



Math 1332.152
Contemporary Mathematics
Spring 2024
1:30pm – 2:50pm, T & Th Steam 103

Instructor Information: Alan Bigos, abigos@com.edu, 409-933-8327

Student hours and location: 325-16 Steam

M&W: 11:00 – 12:00pm

T&Th: 3:15 – 5:45pm

F: 12:00 – 12:30pm

Required Textbook/Materials: The textbook for this course is: **A Survey of Mathematics With Applications, 11th edition, by Angel, Abbot, and Runde, Pearson Education, 2017.** Textbooks and/or courseware will be available through VitalSource digitally. The course materials will be available on the first day of class and you will be given the opportunity to opt-out of the e-book prior to the census day of the class. If you choose not to use the course materials, you will be reimbursed after census day of the class. The materials are not refundable after the census day. You will receive an email with more information about the use of the course materials closer to the start of the semester.

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. Prerequisites/co-requisites: Prerequisite of TSI Math 350 or MATH 0306/0308 grade "C" or better or co-requisite of MATH 0306/0308. Intended for NON-STEM (Science, Technology, Engineering, and Mathematics) majors. Contact counseling to determine which math course satisfies the requirement of desired baccalaureate program.

Course requirements:

Four regular Tests

Comprehensive final exam

Online Homework Assignments (My Math Lab/Brightspace)

Online Quizzes (My Math Lab/Brightspace)

Determination of Course Grade/Detailed Grading Formula:

Tests

The Tests will be written exams, which require complete, well-reasoned solutions written in detail; this means you must show all steps and proper work, or you will not be given credit for an answer. During Testing situations, make sure that all unnecessary items are put away. No backpacks or books on the desks. Make sure the proctor has a clear line of sight. Spread out. When possible, one student per table. All tests (except the final) are scheduled for the second time slot.

Final Exam

The Final Exam will be a comprehensive multiple-choice exam. You should still organize your thoughts and show (on scratch paper) all steps needed to work the problems correctly. Standard testing rules still apply. The final is scheduled for the first time slot.

Online Homework

The homework assignments appear in My Math Lab, which is accessed through Brightspace. Homework assignments should be completed within 48 hours of covering the material in class. When possible, you will have 3 days to complete the homework assignments for full credit. (Review assignments may be less.) The 3 days already include an extended deadline, so do not ask for an additional one. You have unlimited tries (up to the end of semester deadline) to get every question right. You should begin the assignments as soon as possible after the material is covered in class. Although the homework is online, you should write out your work and put it in your notebook so you can study from it later. Remember, the point of doing homework is to prepare yourself for tests, so try and be as caught up as possible before test days.

MyMathLab Quizzes

There are six timed quizzes which relate to the student learning outcomes. Quizzes appear in My Math Lab, which is accessed through Brightspace. Quizzes may be taken up to 2 times. One on time opportunity and one makeup opportunity. To take a quiz on time, you must first unlock it by scoring at least 70% in each of the related homework assignments. **Students who do not take a quiz before the initial deadline will receive a zero but will still be allowed the makeup attempt.** The higher score counts towards your final grade. Quizzes should be taken within 2 days of completing the related homework assignments. The deadline for the first attempt of each quiz is 7 days after we finish covering the related material in class. (This includes a built in 3-day extension.) Since the purpose of quizzes is to see how well you are prepared for the tests, it is recommended that you complete the relevant quizzes before taking the tests, regardless of the official deadlines.

Accessing MyMathLab

1. Log into Brightspace
 - a. Click on the My Math Lab link for the appropriate class
 - b. Click on HOMEWORK button and then the homework assignment you wish to do.
2. Use the "Show Me How" aids when needed and complete the homework assignment.
3. Enter your answers then click the CHECK ANSWER button.
4. If needed, click the SIMILAR EXERCISE button to redo the exercise. Note: You should score at least 80% before moving on to the next section.
5. If the submitted answer is correct, click on the SAVE button to send your results to the gradebook. Your grade will show up in the GRADEBOOK and will be automatically accessible by your instructor.
6. Click on the next question to continue.

If your score does not save properly, send me an email indicating the specific question and section number with a picture of your written work attached.

Class Participation

To maximize learning, students must be actively engaged in the classroom. Staring at the board doesn't cut it. You need to be listening to the discussion, taking notes, asking questions, and helping to maintain a learning atmosphere. Some specific behaviors that we are trying to avoid are "tuning out", not taking notes, and playing with your phone. When you are in class but not participating, you are communicating to the other students that they are wasting their time. That means that you are not only hurting yourself but others as well.

Grading Scale

The following weighting system will be used to determine your overall average.

| | |
|---------------------------------|------------|
| Comprehensive Final Exam | 20% |
| Regular Exams | 60% |
| MyMathLab Homework | 15% |
| Quizzes | 5% |

Your letter grade will be determined by your overall average using the following scale.

Grade A: Final Average is [89.5, 100]
Grade B: Final Average is [79.5, 89.5)
Grade C: Final Average is [69.5, 79.5)
Grade D: Final Average is [59.5, 69.5)
Grade F or Fn: Final Average is [0, 59.5)

Grade I: Given unforeseen circumstances that result in the inability to successfully complete the course objectives, an I-Contract can be requested from the instructor assuming you meet the following criteria:

1. Have a passing overall average (70 or higher)
2. All work completed except for The Final.

(Retaking the placement test does not affect your grades in this course. Your grade will be based on the information outlined above.)

Grade W: If you drop the class after census day, your official grade will be W, regardless of how much of the coursework has been completed. Keep in mind that if you drop a class that is linked to another, you will be dropped from both.

Late Work, Make-Up, and Extra-Credit Policy:

Each class meeting is a unique experience involving interaction with other students and cannot be recreated. In-class participation cannot be made up. You are still responsible for what was covered. If you are unable to attend class, you will need to talk with another student or meet with the instructor (in person or virtually) outside of class. Obviously, not everyone will be able to have perfect attendance, for whatever reason. Just be aware that if you are not in the classroom, additional effort will be needed to stay caught up.

All work other than the final must be completed by the day before the scheduled Final. Students will be allowed to substitute 1 low test score with their Final Exam score. **There are no retakes.**

Homework Assignments: You may continue to work on homework assignments after the initial deadline. Problems from regular homework assignments completed after the deadline will have their scores reduced by 1% for each day late. **You will need to type in the password “late” to gain access to homework problems after the deadlines.** Students who complete the first MML assignment on time will have 2 points added to their score.

Online Quizzes: Students who do not meet the initial deadline and prerequisites for a quiz will only be allowed one attempt.

Tests: Officially, there are no makeup tests. If you can provide documentation for special circumstances, we can explore options. If you are unable take the test on time and would like a makeup opportunity, you need to email me ASAP. Students who complete the online course evaluation will have 2 points added to their score on Test 4.

The end of semester deadline for completing all work (other than the final and final review) **is May 5**. This supersedes any extended deadlines. The final review must be completed by midnight prior to the scheduled final.

Attendance Policy:

Students at COM are expected to attend and participate in every session of all classes for which they are registered. Regular attendance is a critical component to being successful in courses. Students should consult with their instructors when it becomes necessary to miss a class. Students are required to attend all classes. College of the Mainland recognizes no excused absences other than those prescribed by law.

You cannot make-up classes, and it is your responsibility to be punctual and regularly attend class. It is in your best interest to attend all classes, be punctual, and not leave early. It is extremely difficult to succeed in this course without having good attendance.

To receive credit for attendance you must be in the classroom for the majority of the designated time and sign the attendance sheet for the appropriate time slot. Being in the tutoring or testing area does not count as being in class. Remember, it is your responsibility to sign in. You are still responsible for all the material covered whether you are in class or not.

If you arrive late, please quickly and quietly take your seat and get set up so that you can begin participating in class.

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means. Class announcements which do not include personal information may be shared via Brightspace/My Math Lab. You might get an immediate reply, but some responses may take up to 2 business days. Do not send messages using Teams as I do not check it on a regular basis.

| Student Learner Outcomes | SLOs Assessment | Maps to Core Objective | Core Objective Assessment, when assessed |
|--|------------------------|---|---|
| 1. Apply the language and notation of sets. | Quiz 1 | Critical Thinking Skills (CT) | Question on Test 1 |
| 2. Determine the validity of an argument or statement and provide mathematical evidence. | Quiz 2 | | |
| 3. Solve problems in mathematics of finance. | Quiz 6 | Communication Skills (CS) | Question on Test 4 |
| 4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems. | Quiz 3 | | |
| 5. Interpret and analyze various representations of data. | Quiz 4 | Empirical and Quantitative Skills (EQS) | 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. | Quiz 5 | | |

Academic Dishonesty: Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate disciplinary action.

Student Concerns: 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 Leslie Richardson at 409-933-8329 or lrichardson@com.edu.

Course outline: Math 0308.152 borrows the first 2 weeks from this course. The time is returned to the last 2 weeks of this course, so that the total time for each course is correct.

This is a tentative schedule. As the semester progresses, adjustments may be needed.

| Week | Day | Sections Covered | Due Date |
|------|------|---|----------------------|
| 3 | 1-30 | Introduction 2.1 Set Concepts 2.2 Subsets (start) | 2-2 |
| | 2-1 | 2.2 Subsets (finish) 2.3 Venn Diagrams and Set Operations | 2-4 2-4 |
| 4 | 2-6 | 2.4 Venn Diagrams with Three Sets and Verification of Equality of Sets 2.5 Application of Sets (start) | 2-9 2-9 |
| | 2-8 | 2.5 Application of Sets (finish) Quiz 1 (Section 2.5, SLO 1) -will not appear until unlocked (70% in each assignment is required to unlock) 3.1 Statements and Logical Connectives | 2-11 2-15 2-11 |
| 5 | 2-13 | 3.2 Truth Tables for Negation, Conjunction, and Disjunction | 2-16 |
| | | 3.3 Truth Tables for the Conditional and Biconditional | 2-16 |
| | 2-15 | 3.4 Equivalent Statements Quiz 2 (Section 3.2, 3.3, 3.4, SLO 2) -will not appear until unlocked (70% in each assignment is required to unlock) 11.1 Empirical and Theoretical Probabilities | 2-18 2-22 2-24 |
| 6 | 2-20 | Test 1 Review | 2-19 |
| | 2-22 | TEST 1 (CH. 2&3) | |
| 7 | 2-27 | 11.2 Odds | 2-21 |
| | | 11.3 Expected Value (start) | 3-1 |

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|----|------|--|--------------|
| 8 | 2-29 | 11.3 Expected Value (finish) 11.4 Tree Diagrams | 3-3 3-3 |
| | 3-5 | 11.5 OR and AND Problems | 3-8 |
| | 3-7 | 11.6 Conditional Probability 11.7 The Counting Principle and Permutations (start) | 3-10 |
| | 3-12 | SPRING BREAK | |
| 9 | 3-19 | Test 2 Review | 3-20 |
| | 3-21 | Test 2 (11.1 – 11.6) | |
| 10 | 3-26 | 11.7 The Counting Principle and Permutations (finish) 11.8 Combinations (start) | 3-29 |
| | 3-28 | 11.8 Combinations (finish) 11.9 Solving Probability Problems by Using Combinations Quiz 3 (Section 11.1, 11.5, 11.6, 11.7, 11.8, 11.9, SLO 4) -will not appear until unlocked (70% in each assignment is required to unlock) | 3-31 3-31 |
| | | | 4-4 |
| 11 | 4-2 | 12.2 Frequency Distributions and Statistical Graphs Quiz 4 (Section 12.2, SLO 5) -will not appear until unlocked (70% in each assignment is required to unlock) 12.3 Measures of Central Tendency (start) | 4-5 4-9 |
| | 4-4 | 12.3 Measures of Central Tendency (finish) 12.4 Measures of Dispersion | 4-7 4-7 |
| | | | |
| 12 | 4-9 | Test 3 Review | |
| | 4-11 | Test 3 (11.7 – 12.4) | 4-10 |

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|----|------|--|------------------------------|
| 13 | 4-16 | 6.2 Formulas 6.3 Applications of Algebra 6.10 Functions and Their Graphs | 4-19 4-19 |
| | 4-18 | 10.1 Percent 10.2 Personal Loans and Simple Interest | 4-19 |
| 14 | 4-23 | 10.3 Compound Interest Quiz 5 (Section 10.1, 10.2, 10.3, 6.10, SLO 6) -will not appear until unlocked (70% in each assignment is required to unlock) | 4-21 4-21 4-26 4-30 |
| | 4-25 | 10.4 Installment Buying | 4-28 |
| 15 | 4-30 | 10.5 Buying a House with a Mortgage Quiz 6 (Section 10.2, 10.3, 10.4, 10.5, SLO 3) -will not appear until unlocked (70% in each assignment is required to unlock) Test 4 Review | 5-3 5-7 |
| | 5-2 | Test 4 / Final Review Test 4 (6.2 – 10.5) | 4-28 |
| 16 | 5-7 | Final Review | 5-1 |
| | 5-9 | THE FINAL | 5-8 |

Institutional Policies and Guidelines

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_2023-2024_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 at 409-933-8919 or klachney@com.edu. The Office of Services for Students with Disabilities is located in the 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 February 28. The last date to withdraw from the 16-week session is April 22. The last date to withdraw for the 2nd 8-week session is May 1. The last date to withdraw for spring mini session is May 29.

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.