Contemporary Math (MATH 1332-3B1)

CREDIT
3 Semester Credit Hours (3 hours lecture)

MODE OF INSTRUCTION
Face-to-face

Prerequisite/Co-requisite:

A score of 350 or above on the TSI-Assessment placement test (effective Fall 2013) or a "C" or better in TMTH 0374.

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 (Student Learning Outcomes SLO)
Upon successful completion of this course, students will:

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.

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.

Approved: Initials/date

INSTRUCTOR CONTACT INFORMATION

Instructor:	Daniel Dove
Email:	dadove@lit.edu
Office Phone:	409-247-5017
Office Location:	TC 112A
Office Hours:	M: 11:30 – 12:30, 2:00 - 2:30
	T: T 8:30 - 9:30, 12:30 - 2:30
	W: 11:30 - 12:30, 2:00-2:30
	R: 8:30 - 9:30, 1:30 - 2:30
	F: 10:30-2:30

REQUIRED TEXTBOOK AND MATERIALS
1. **Use Blackboard to acquire My Math Lab** access for our course.
1. Calculator of your choice, but no phones or computers as calculators. A Scientific calculator or better is necessary for some homework assignments near the end of the course.

ATTENDANCE POLICY

Attendance is mandatory and will count as a homework assignment grade. The grade will be determined by number of days attended divided by total class days times 100%. If you must miss class, you are still responsible for any covered missed material. It is suggested that if you must miss class that you get a copy of a classmate's notes and/or visit with you instructor during office hours.

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.

COURSE CALENDAR (Dates and assignments subject to change with notice)

Week of	Section	Title	Assignment
1/21		Syllabus / Introduction to MyMathLab	Online through MyMathLab
	2.1	Set Notation	Due 2/17
	2.2	Subsets and Venn Diagrams	Due 2/17
1/27	2.3	Operations with Sets	Due 2/17
	2.4	Problem Solving with Venn Diagrams	Due 2/17
2/3	3.1	Logic Statements and Quantifiers	Due 2/17
	3.2	Truth Tables	Due 2/17
2/10	3.3	The Conditional	Due 2/17
	3.4	Conditional and Related Statements	Due 2/17
2/17		Test I Chapters 2 & 3	Due 2/18
	5.1	Prime and Composite Numbers	Due 3/24
2/24	5.4	GCF and LCM	Due 3/24
	6.1	Real Numbers, Order, and Absolute Value	Due 3/24
3/3	6.2	Operations and Properties	Due 3/24
	6.3	Rational Numbers and Decimals	Due 3/24
3/10		**SPRING BREAK**	
3/17	6.4	Irrational Numbers	Due 3/24
	6.5	Applications of Decimals and Percent's	Due 3/24
3/24		Test II Chapters 5 & 6	Due 3/25
	7.3	Ratio, Proportions, and Variation	Due 4/7
3/31	10.2	Fundamental Counting Principal	Due 4/7
	10.3	Permutations and Combinations	Due 4/7
4/7		Test III Chapters 7 & 10	Due 4/8
	11.1	Basic Concepts	Due 4/21
4/10		**No Classes this day.**	
4/14	11.2	Probability Involving (or)	Due 4/21
	11.3	Probability Involving (and)	Due 4/21
4/21		Test IV Chapter 11	Due 4/22
4/28	12.1	Frequency Distributions	Due 5/5
	12.2	Mean Median and Mode	Due 5/5
5/5	13.1	Simple Interest	Due 5/5
		Core Assessment	Due 5/7
5/12		Final exam (Date and time subject to change!)	Due 5/13

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Tests   60%
- Assignments   20%
- Core Assignment   20%

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

LIT does not use +/- grading scales

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

. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT
Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses.

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

Course Expectations

Instructor Expectations from Students:

➢ Weekly email communication regarding assignment and upcoming test due dates.
➢ Response to email within 24 business hours. (No email responses over weekends or holidays.)
➢ Flexible office hour/ virtual help when needed.
➢ Weekly grade updates. All correct course grades will be displayed in Blackboard, NOT in My Math Lab!

Professor Expectations of Students:

➢ **Seek help from instructor early and often, do not wait until the last minute!**

- I will apply a 15% penalty on any homework assignments turned in after the due date!
- On exams, all of your work should be completely your own.   You are allowed scratch paper, a pencil, and your calculator. Any other materials allowed on the test are at instructor's discretion and will be announced in advance of the exam. Any evidence of cheating could result in a zero on that particular exam. Repeated offenses will cause you to fail the course and to be referred to the department chair for disciplinary action.
- If you must miss an exam, make prior arrangements to take it early or schedule a make-up date at instructors' convenience (must notify instructor within a day of due date to schedule the makeup unless you provide documentation of emergency like a doctor's note, hospital release, etc.) Otherwise, you will earn a <u>zero</u> on the missed exam!
- When sending emails identify yourself with class and section