



Math 1332.00112
Quantitative Reasoning
Fall 2024
Online Course

Instructor Information: James Griffiths jgriffiths@com.edu 409-933-8225

Student hours and location: MW 4:30 pm – 5:30 pm in STE325-08
(second 8-weeks) TTh 1:45 pm – 2:30 pm in STE325-08
TTh 4:30 pm – 5:30 pm in STE325-08

Required Textbook: A Survey of Mathematics With Applications, 11th edition, by Angel, Abbot, and Runde, Pearson Education, 2022. Students new to online learning at COM can register for the Online Learner Workshop on Demand module. Learn how to access the training at <http://edtech.com.edu/olw/Textbooks> and/or courseware will be available through VitalSource digitally. The e-text is provided with *MyLab Math*. The student will need a computer and internet service to gain access to the online assignments on *MyLab Math*. Computers and internet access are available on campus during specified times. A Texas Instruments TI30XIIS scientific calculator is recommended for this course.

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.

Course requirements:

Homework Assignments on *MyLab Math*: There is a homework assignment for each unit covered. Each day's homework assignments must be completed by 11:59 pm on the due date shown on both the course outline and on the list of assignments on *MyLab Math*. You should do the assignments as soon as possible after reading the appropriate section in the text book, and/or watching the associated video(s) on *MyLab Math*. The student has a limit of **five** attempts to answer a question correctly on the homework assignments.

Quizzes on *MyLab Math*: Four quizzes will be given on *MyLab Math*. Like the homework assignments, the due dates are shown on both the course outline in this syllabus and on the assignment list on *MyLab Math*. Unlike the homework assignments, the quizzes must be taken in one sitting, they are timed, and the student gets only **one** attempt to answer each question. The quizzes may be retaken one time. The higher of the two grades will be used to determine the student's quiz average.

Note: It is important that the student read and understand the warnings on page 2 of the Orientation Notes, concerning taking quizzes or exams on *MyLab Math*. The Orientation Notes can be found among the major tabs for this course on Brightspace D2L. Failing to follow the suggestions presented in that document may cause a quiz or exam to be terminated. The instructor will not change a grade on any assignment on *MyLab Math*. Nor will the instructor reopen a quiz or exam from which the student has been locked out.

Chapter Exams on *MyLab Math*: There are **four** exams which cover the chapters in the textbook. The exams are taken on *MyLab Math* and are to be finished by the due dates shown on the course outline in this syllabus and on the assignment list on *MyLab Math*. The student has 90 minutes to take each exam. Like the quizzes, the exams must be taken in one sitting, and the student gets only one attempt to answer each question. Unlike the quizzes, exams may **not** be retaken. However, if the grade on the final exam is higher than the lowest chapter exam grade, the final exam grade will replace the lowest chapter exam grade.

Comprehensive Final Exam on *MyLab Math*: The comprehensive final exam is taken on MyLab Math and must be finished by the due date shown on the course outline in this syllabus and on the assignment list on MyLab Math. The student has 90 minutes to complete the final exam. The final exam must be taken in one sitting, and the student gets only one attempt to answer each question. The final exam may **not** be retaken.

Determination of Course Grade:

Comprehensive Final Exam	20%
Average of Chapter Exam	60%
Homework Average	10%
Quiz Average	10%
Final Average	100%

Grade I: Given unforeseen circumstances that result in the student's inability to successfully complete the course objectives, an I-Contract may be requested from the instructor assuming the following criteria have been met:

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

Grading 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: Final Average is [0, 59.5)

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

Late Work: There is a twenty (20) point penalty for all homework and quizzes submitted after the due date. Any homework assignments or quizzes that are not finished by the due date and time of the associated exam will be given a grade of zero at the time of the exam.

Make-Up Exams: There are **no make-up exams** unless:

- 1) the student notifies the instructor that they will miss the exam before the time and date the exam is scheduled, and
- 2) the reason for the requested make-up exam is extraordinary, such as the death of a close family member, or the student's admittance to the hospital.
(Transportation problems, minor illness, or scheduled doctor appointments are not extraordinary reasons for missing an exam.)

Students will **not** be permitted to make up more than **one** exam.

Extra Credit: Three points extra credit is given on exams if the student earns a score of **100** on the review. Extra-credit assignments may also be given throughout the course at the discretion of the instructor. The total extra credit points for any exam may not raise an exam grade above **100**. Extra credit is never given at the end of the semester to bring up a grade. Don't even ask.

Attendance Policy: As an online student, you are expected to log on to *MyLab Math* and complete the assigned work a minimum of two times per week. For most students, it will be necessary to participate in the activities on *MyLab Math* more frequently than twice per week to succeed. A student who fails to meet the minimum participation requirement will be given an early alert referral.

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. The preferred method of communication in this course is in person. If that is not possible, an email or phone call will be satisfactory. Be sure to include your name, the course in which you are enrolled, and state your question completely.

Table Mapping SLO's and Core Objectives

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
1. Apply the language and notation of sets.	Communication Skills	Quiz 1
2. Determine the validity of an argument or statement and provide mathematical evidence.	Critical Thinking Skills	Quiz 2
3. Solve problems in math of finance.	Critical Thinking Skills	Quiz 6
4. Demonstrate fundamental probability and counting techniques and apply those techniques to solve problems.	Emperical and Quantitative Skills	Quiz 3
5. Interpret and analyze various representations of data.	Critical Thinking Skills	Quiz 4
6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including personal finance, health literacy, and civic engagement.	Critical Thinking Skills	Quiz 5

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 dishonest (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 be 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 of *Standards of Student Conduct and Discipline and Penalties* in the on-line Student Handbook.

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 Mr. Leslie Richardson, Math Department Chair, at 409-933-8329 or lrichardson@com.edu.

Course outline:

<u>Week</u>	<u>Date</u>	<u>Section</u>
1	10/14	Orientation Homework Due 10/17 2.1 Set Concepts Due 1/17 2.2 Subsets Due 1/17 2.3 Venn Diagrams and Set Operations Due 1/17
	10/16	2.4 Venn Diagrams & Verification of Equality of Sets Due 10/20 2.5 Application of Sets Due 10/20 3.1 Statements and Logical Connectives Due 10/24
2	10/21	3.2 Truth Tables Negation Conjunction & Disjunction Due 10/24 3.3 Truth Tables Conditional and Biconditional Due 10/24 3.4 Equivalent Statements Due 10/24 Quiz 1 (Section 2.5, 3.3, 3.4) Due 10/24
	10/23	Review for Exam 1 Due 10/27 Exam 1 (2.1 – 3.4) Due 10/27
3	10/28	11.1 Empirical and Theoretical Probabilities Due 10/31 11.2 Odds Due 10/31 11.4 Tree Diagrams Due 10/31
	10/30	11.5 OR and AND Problems Due 11/3 11.6 Conditional Probability Due 11/3 Quiz 2 (Section 11.1 – 11.5) Due 11/3

- 4 11/4 Review for Exam 2 Due 11/7
Exam 2 (11.1 – 11.6) Due 11/7
- 11/6 11.7 The Counting Principle and Permutations Due 11/10
 11.8 Combinations Due 11/10
 11.9 Solving Probability Problems Using Combinations Due 11/10
Quiz 3 (Section 11.7 – 11.9) Due 11/10
- 5 11/11 12.2 Frequency Distributions and Statistical Graphs Due 11/14
 12.3 Measures of Central Tendency Due 11/14
 12.4 Measures of Dispersion Due 11/14
- 11/13 Review for Exam 3 Due 11/17
Exam 3 (11.7 – 12.4) Due 11/17
- 6 11/18 6.2, 6.3, 6.10 Formulas, Applications of Algebra, Functions Due 11/21
 10.1 Percent Due 11/24
- 11/20 10.2 Personal Loans and Simple Interest Due 11/24
 10.3 Compound Interest Due 11/24

******* Last Day to Withdraw from this Class is November 26 *******

- 7 11/25 10.4 Installment Buying Due 11/27
Quiz 4 (Section 10.1 – 10.4) Due 11/27
 10.5 Buying a House with a Mortgage Due 11/27
- 11/27 Review for Exam 4 Due 12/1
Exam 4 (9.1 – 10.2) Due 12/1
- 8 12/2 Review for Comprehensive Final Exam Due 12/4
Comprehensive Final Exam Due 12/4

The syllabus is subject to change at the discretion of the instructor.

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_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 from 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. The instructor will 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.