# Contemporary Math (MATH 1332-2A1)

#### **CREDIT**

3 Semester Credit Hours (3 hours lecture)

### **MODE OF INSTRUCTION**

Online



### 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: Brandy Palmer

Email: blpalmer@lamar.edu

Office Phone: 409-880-8919

Office Location: LU Lucas 211C

Office Hours: M: 9:00 – 10:00

T: 12:00 – 1:00 W: 9:00 – 10:00 R: 2:00 – 3:00

### **REQUIRED TEXTBOOK AND MATERIALS**

- 1. **Use Blackboard to acquire My Math Lab** access for our course. Click on the Pearson link to access.
- 1. Calculator of your choice. A Scientific calculator or better is necessary for some homework assignments near the end of the course.

### **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 <u>Academic Calendar</u>. 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)**

Section	Title	Assignment
	Syllabus / Introduction to MyMathLab	Online through MyMathLab

2.1	Set Notation	Due 9/22
2.2	Subsets and Venn Diagrams	Due 9/22
2.3	Operations with Sets	Due 9/22
2.4	Problem Solving with Venn Diagrams	Due 9/22
3.1	Logic Statements and Quantifiers	Due 9/22
3.2	Truth Tables	Due 9/22
3.3	The Conditional	Due 9/22
3.4	Conditional and Related Statements	Due 9/22
	Test I Chapters 2 & 3	9/22 - 9/24
5.1	Prime and Composite Numbers	Due 10/17
5.4	GCF and LCM	Due 10/17
6.1	Real Numbers, Order, and Absolute Value	Due 10/17
6.2	Operations and Properties	Due 10/17
6.3	Rational Numbers and Decimals	Due 10/17
6.4	Irrational Numbers	Due 10/17
6.5	Applications of Decimals and Percent's	Due 10/17
	Test II Chapters 5 & 6	10/17 - 10/19
7.3	Ratio, Proportions, and Variation	Due 10/31
10.2	Fundamental Counting Principal	Due 10/31
10.3	Permutations and Combinations	Due 10/31
	Test III Chapters 7 & 10	10/31 - 11/2
11.1	Basic Concepts	Due 11/14
11.2	Probability Involving (or)	Due 11/14
11.3	Probability Involving (and)	Due 11/14
	Test IV Chapter 11	11/14 - 11/16
12.1	Frequency Distributions	Due 12/3
12.2	Mean Median and Mode	Due 12/3
13.1	Simple Interest	Due 12/3
	Core Assessment	Due 12/3
	Final exam (Date and time subject to change!)	12/4 - 12/7

# **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 <a href="http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty">http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty</a>.

### **TECHNICAL REQUIREMENTS**

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <a href="https://lit.edu/online-learning/online-learning-minimum-computer-requirements">https://lit.edu/online-learning/online-learning-minimum-computer-requirements</a>. 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 <a href="mailto:specialpopulations@lit.edu">specialpopulations@lit.edu</a>. You may also visit the online resource at <a href="mailto:specialpopulations">Specialpopulations</a>. You may also visit the online resource at <a href="mailto:specialpopulations">Specialpopulations</a>. 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 <a href="https://www.lit.edu">www.lit.edu</a>. 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:**

- Response to email within 48 business hours. (No expectation of 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!
- Seek help from instructor early and often, do not wait until the last minute!
- When sending emails identify yourself with class and section