

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.



**LAMAR INSTITUTE
OF TECHNOLOGY**

INSTRUCTOR CONTACT INFORMATION

Instructor: Guy Harwell

Email: gharwell@lit.edu

Office Phone: (409) 247-4757

Office Location: TA 103

Office Hours: By appointment.

REQUIRED TEXTBOOK AND MATERIALS

1. Mathematical Ideas, by Miller, 15th edition with MyLab Math Access (18 week). You will access this material on the first day through Blackboard.
2. Scientific or graphing calculator. I recommend the Texas Instruments series of calculators, in particular the TI-84 series.

ATTENDANCE POLICY

Attendance is mandatory. If you must miss class, you are still responsible for any missed material covered. It is suggested that if you miss class that you get a copy of a classmate's notes and/or visit your instructor during office hours. Exams will also be given in class on the days listed in the syllabus unless changed via announcements in class and through Blackboard.

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 (Dates and assignments subject to change with notice)

Week #	Section	Topic Description		
		Week of	12/14	
	2.1	Set Notation		
	2.2	Subsets and Venn Diagrams		
	2.3	Operations with Sets		
	2.4	Problem Solving with Venn Diagrams		
	3.1	Logic Statements and Quantifiers		
	3.2	Truth Tables		
	3.3	The Conditional		
	EXAM	Exam 01	Open: 12/19	Due: 12/21
		Sections on Exam: 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3		
		Week of	12/21	
2	3.4	Conditional and Related Statements		
	5.1	Prime and Composite Numbers		
	5.4	GCF and LCM		
	6.1	Real Numbers, Order, and Absolute Value		
	6.2	Operations and Properties		
	6.3	Rational Numbers and Decimals		
	6.4	Irrational Numbers		
	EXAM	Exam 02	Open: 12/26	Due: 12/28
		Sections on Exam: 3.4, 5.1, 5.4, 6.1, 6.2, 6.3, 6.4		
3		Week of	12/28	
	6.5	Applications of Decimals and Percent's		
	7.3	Ratios, Proportions, and Variation		
	10.2	Fundamental Counting Principal		
	10.3	Permutations and Combinations		
	11.1	Basic Concepts		
	11.2	Probability Involving (or)		
	EXAM	Exam 03	Open: 01/02	Due: 01/04
		Sections on Exam: 6.5, 7.3, 10.2, 10.3, 11.1, 11.2		
4		Week of	01/04	
	11.3	Probability Involving (and)		
	12.1	Frequency Distributions		
	12.2	Mean, Median, and Mode		
	13.1	Simple Interest		
	Final	Final Exam	Open: 01/08	Due: 01/09
		Sections on Exam: 11.3, 12.1, 12.2, 13.1		
		Last Day of Class: 01/09		

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 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

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

Artificial Intelligence (AI)

Artificial Intelligence (AI) tools (e.g., ChatGPT, Wolfram Alpha, Photomath, Copilot, etc.) can be useful for exploring concepts and checking your understanding. However, in this course, **your own reasoning and problem-solving skills are essential**.

Permitted Uses

- Asking AI tools for help understanding a mathematical concept (e.g., asking for clarification of the Fundamental Theorem of Algebra or solving polynomials) while studying.
- Using AI to check your work **after** completing it independently while studying.
- Generating practice problems for self-study.

Prohibited Uses

- Using AI to complete (or on) homework, problem sets, projects, exams, quizzes, assignments, assessments, discussions, etc.
- Copying answers or solutions directly from AI tools.
- Using AI during quizzes, exams, or any individual assessment.
- Relying on AI without understanding the steps or logic behind the solution.

Disclosure Requirement

If you use an AI tool on any assignment, you must include a brief note explaining:

- Which tool you used.

- What you used it for.
- How it helped (or didn't help) you're learning.

Example:

"Used Wolfram Alpha to verify the final solution to Problem 3 after completing it on my own."

Remarks

- **No AI tools, apps, software, etc. is/ 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 handled according to college's policies including failure of the assignment, exam, homework, text, project, assessment, quiz, discussion, etc.**
- I reserve the right to use an AI detector on student's work.
- If the instructor has any concerns about AI being used, you can be asked to work out the problems in front of the instructor (this also includes online courses).
- If you refuse to do so in a timely manner you can lose points for every question the instructor has concerns about.
- If you have any questions, please ask the instructor.

An Appeal to You

It is not a good idea to use AI to solve your problems. I know how long it takes to work on these problems (I have been working on them for years) and I can see how long it takes you to work on the problems. Blackboard and MyLab Math/ MyMathLab tells me when you logged in, how long you were logged in, when and which problems you were working on, how long it took you to work on the problems, etc. That is to say that I can see everything. I can tell if you are not being truthful, because numbers don't lie.

I will also look at your written work. It may not seem like it to you but once you get to know a student's work the way they work a problem (or don't) becomes like a signature in a way. I can tell if you are getting better or worse. I can tell if the work you turn in is way above or below where you are with your learning.

Besides all of this it is not a good idea to be dishonest with someone who is trying to help you (that's me) and it kind of hurts my feelings. I want you to do well because you can. You may not believe it, but I know it. With work, effort, and determination you can achieve and be successful at anything you set your mind to do. Yes, it is hard, but you can do it. Technology is only a tool; it does not replace your own mind and capabilities.

Attendance

Online Courses

Information

- You must complete at least one of the following before the census date to show that you are actively engaged in the course during the first week:

- Syllabus/ Set-Up quiz
 - Complete an online course discussion
- Note that attendance is not “taken” as in a face-to-face class, but you will need to actively participate in the course each week.
- Active participation includes things such as completing discussions, completing quizzes, completing exams, other course activities for that week.
 - Note that just logging into the course is **not** considered active participation.

Assignments

Homework Assignments

- Homework assignments are assigned for every topic that we cover in the course.
- Homework is not optional and must be completed by their respective due dates.
- Failure to complete the homework assignment by its due date will result in a loss of points.
- We will be using MyLab Math/ MyMathLab for our homework for the course.

Homework Assignment Due Dates

- To find the due dates for the homework assignments please refer to MyLab Math/ MyMathLab and/or our online course site (Blackboard).

Other Assignments

- We can have other assignments during our course.
- Other assignments can include activities such as projects, worksheets, papers, etc.
- They will be announced via our online course website (Blackboard) and/ or by the instructor in class.
- Please see our online course website (Blackboard) and/ or the instructor.

Class Etiquette

Information

- Please be respectful of the other people and me in class.
- If you have any questions or concerns about the class, please come and talk with me outside of class (I am always concerned with how you are doing in the class).

Online Courses

- Please do not take pictures, video recordings, snapshots, etc. of the exams/ quizzes.
- If you have a question about a problem, please email me and let me know which exam/ quiz, which problem and your question.

Remarks

- Please remember that mathematics can be a difficult subject and I am here to help you, but we need to be respectful of everyone (including me) and address concerns outside of class.
- If I ask to meet with you (by video conference for online courses), please be respectful and meet with me.

Communication

Information

- The best way to reach me is by email (gharwell@lit.edu) or my office hours (posted outside my office).
 - For email, please allow 24 – 48 hours
 - Emails at or after 5:00 pm on Friday might not be answered before the following Monday.
 - When emailing me please use your college email address and put the class subject and section in the subject line.
 - Example class subject and section: MATH 1314.2A4
- Please check our online class website (Blackboard) daily for announcements.
- Any announcements about the class will be on our online class website (Blackboard).

Communication Etiquette

Make sure that all communications are polite and respectful. Please use professional communication etiquette. Remember, email is formal written communication and should be treated as such.

Electronic Devices

Information

Online Courses

- Electronic devices include laptops, iPads, all phones, tablets, headphones, etc.
- For online courses electronic devices are not allowed on exams/ quizzes.

Calculators

- No calculators on phones, laptops, tablets, etc. are to be used in the class at all.
- Only approved calculators are allowed on exams/ quizzes.
 - Approved calculators are TI-83 series, TI-84 series, scientific, and four-function calculators.
- You should show the webcam your calculator before taking the exam/ quiz and make sure that it can be seen by the webcam during the entire exam.
- Failure to adhere to the policy can result in a loss of points.
- If you have any questions, you should contact me before the exam/ quiz.

Exams/ Final Exam

Online Courses

Information

- We will be having several major exams and a cumulative final exam (this means that the final exam is over everything in the course).
- You can find our exam schedule on the course calendar.

- Note that the exam/quiz will have an open date and a due date that you can find on our course calendar and/or course website (Blackboard).
- You will have a certain amount of time to start the exam/ quiz.
 - The time the exam/quiz is open can be 1 to 7 days depending on the semester, class, etc.
 - You can find this on our course calendar and/or course site (Blackboard).
- Once the due date has passed the exam/quiz will no longer be available to take and it will not reopen.
 - If you miss an exam/quiz you should contact me immediately.
- You will be expected to complete the exam/quiz in a single sitting.
 - That is to say that once you start the exam/quiz you must finish in a single session.
- You won't be able to take the exam/ quiz again if you leave the exam/ quiz after starting it.
 - If you start it and **exit it for any reason** (including technical reasons) every question you did not complete will be marked wrong and you will lose points.
 - You should contact me as soon as possible if this happens.
 - Note this does not mean that I will automatically reopen the exam/ quiz as you will be expected to have all the technical issues worked out before ever taking the exam/ quiz.
- Our exams/ quizzes will be taken online using our online class site (Blackboard).
 - This is to say that you can find them on our online class site (Blackboard).
 - Please see the instructions on our class website (Blackboard).

Acceptable and Unacceptable Items on Exams/ Quizzes

- Acceptable Items
 - Paper: Blank loose-leaf paper only (no notebooks, etc.).
 - Calculator: TI-83 series, TI-84 series, scientific, four-function
- Unacceptable Items
 - No electronic (phones, electronic watches, iPads, tablets, headphones, etc.) are allowed on exams/ quizzes.

Calculators on Online Exams

- Approved calculators (TI-83 series TI-84 series, scientific, four-function) are allowed and must be shown to the webcam at the beginning and end of the exam/ quiz.
- The calculator must be visible on the webcam for the entire exam/ quiz.

Respondus Browser and Webcam

- You will be required to use the Respondus Browser and webcam.
 - The Respondus Browser and webcam must be set up correctly before taking the exam/ quiz.
 - You can find detailed steps on how to do this on our online course website (Blackboard).
 - Please see our class website (Blackboard) for more information as you will be expected to have this correctly set-up before taking any exam/ quiz

- **!!!! Failure to have the Respondus Browser and webcam correctly set up before the exam will result in a zero for the exam!!!!**
- The exam will not open unless the Respondus Browser and webcam have been correctly set-up before you take the exam and you may not even see the exam on our class site (Blackboard) at all if you do not have it set-up.
- We will have a Practice Exam on our course site (Blackboard) to make sure we have the Respondus Browser and webcam set up correctly.
- Note that you should set up the Respondus Browser and webcam on the computer that you will be taking your exams on.
 - This should be a desktop or laptop, no iPads, phones, or tablets are allowed.
- The browser should be one of the following: MS Edge, Chrome, or Firefox.
- Mac and Apple computers have issues and should not be used. Please contact me ASAP.
- Chromebooks are not allowed at all.

Remarks

- The best scenario is a windows desktop or laptop the Edge, Chrome, or Firefox browser. Otherwise, there could be issues, and this could lead to a delay in taking the exams/ quizzes and can lead to a loss of points.
- If you do have issues, please contact me as soon as possible and we can get IT involved to help.

Webcam and Webcam Stand

Information

- You are required to have a free-standing webcam and stand to take the exams/ quizzes.
 - Free standing means that the webcam is not imbedded in the computer, laptop, monitor, etc.
 - The webcam stand is so that you can position the webcam correctly.
- You will be expected to have correct webcam placement for the exam/ quizzes.
 - You can find detailed instructions on camera placement on our class website (Blackboard).
- We will have a Syllabus/ SetUp Quiz on our course site (Blackboard) to make sure we have the webcam and stand correctly positioned.
- **!!!! Failure to have correct webcam placement will result in a score of zero for the exam!!!!**

Proper Webcam Placement and Webcam Etiquette

- Please make sure you, your face, your workspace, your paper for the exam is always visible to the webcam.
- You will need to show all sheets (both front and back) one at a time to the webcam before you take the exam and after you are done taking the exam.
- You can find detailed instructions on camera placement on our class website (Blackboard).

Written Work for Exams

Information

- For all exams you will need to show your fully written solution to each problem.

- You will need to write your fully written solutions to the problems on paper, scan the written work to a single pdf file, and upload this single pdf file to our course website (Blackboard).
- Instructions on this process (what to do) can be found on our course website (Blackboard).
- You will have up to 10 minutes after you submit your exam to scan your written work into a single pdf file and upload this file to our course website (Blackboard).
- Once the 10-minute deadline to submit the single pdf file has passed you will not be able to submit your written work to the course website (Blackboard) and you should contact me immediately.
- Failure to submit your work by the deadline can result in a loss of points.
- **Failure to upload your written work will result in a zero for the exam.**

Extra Credit Opportunities

Information

- We will be having extra credit opportunities during the course.
- The extra credit opportunities will be announced during the normal course of the semester and will be on our course website (Blackboard).
- To receive points for the extra credit, you must follow all instructions completely and completely complete the opportunity.
- The instructor will determine how much if any points are awarded for the extra credit opportunity.

Remarks

- Please remember that extra credit is a reward for extra work that contributes to your learning.
- It is not to replace an exam, quiz, assessment and it is not points given to you to bring up a poor score or poor performance.
- Extra credit opportunities are above and beyond your normal course work. That is to say that you should focus on your normal coursework and then extra credit.

Late Work

Information

- Late work is not accepted unless you have approval from the instructor.
- My expectation is that you talk with me before the due date if you know that you are not going to be able to complete an assignment, exam, quiz, etc. by the due date.
- Please remember that if you do not turn in your work before the due date, you can receive a zero for the assignment.
- It is the instructor's decision whether late work is accepted or not.
- If you have questions about this, please feel free to contact me.
- If the work is accepted after the due date, it can take several weeks to get back.
 - This means that you may not get the assignment grade or feedback until several weeks after you turn in the work late.

Late Assignments

- Homework assignments will not be accepted past the due date unless you have the approval of the instructor.
 - The late assignments will have a per day penalty assessed or an overall penalty depending on the assignment.
- You can find the due dates for homework on MyLab Math/ MyMathLab.
- Other assignment due dates can be found on our course calendar and/or class website (Blackboard).

Late Written Work (Online Courses)

- Written work (see Exams section) not submitted within 10 minutes completing the exam will be considered late.
- The folder that you submit the work to on our course website (Blackboard) will close after the due date/time has passed and you won't be able to submit it.
- You should contact me as soon as possible and send me the single pdf file of your work.

Project/ Core Assessment

Information

- A project or core assessment is a part of the course to assess the learning and comprehension of the topics in the course.
- It generally consists of working on more involved questions that require many of the skills and knowledge that the course covers.
- Generally, it takes the form of a paper (report, detailed worksheets, etc.) that the student must write to show competence of the course material.
 - An example of this would be that the student is given a project packet that they must complete by writing a report on a topic and answering questions that need an understanding of the course material.
- You can find more information on the projects/ core assessment for the course on our course website (Blackboard).
- You can find the due dates on our course calendar and/or our course website (Blackboard).

Make-up Assignments, Exams, Quizzes, Etc.

Information

- Make-ups assignments, exams, quizzes, etc. are not given without the approval of the instructor.
- You will need to provide documented evidence for the reason you need to take the make-up assignment, exam, quiz, etc.
 - This can take the form of a doctor's note, jury summons, etc.
- Make-up is not given without acceptable reason and evidence.
- It is the instructor's decision whether to accept the reason and evidence provided and to give the make-up or not.

Quizzes

Information

- Quizzes are given to assess students learning at the time of the quiz.
- They can be in-class or online.
- They can be announced or not.
- For online quizzes you can find them on our course calendar and/or class website (Blackboard).
- Sections on the quiz can be found on the course calendar.
- For the quizzes, you won't have to turn in any written work.

Retakes

- **There are no retakes of any exams and quizzes.**
- If you have any questions, please feel free to contact me.

Syllabus Acknowledgment Form

Course Information

Course and Section: _____

Example: MATH 1314.3C1 (see syllabus if you don't know)

Year and Semester: _____

Example: 2025 Fall (see syllabus if you don't know)

Instructor's last name: _____

(see syllabus if you don't know)

Instructor's email address: _____

(see syllabus if you don't know)

Acknowledgment Statement

I have received, read, and understood the syllabus for the above course.

I am aware of the course objectives, grading policy, attendance requirements, assignment deadlines, academic integrity guidelines and all other information and policies that the syllabus states.

I understand it is my responsibility to refer to the syllabus throughout the semester and to seek clarification from the instructor if I have questions.

Student Name (Print): _____

Student Signature: _____

Date: _____
