

Contemporary Mathematics (MATH 1332)

CREDIT

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

MODE OF INSTRUCTION: Online

PREREQUISITE/CO-REQUISITE:

TSI Complete for Math

INSTRUCTOR CONTACT INFORMATION

Instructor: Laura Kendrick

Email: lkendrick@lit.edu

Office Phone: N/A

Office Location: N/A

Office Hours: Email (allow 24 hours for me to respond), any emails on the weekend will be answered on the next business day

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 successful completion of this course, students will:

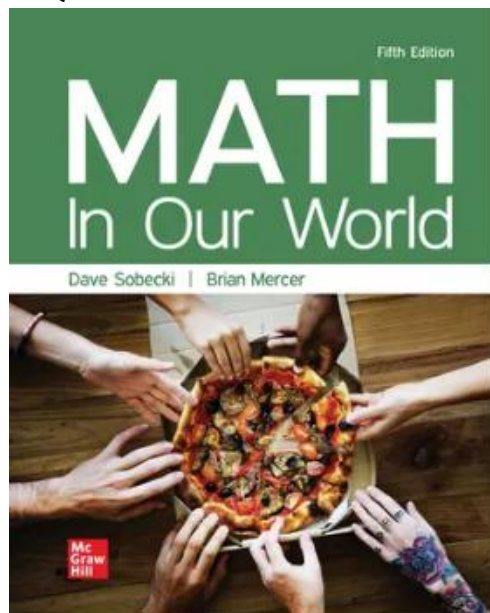
1. Apply the language and notation of sets.
2. Determine the validity of an argument or statement and provide mathematical evidence.
3. Solve problems in mathematics of finance.
4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
5. Interpret and analyze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

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



STEPS TO JOIN CLASS:

1. **Go to ALEKS Link in Blackboard.** It will say “Launching in a new window”, click on “New Window” and it will launch.
2. Select **Sign Up Now** if you don’t already have an ALEKS account.
3. Enter your 10-character Class Code.
MATH 1332 Class code- G6KEN-44ANW
4. Click **Continue**.
5. ALEKS will identify your class and walk you through creating or connecting your student account.

Online subscription to ALEKS is required and comes with eBook. ALEKS Math In Our World. Physical textbook not required. This is included in the ELE bundle, or you may purchase subscriptions directly from ALEKS. If opted out Aleks subscriptions vary, 6-month \$99.95

MATERIALS

Paper, pencils, calculator of your choice, access to a computer with internet access.

CLASS POLICIES

- All assignments in ALEKS. **All assignments are due by Midnight on Sunday the week the assignments are assigned.** You have unlimited opportunities to complete assignments and can redo them for a higher grade until the due date.
- **LATE POLICY FOR ASSIGNMENTS:** you will be penalized 25% for every day an assignment is late. After that, the grade remains a zero.
- You will be given two opportunities for exams. Exams not completed by due date will be a zero. You will get a week to prepare and take the exam(s). Be responsible with your time. **All EXAMS are due by Midnight on Sunday the week the exams are assigned. Tests MUST be submitted by the deadline; late submissions will NOT be accepted.**
- Communicate effectively with respect, transparency, and use proper etiquette when emailing.
- **Read through the entire syllabus-** You will get a better understanding of course objectives and what is expected of you as a student.
- Course syllabus and information, including exam grades, can be found in Blackboard.
- **Check email DAILY. I will also post class announcements each Monday and throughout the week.**
- **DO NOT** wait until the due date to start assignments/tests.

COURSE CALENDAR:(Dates and assignments subject to change with or without notice)

Week of	Title	Due Date
9/21-9/27	Introduction/Course overview Syllabus Quiz/Introduction Post with 2 replies 2.1: Introduction to Set Theory 2.2: Subsets and Set Operations 2.3: Using Venn Diagrams to Study Set Operations 2.4: Using Sets to Solve Problems 2.5: Infinite Sets	9/27 by midnight
9/28-10/4	3.1: Statements and Quantifiers 3.2: Truth Tables 3.3: Types of Statements 3.4: Logic Arguments Test 1 (Chapters 2 & 3)	10/4 by midnight
10/5-10/11	5.1: The Natural Numbers 5.2: The Integers 5.3: The Rational Numbers 5.4: The Irrational Numbers	10/11 by midnight
10/12-10/18	6.2: Ratio, Proportion 7.1: Percents 7.3: Simple Interest 7.4: Compound Interest	10/18 by midnight
10/19-10/25	7.5: Installment Buying 7.6: Student Loans and Home Buying Test 2 (Chapter 5,6, & 7)	10/25 by midnight
10/26-11/1	10.1: Probability and Counting Techniques 10.2: Basic Concepts of Probability 10.3: The Fundamental Counting Principle and Permutation	11/1 by midnight
11/2-11/8	10.4: Combinations 10.5: Tree, Diagrams, Tables, and Sample Space 10.6: Odds and Expectation	11/8 by midnight
11/9-11/15	10.7: The Addition Rules for Probability 10.8: The Multiplication Rules and Conditional Probability 11.1: Gathering and Organizing Data	11/15 by midnight
11/16-11/22	11.2: Picturing Data 11.3: Measures of Average Test 3 (Chapter 10 & 11)	11/22 by midnight
11/23-11/29	Thanksgiving Break	
11/30-12/4	Core Assessment Final exam	12/4 by midnight

COURSE EVALUATION

*Your official, most accurate grade for this course is maintained in **Blackboard**. The grade calculation shown inside ALEKS reflects only your progress on ALEKS assignments/topics and does not factor in your full course weighting, exams, or other coursework. Always refer to Blackboard for your current overall grade in the class.*

Final grades will be calculated according to the following criteria:

- Test 60%
- Homework 20%
- Final Exam 20%
 - Core Assessment (20% of Final Exam Grade)

GRADE SCALE

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

ATTENDANCE POLICY

Attendance is required, online students should login and work on assignments 2-3 times per week, minimum.

DROP POLICY

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

TECHNICAL REQUIREMENTS

For the latest technical requirements, including hardware, compatible browsers, operating systems, etc., review the Minimum Computer and Equipment Requirements on the [LIT Online Experience](#) page. 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.

ARTIFICIAL INTELLIGENCE STATEMENT- LIT

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.

MATH AI POLICY

- No AI tools, apps, software, etc. are to be used on any work that is scored, graded, assessed, etc. This includes all homework, exams, tests, projects, assessments, quizzes, discussions, etc.
- Failure to follow these guidelines (as deemed by the instructor) may be considered academic dishonesty and will be managed by instructor discretion or for exams, the Math testing policy.

MATH TESTING AI POLICY

- All online Math courses will use Respondus Lockdown Browser and Monitor. This means students will be recorded when taking exams and will need a webcam and microphone.
- If a student is suspected of cheating, such as with AI use or other cheating methods, the student will be given a zero on the exam. The student will have one week of being notified to have a meeting with the instructor either face to face in the instructor's office or through an online method through such means as Microsoft Teams or Zoom. During this meeting, the student may be asked to work out problems or even the entire test in front of the instructor to adjust the student's grade.
- If the student is caught using AI or the student fails to meet with instructor within one week of notification or the student is unable to complete the work on the exam with instructor present, a zero will be given for that exam or assignment, and there will be no opportunity for a redo.

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.