

Syllabus for MATH 1332 (Contemporary Mathematics)

Class Information

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|---------------------|--------------------------------------|
| <i>Semester</i> | Fall 2024 |
| <i>Class</i> | Math 1332 (Contemporary Mathematics) |
| <i>Section</i> | 103H1 |
| <i>Mode</i> | Hybrid |
| <i>Class Length</i> | 08 weeks |
| <i>Class Dates</i> | 8/19/2024 - 10/10/2024 |
| <i>Days</i> | Mondays/ Wednesdays |
| <i>Time</i> | 11:00 a.m. - 12:50 p.m. |
| <i>Building</i> | #22 (STEAM) |
| <i>Room</i> | 103 |

Instructor Information

| | |
|---------------------|---|
| <i>Title</i> | Instructor |
| <i>Name</i> | Guy Harwell |
| <i>Email</i> | gharwell@com.edu |
| <i>Office Hours</i> | 9:50 a.m. – 10:50 a.m. on Mondays/ Wednesdays in the Tutoring Center. |
| <i>Note</i> | Best way to contact me is by email. |

Hybrid Class Information

1. You will be expected to attend class face-to-face on
 - a. **Mondays AND Wednesdays every week from 11:00 a.m. – 12:50 p.m.**
2. You will also be expected to participate in the online portion of the class.
 - a. This can include assessments, assignments, lectures, etc.
3. The expectation is that you will engage in some parts of the class in person including specific required face-to-face assessments during class and other parts being through remote, fully online participation.

Course Textbook/ Material Information

1. Textbook
 - a. *A Survey of Mathematics with Applications*, 11th edition, by Angel, Abbot, and Runde, Pearson Education
2. Textbook Purchasing
 - a. The electronic textbook is contained within MyLab Math in Brightspace - D2L.
 - b. If you wish to use a physical textbook or other electronic textbook, please contact me.
3. Computer and Internet Access
 - a. Access to a dependable desktop computer or laptop and reliable internet service outside of class are required to gain access to the required online assignments.
 - b. Computers and internet access are available on campus during specified times.
 - c. Do not use the following for online work as they have issues with the software that is used in the course:
 - i. iPad, Chromebook, tablets, phones, Safari

- d. Download Chrome or Firefox if you have an Apple computer.
- 4. MyLab Math
 - a. MyLab Math (MLM) contained within Brightspace is required for this class.
 - i. Opting out of this required component means your homework and online assignments will be zeros.
- 5. Calculators
 - a. A TI-30XIIS calculator is required for this course.
 - b. The TI-30XA calculator is not appropriate for this course since it requires a different combination of keystrokes.
 - c. Graphing calculators and unapproved calculators are not permitted when testing.
- 6. Other
 - a. A free PDF converter app or a printer that can scan documents is needed to submit some assignments/scratch work, etc.

Course Description

Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication will be embedded throughout the course.

Student Learning Outcomes

1. *Apply the language and notation of sets.*
 - a. Core Objective - Critical Thinking Skills (CT)
 - b. Assessed by - Question on Test 1
2. *Determine the validity of an argument or statement and provide mathematical evidence.*
 - a. Core Objective – Critical Thinking Skills (CT)
 - b. Assessed by – Question on Test 1
3. *Solve problems in mathematics of finance.*
 - a. Core Objective – Communication Skills (CS)
 - b. Assessed by – Question on Test 4
4. *Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.*
 - a. Core Objective – Communication Skills (CS)
 - b. Assessed by – Question on Test 4
5. *Interpret and analyze various representations of data.*
 - a. Core Objective – Empirical and Quantitative Skills (EQS)
 - b. Assessed by – Question on Test 3
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.*
 - a. Core Objective – Empirical and Quantitative Skills (EQS)
 - b. Assessed by – Question on Test 3

General Education Objectives

This course will address the following core objectives:

1. *Critical Thinking Skills*
 - Includes creative thinking, innovation, inquiry, analysis, evaluation and synthesis of information.
2. *Communication Skills:*
 - Includes effective development, interpretation and expression of ideas through written, oral and visual communication.

3. *Empirical and Quantitative Skills:*

- Includes the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Grading Formula/ Grading Scale

Grading Formula

| <i>Category</i> | <i>Weight</i> | <i>Remarks</i> |
|---------------------|---------------------------|--|
| Major Exams Average | 50% of final course score | The final course score is the sum of all the category weights. |
| Final Exam | 20% of final course score | |
| Homework Average | 15% of final course score | |
| Quizzes Average | 15% of final course score | |

Grading Scale

| <i>Letter Grade</i> | <i>Final course average is between</i> |
|---------------------|--|
| A | 89.5 - 100 |
| B | 79.5 - 89.5 |
| C | 69.5 - 79.5 |
| D | 59.5 - 69.5 |
| F | 0 - 59.5 |

Course Policies

Assignment Policies

Homework

- We will be using an online homework website to complete our homework assignments.
- To get to the online website you will login to our class website, then go to the online homework website to complete the homework assignments.
 - In other words, login to D2L then login to MyLab Math (a.k.a. MyMathLab) to access the homework assignments.
- For more information, see the D2L.

Other Assignments

- Assignments will be given on our class website (except for our homework assignments).
- Other assignments can be given throughout the semester. If you have questions about any assignments, please contact me.

Attendance Policies

Late to Class

- You are late to a class if you come to class after the roll has been taken.
- It is your responsibility to make sure that you are counted present.
- Note that you will only have until the end of the class period that day to let me know that you are present. After that you can be counted absent for the day.

Miss a Class

- If you miss a class, then it is your responsibility to get the notes and information from another student.

Sign-In Sheet

- We can use a sign-in sheet for roll.
- You are only allowed to sign for yourself and no other and you cannot have anyone sign for you.

- If you sign in for another person or if you have another person sign in for you this will be considered dishonesty on the part of the student and/or students participating.

Communication Policies

Communication Etiquette

Make sure that all communications represent you in a way you want to be represented to your instructors. Remember, email is formal written communication and should be treated as such.

Use a clear subject line.

The subject “Solving Quadratic Equations” would work a bit better than “heeeeelp!” and much better than the unforgivable blank subject line.

Use a salutation and signature.

Instead of jumping right into your message or saying “hey,” begin with a greeting like “Hello” or “Good afternoon,” and then address your professor by appropriate title and last name, such as “Instructor Harwell”.

Use standard punctuation, capitalization, spelling, and grammar.

Instead of writing “idk how 2 solve the equation can you help??” try something more like, “I am writing to ask about how to solve the problems that were discussed in the class lecture titled Quadratic Equations.”

Do your part in solving what you need to solve.

Instead of asking, “What’s our homework for tonight?” you might write, “I looked through the syllabus and course website for this weekend’s assigned homework, but unfortunately I am unable to locate it.”

Be aware of concerns about entitlement.

If you appear to demand help, shrug off absences, or assume late work will be accepted without penalty because you have a good reason, your professors may see you as irresponsible or presumptuous.

Professional communication will be essential to your future success, so when contacting your instructor, please adhere to the guidelines above. Emails that do not meet the guidelines above may be returned for a second attempt.

D2L

- Please login to D2L daily and check the “Announcements” section for any announcements about the class.

Email

- Please use your student email for all communications with me.
- Please do not use email on D2L or MyMathLab to email me. It is best if you use your student email.
- Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.
- Please allow 24-48 hours for a response (excluding weekends). I will try to answer your email as soon as I can, but please be patient.

Electronic Device Policies

Cell Phones

- Cell phones are not allowed on exams and should be off or set to vibrate during class time.

Class Time

- No electronic devices are allowed during the lecture.
- Please put away all electronic devices after checking into the class for attendance.

Recording/ Picture Taking

- Before recording video/ audio or taking any pictures during class time (or in the classroom) please get my permission to do so.
- This includes video, audio, and picture formats.
- Note that you can only record/ take pictures of the lecture material for learning purposes that apply to our class.

Testing Policies

Exams

- We will be having several exams (including a final exam) to test competency and understanding of the material.

Exam Retakes

- The college does not allow any retakes of exams and so there are **no retakes of exams**.

Hybrid Exams

- For a hybrid class, you can expect some of the exams to be in class and some to be online.
 - Being able to use a computer and gain access to the internet is necessary to complete the required online assignments (including exams).
 - Note that personal computer problems do not excuse the requirement to complete all coursework in a timely and satisfactory manner.

Make-Up Exams

- If you are unable to make a scheduled exam, you will be allowed to make up the exam outside of class provided you notify the instructor prior (or as soon as possible) to the exam and have a legitimate reason for the absence.
- Please send me an email if you need a make-up exam.
- The email should contain your name, class information, the reason you missed the exam, and valid documentation (doctor's note, etc.)

Replacement Policy

- The final exam score can replace the lowest exam score.
- The replacement only applies to one exam.

Quizzes

- We will be having several quizzes to test competency and understanding of the material.
- Quizzes can be in class (face-to-face) and/or online.

Additional Policies/ Information

Very, Very, Important (Do Not Skip)

COM Student Handbook - <https://www.com.edu/student-services/student-handbook.html>

- All students at the college are expected to read and follow the student handbook. As we will be following all policies and procedures given by the college.
- **Make sure to read and follow the student handbook as not knowing is not a valid reason for not following the student handbook.**

Unattended Minors/Children in Class

For their safety, unattended minors of students are not permitted on campus while students are in class. In consideration of fellow classmates and staff, please do not bring children to class.

Productive Workplace

Students are expected to bring all tools necessary for success to class every day. These tools include writing implements, notebook/note paper, weekly handouts, and an approved calculator. All other items (backpacks, purses, bags, laptops, etc.) must be placed between your feet. Before class starts, headsets/wireless earbuds and cellphones are to be placed in your backpack/bag, and laptops are to be turned off and not visible on your workspace/desk.

Classroom Conduct Policy

Arriving on time, staying the entire class period, eliminating distractions like cellphones, using appropriate language (no cursing), respecting your classmates and the instructor, and cleaning up after yourself are all expectations for students in the classroom. Please abide by these expectations so that the class setting is enjoyable for all students. Regarding cell phones, they should be turned off or set on airplane mode and in your backpack/purse (not on your desk). It is extremely disruptive to the learning environment, so you will be asked to leave if it is a continuous problem. Cell phones **cannot** be used during tests or quizzes and refer to testing policies for additional information. Please notify me before class if you have an emergency that requires you to answer your phone during class. Take an emergency phone call outside of the classroom.

Recording of Class

Students may not record all or part of class and/or all or part of a livestream without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Student Disability Services. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. If any instructor's recordings are provided by the instructor, students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings may result in a disciplinary referral and/or disciplinary action.

Testing Policy

Prohibited devices include, but are not limited to:

- Cell phones; smart phones; smart watches
- Audio players/recorders, tablets, laptops, notebooks, or any other personal computing devices
- Separate timers
- Cameras or any other photographic equipment
- Any devices, including digital watches, that can be used to record, transmit, receive, or play back audio, photographic, text, or video content.

If you leave the classroom at any time during an exam, the exam must be submitted for grading. If you are not feeling well, let me know in advance of distributing the exam and the exam will be given one page at a time. Therefore, it is strongly advised that students take care of all personal business prior to entering the classroom to take an exam.

Also, using any electronic device other than an approved calculator on a quiz or test will be considered cheating.

Tentative Weekly Topic/ Exam Schedule

Week # Section Topic Description

| | | |
|---|-------|--|
| 1 | | Introduction |
| | 02.01 | Set Concepts |
| | 02.02 | Subsets |
| | 02.03 | Venn Diagrams and Set Operations |
| | 02.04 | Venn Diagrams with Three Sets and Verification of Equality of Sets |
| | 02.05 | Application of Sets |
| 2 | | |
| | 03.01 | Statements and Logical Connectives |
| | 03.02 | Truth Tables for Negation, Conjunction, and Disjunction |
| | 03.03 | Truth Tables for the Conditional and Biconditional |
| | 03.04 | Equivalent Statements |
| | 11.01 | Empirical & Theoretical Probabilities |
| 3 | | |
| | 11.04 | Tree Diagrams |
| | 11.02 | Odds |
| | EXAM | Exam 01 (In-Class) |
| | | Sections on Exam 01: 02.01 – 02.05, 03.01 – 03.04 |
| 4 | | |
| | 11.04 | Tree Diagrams |
| | 11.05 | OR and AND Problems |
| | 11.07 | The Counting Principle and Permutations |
| | 11.08 | Combinations |
| | 11.06 | Conditional Probability |
| 5 | | |
| | 11.08 | Combinations |
| | 11.09 | Solving Probability Problems by Using Combinations |
| | 12.04 | Measures of Dispersion |
| | 12.02 | Frequency Distributions and Statistical Graphs |
| | 12.03 | Measures of Central Tendency |
| | EXAM | Exam 02 (In-Class) |
| | | Sections on Exam 02: 11.01, 11.02, 11.04 – 11.06 |
| 6 | | |
| | 06.02 | Formulas |
| | 06.03 | Applications of Algebra |
| | 06.10 | Functions and Their Graphs |
| | 10.01 | Percent |
| | EXAM | Exam 03 (In-Class) |
| | | Sections on Exam 03: 11.07 – 11.09, 12.02 – 12.04 |
| 7 | | |
| | 10.03 | Compound Interest |
| | 10.04 | Installment Buying |
| | 10.05 | Buying a House with a Mortgage |
| | 10.02 | Personal Loans and Simple Interest |
| | D-Day | Last Day to Drop - October 2, 2024 |
| | EXAM | Exam 04 (Online) |
| | | Sections on Exam 04: 06.02, 06.03, 06.10, 10.01 – 10.05 |
| 8 | | |
| | REV. | Review for final exam |
| | FINAL | Final Exam (In-Class) |
| | | Sections on the final exam – All sections covered in the course. |

Institutional Policies and Guidelines

Academic Dishonesty

College of the Mainland is committed to a high standard of academic integrity. All students are responsible for honesty and independent effort. Incidents of academic and scholastic dishonesty

(including cheating, plagiarism, and collusion) will be dealt with in a manner that is consistent with College Policy and the Student Handbook. Any student found to have been academically dishonest on an assignment, quiz or exam will receive a zero for that assignment, quiz or exam and he or she will be referred to the Office of Student Conduct for further disciplinary action. Please read the sections on Standards of Student Conduct and Discipline and Penalties in the on-line Student Handbook.

Concerns about the Instructor

If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact the Department Chair for Math & Computer Science, Leslie Richardson, at (409) 933-8329, lrichardson@com.edu.

Grade Appeal Process

Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook https://www.com.edu/student-services/docs/Student_Handbook_2024-2025_v2.pdf. *An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.*

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact:

Kimberly Lachney, Student Accessibility Services Coordinator

Phone: 409-933-8919

Email: AccessibilityServices@com.edu

Location: COM Doyle Family Administration Building, Student Success Center

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is October 2. The last date to withdraw from the 16-week session is November 15. The last date to withdraw for the 2nd 8-week session is November 26.

FN Grading: The FN grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the

Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:

If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click here <https://www.com.edu/community-resource-center/>. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:

The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.