



**Math 1332.001IN**  
**Quantitative Reasoning**  
**Fall 2022**  
**Online Course**

**Instructor Information:** James Griffiths 409-933-8225 [jgriffiths@com.edu](mailto:jgriffiths@com.edu)

**Student hours and location:** MW 2:00 pm – 5:30 pm, TTh 11:00 am – 11:30 am  
All student hours are in my office, 325-08 in the STEAM building.

Math 1332.001IN will have Virtual Office Hours from 2:00 pm – 3:00 pm on MW.

**Required Textbook:** *A Survey of Mathematics With Applications*, 10<sup>th</sup> edition, by Angel, Abbot, and Runde, Pearson Education, 2017. 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 outside of class to gain access to the online assignments on *MyLab Math*. Computers and internet access are available on campus during specified times. A Texas Instruments TI84 plus graphing calculator is required 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:**

**Discussion Forums:** Discussion forums will be assigned four times throughout the course to give students the opportunity to exchange and clarify ideas. Students are asked to answer one or more questions as thoroughly as possible, and then to comment on at least two of their classmates' responses to the assigned questions.

**Homework Assignments on *MyLab Math*:** There is a homework assignment for each unit covered. These are listed on the course outline in the syllabus and on the list of assignments on *MyLab Math*. 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 participating in the lecture, reading the appropriate section in the text book, and watching the associated video(s) on *MyLab Math*. Although the homework is online, and the answers are entered online, you should write your work on paper, neatly showing all steps, and keep it in your notebook with your notes for future reference, both as an aid for preparing for quizzes and exams, and as a place to begin when seeking assistance from your professor, your peers, or the college tutoring center. The student has a limit of five attempts to answer a question correctly on the homework assignments.

**Quizzes on *MyLab Math*:** Four quizzes which relate to the student learning outcomes, will be taken 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.

**Chapter Exams on *MyLab Math*:** There are four exams which cover the chapters in the text book. 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 two hours 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 MyMathLab and must be finished by the due date shown on the course outline in this syllabus and on the assignment list on MyMathLab. The student has two hours 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 Exams	60%
Discussion Forums	5%
Homework Average	7%
<u>Quiz Average</u>	<u>8%</u>
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, and Extra-Credit Policy:** 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 of the related exam will be given a grade of zero at that time.

There are no make-up exams unless:

- 1) the student notifies the instructor before the exam due date that they will miss the exam, and
- 2) the reason for the requested make-up exam is extraordinary.

Three points extra credit is given on exams if the student earns a score of 95 or better on the review. Extra-credit assignments may also be given throughout the course at the discretion of the instructor. It is never given at the end of the semester to bring up a poor grade. Do not even ask.

**Attendance Policy:** Students at COM are expected to attend and participate in every session of all classes for which they are registered. College of the Mainland recognizes no excused absences other than those prescribed by law. Students with excessive absences will be referred to Student Services. Students should consult information provided in My Math Lab and the course calendar when it becomes necessary to miss a class in order to be prepared when they return to class. They are still responsible for work that is assigned during an absence and due dates still hold.

A student is tardy if they enter the class room after class begins. Punctuality is a matter of consideration for other people. When a student arrives to class late or leaves early, they create a distraction to their peers and the professor, delaying or disrupting the learning process. Students who repeatedly arrive late or leave early will be referred to Student Services.

**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](mailto:lrichardson@com.edu).

## Course Outline:

<u>Week</u>	<u>Date</u>	<u>Assignments</u>
1	8/22	Orientation Homework Due 8/26 <b>Discussion Forum <u>Introduce Yourself</u> Due 8/26</b>
	8/24	2.1 Set Concepts Due 8/26 2.2 Subsets Due 8/28 2.3 Venn Diagrams and Set Operations Due 8/28
2	8/29	<b>Discussion Forum <u>Sets and Subsets</u> Due 9/2</b> 2.4 Venn Diagrams with Three Sets and Verification of Equality of Sets Due 9/2
	8/31	2.5 Application of Sets Due 9/4 <b>Quiz 1 (Section 2.5, SLO 1) Due 9/4</b>
3	9/5	Holiday
	9/6	3.1 Statements and Logical Connectives Due 9/9
	9/8	3.2 Truth Tables for Negation, Conjunction, and Disjunction Due 9/11
4	9/12	3.3 Truth Tables for the Conditional and Biconditional Due 9/16
	9/14	3.4 Equivalent Statements Due 9/18 <b>Quiz 2 (Section 3.2, 3.3, 3.4, SLO 2) Due 9/18</b>
5	9/19	Review for Exam 1 Due 9/21
	9/21	<b>Exam 1 (2.1 – 3.5) Due 9/21</b> 11.1 Empirical and Theoretical Probabilities Due 9/25 11.2 Odds Due 9/25
6	9/26	<b>Discussion Forum <u>Probability and Odds</u> Due 9/30</b> 11.3 Expected Value Due 9/30
	9/28	11.4 Tree Diagrams Due 10/2
7	10/3	11.5 OR and AND Problems Due 10/7
	10/5	11.6 Conditional Probability Due 10/9
8	10/10	Review for Exam 2 Due 10/12
	10/12	<b>Exam 2 (11.1 – 11.6) Due 10/12</b> 11.7 The Counting Principle and Permutations Due 10/16

- 9    10/17    11.8 Combinations Due 10/21  
       10/19    11.9 Solving Probability Problems Using Combinations  
               Due 10/23  
               **Quiz 3 (Section 11.1, 11.5, 11.6, 11.7, 11.8, 11.9, SLO 4)**  
               **Due 10/23**
- 10    10/24    **Discussion Forum Combinations & Permutations Due 10/28**  
               11.10 Binomial Probability Formula Due 10/28  
       10/26    12.2 Frequency Distributions and Statistical Graphs Due 10/30  
               **Quiz 4 (Section 12.2, SLO 5) Due 10/30**
- 11    10/31    12.3 Measures of Central Tendency Due 11/4  
       11/2    12.4 Measures of Dispersion Due 11/6  
               Review for Exam3 Due 11/7
- 12    11/7    **Exam 3 (11.7 – 12.4) Due 11/7**  
               6.2, 6.3, 6.10 Formulas, Applications of Algebra, Functions  
                     Due 11/11  
       11/9    10.1 Percent Due 11/13
- 13    11/14    10.2 Personal Loans and Simple Interest Due 11/18  
       11/16    10.3 Compound Interest Due 11/20  
               **Quiz 5 (Section 10.1, 10.2, 10.3, 6.10, SLO 6) Due 11/20**
- \*\*\*\*\* W-Day: November 18, 2022 \*\*\*\*\*
- 14    11/21    10.4 Installment Buying Due 11/25  
       11/23    10.5 Buying a House with a Mortgage Due 11/27  
               **Quiz 6 (Section 10.2, 10.3, 10.4, 10.5, SLO 3) Due 11/27**
- 15    11/28    Review for Exam 4 Due 11/30  
       11/30    **Exam 4 (6.2, 6.3, 6.10, 10.1 – 10.5) Due 11/30**
- 16    12/5    Review for Comprehensive Final Exam Due 12/7  
       12/7    **Comprehensive Final Exam Due 12/7**

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

**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://build.com.edu/uploads/sitecontent/files/student-services/Student\\_Handbook\\_2019-2020v5.pdf](https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.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.*

[https://build.com.edu/uploads/sitecontent/files/student-services/Student\\_Handbook\\_2019-2020v5.pdf](https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf)

**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 Michelle Brezina at 409-933-8124 or [mvaldes1@com.edu](mailto:mvaldes1@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 1<sup>st</sup> 8-week session is October 5. The last date to withdraw from the 16-week session is November 18. The last date to withdraw for the 2<sup>nd</sup> 8-week session is December 1.



**F<sub>N</sub> Grading:** The F<sub>N</sub> grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The F<sub>N</sub> 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 F<sub>N</sub> grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an F<sub>N</sub> 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](mailto:deanofstudents@com.edu) or [communityresources@com.edu](mailto:communityresources@com.edu).