# Contemporary Math (MATH 1332-2A1) Online

### INSTRUCTOR CONTACT INFORMATION

Instructor: Alfred de la Rosa, Jr.

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Office Phone: (409) 247-4757

Office Location: Building TA5, Room 103

Office Hours: Monday: 11:00 am-2:00 pm

Tuesday: 12:30 pm-2:00 pm Wednesday: 10:00 am-2:00 pm Thursday: 12:30 pm-2:00 pm Friday: 10:00 am-12:00 pm



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

### **MODE OF INSTRUCTION**

Online

# PREREQUISITE/CO-REQUISITE:

A score of 950 or above on the TSI Assessment placement test 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. *This course is time-bound, structured, and online.* 

### **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 standalone access
  - a. ISBN 9780138109738
- 2. Basic six-function calculator--no scientific or graphing calculators or calculators on cell phones, tablets, etc., are permitted.

Access to MyMathLab is available through the Eagle Learning Essentials (ELE) program at \$14 per credit hour added to your student account. Students may opt out of this program if they do not wish to participate in it. The deadline for opting out during this 16-week course is September 11, 2024. For more information, please go to <a href="https://www.lit.edu/student-success/eagle-learning-essentials">https://www.lit.edu/student-success/eagle-learning-essentials</a>.

### ATTENDANCE POLICY

Since this course is taught online, it takes a lot of discipline and self-starting qualities to complete and pass it. Therefore, it is necessary to keep up with assignments by working on them daily, if needed, in order to meet deadlines and not fall behind. It is also very important for students to check for email and announcements from their instructor. Students should check for these daily so that they are up-to-date on information about the course regarding assignments, exams, etc.

### **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. 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**

5.475	Topic	READINGS	ASSIGNMENTS
DATE	TOPIC	(Due on this Date)	(Due on this Date)
8-26-24	Course Policies and Introductions; MyMathLab Orientation and Registration; Online Contract; Practice Test	Course Policies and Introductions; MyMathLab Orientation and Registration; Online Contract; Practice Test Monday, August 26, 2024	Course Introductions; MyMathLab Orientation and Registration; Online Contract; Practice Test Sunday, September 1, 2024
9-2-24	Section 2.1: Symbols and Terminology Section 2.2: Venn Diagrams and Subsets	Sections 2.1-2.2 Notes Monday, September 2, 2024	MyMathLab: Sections 2.1-2.2 Sunday, September 8, 2024
9-9-24	Section 2.3: Set Operations and Cartesian Products Section 2.4: Surveys and Cardinal Numbers	Sections 2.3-2.4 Notes Monday, September 9, 2024	MyMathLab: Sections 2.3-2.4 Sunday, September 15, 2024
9-16-24	Section 5.1: Prime and Composite Numbers Section 5.4: Greatest Common Factor and Least Common Multiple	Section 5.1 Notes Section 5.4 Notes Monday, September 16, 2024	MyMathLab: Section 5.1 Section 5.4 Sunday, September 22,2024
9-23-24	Section 3.1: Statements and Quantifiers Section 3.2: Truth Tables and Equivalent Statements	Sections 3.1-3.2 Notes Monday, September 23, 2024	MyMathLab: Sections 3.1-3.2 Sunday, September 29, 2024
9-30-24	Section 3.3: The Conditional and Circuits Section 3.4: The Conditional and Related Statements	Sections 3.3-3.4 Notes Monday, September 30, 2024	MyMathLab: Sections 3.3-3.4 Sunday, October 6, 2024
10-7-24	Section 3.6: Analyzing Arguments with Truth Tables	Section 3.6 Notes Monday, October 7, 2024	MyMathLab: Section 3.6 Sunday, October 13, 2024
10-14-24	Section 6.1: Real Numbers, Order, and Absolute Value Section 6.2: Operations, Properties, and Applications of Real Numbers Section 6.3: Rational Numbers and Decimal Representation	Sections 6.1-6.3 Notes Monday, October 14, 2024	MyMathLab: Sections 6.1-6.3 Sunday, October 20, 2024
10-21-24	Section 6.4: Irrational Numbers and Decimal Representation	Sections 6.4-6.5 Notes Monday, October 21, 2024	MyMathLab: Sections 6.4-6.5 Sunday, October 27, 2024

	Section 6.5: Applications of Decimals and Percents		
10-28-24	Section 7.3: Ratio, Proportion, and Variation Section 10.2: Using the Fundamental Counting Principle	Section 7.3 Notes Section 10.2 Notes Monday, October 28, 2024	MyMathLab: Section 7.3 Section 10.2 Sunday, November 3, 2024
11-4-24	Section 10.3: Using Permutations and Combinations Section 11.1: Probability— Basic Concepts	Section 10.3 Notes Section 11.1 Notes Monday, November 4, 2024	MyMathLab: Section 10.3 Section 11.1 Sunday, November 10, 2024
11-11-24	Section 11.2: Events Involving "Not" and "Or" Section 11.3: Conditional Probability; Events Involving "And"	Sections 11.2-11.3 Notes Monday, November 11, 2024	MyMathLab: Sections 11.2-11.3 Sunday, November 17, 2024
11-18-24	Section 12.1: Visual Displays of Data Section 12.2: Measures of Central Tendency	Sections 12.1-12.2 Notes Monday, November 18, 2024	MyMathLab: Sections 11.2-11.3 Sunday, November 24, 2024
11-25-24	Section 13.1: The Time Value of Money Section 13.2: Consumer Credit	Sections 13.1-13.2 Notes Monday, November 25, 2024	MyMathLab: Sections 13.1-13.2 Sunday, December 1, 2024
12-2-24	Section 15.3: The Possibilities of Apportionment	Section 15.3 Notes Monday, December 2, 2024	MyMathLab: Section 15.3 Sunday, December 8, 2024

# **COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

- Exams 60%
- Course Assignments 20%
- Core Assessment 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 accessed 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:special-Populations">Special-Populations - Lamar Institute of Technology (lit.edu)</a>.

### 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

- 1. The student must purchase all required course materials.
- 2. The student will be expected to have access to the internet and a computer.
- 3. A webcam and microphone are required for submitting online tests. This means that each student will be recorded while taking his or her exams. Any student violating testing policies during an exam will receive a grade of 0 on the exam.
- 4. A final grade of Incomplete will only be given if a student is passing the course and is missing only one major assignment. 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."