for all re-tests		Test 2 chapters 5, 6, and 7.1 Wed, March 6, 2024
	Spring Break	March 11 – 15, 2024	

Week 9	Chapter 7 <u>Basics of Algebra</u> understand ratios and proportions, direct, inverse, and joint variation	Section 7.3 notes and practice homework worksheets completed by Tuesday, March 19, 2024	MyMathLab Sections 7.3 Tuesday, March 19, 2024
Weeks 9-10	Ch. 10 <u>Counting Methods</u> using the fundamental counting principle, factorials, using permutations to determine the number of ways objects can be arranged and combinations to find the number of ways objects can be divided into groups	Sections 10.2 - 10.3 notes and practice homework worksheets completed by Tuesday, March 26, 2024	MyMathLab Sections 10.2 - 10.3 Tuesday, March 26, 2024
Weeks 11-12	Chapter 11 <u>Probability</u> understanding probabilities and odds, conditional probability, multiplication rule for probability of more than one event	Sections 11.1 - 11.3 notes and practice homework worksheets completed by Friday, April 5, 2024	MyMathLab Sections 11.1 - 11.3 Sunday, April 27, 2024 Test 3 chapters 7.3, 10, and 11 Wed, April 10, 2024
Week 13	Chapter 12 <u>Statistics</u> visual displays of data, bar graphs, line graphs, circle graphs, find measures of central tendency (mean, median, and mode)	Sections 12.1 - 12.2 notes and practice homework worksheets completed by Tuesday, April 16, 2024	MyMathLab Sections 12.1 , 12.2 Tuesday, April 16, 2024
Weeks 13-14	Ch 13 <u>Personal Financial Management</u> the time value of money, simple and compound interest, installment and revolving loans, consumer credit	Sections 13.1 notes and practice homework worksheets completed by Tuesday, April 23, 2024	MyMathLab Sections 13.1 Sunday, April 28, 2024 Test 4 chapters 12 and 13 Monday, April 29, 2024
Week 15	review for Final Exam		review for Final Exam Wed, May 1, 2024
Week 16	Final Exam	in class	Final Exam 1:00 – 2:30 pm Wednesday, May 8

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Average of 4 tests 60%
- Course Assignments (MyMathLab online homework assignments) 20%
- Comprehensive Final Exam 10%
- attendance 10%

GRADE SCALE

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

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

1. A final grade of Incomplete will only be given if a student is passing the course and is missing only one major assignment such as the final exam. Such an arrangement must be made with the instructor. An incomplete assignment must be finished during the next long semester or a grade of "I" will become an "F."
2. No food, drinks, or use of tobacco products in class.
3. Laptops, telephones, and any other electronic devices must be turned off during class.