

# Math 1332.001IN Quantitative Reasoning Fall 2021 Online Course

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

Student hours and location:MW9:00 am - 9:30 am, 10:30 am - 11:00 am12:00 pm - 12:30 pm, 4:00 pm - 5:00 pmTTh11:00 am - 12:30 pmF10:00 am - 11:00 amAll student hours are in my office, 325-08 in the STEAM building.

Math 1332.001IN will have Virtual Office Hours from 11:00 am - 12:00 pm MW using the Live Sessions tab on Blackboard.

**Required Textbook:** <u>A Survey of Mathematics With Applications</u>, 10<sup>th</sup> edition, by Angel, Abbot, and Runde, Pearson Education, 2017. The <u>access code</u> for MyMathLab may be purchased with the textbook or may be purchased separately at mymathlab.com. You need the access code and the course code (the course code is **griffiths35221**) to gain access to MyMathLab today. A calculator is needed for this course. A Texas Instruments TI30XIIS is recommended. You will need computer access to the internet to use MyMathLab. If you do not have a computer and/or dependable internet access, contact your professor immediately so that you may discuss any options that may be available to you through the college.

**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 questions.

**Homework Assignments on MyMathLab:** There is a homework assignment for each unit covered. These are listed on the course outline of this syllabus and on the assignment list on MyMahLab. Each day's homework assignments must be completed by 11:59 pm on the due date shown on both the course outline and on assignment list on MyMathLab.

**Quizzes on MyMathLab:** Six quizzes which relate to the student learning outcomes, will be done on MyMathLab. These are listed on the course outline of this syllabus and on the assignment list on MyMahLab. Like the homework assignments, the due dates are shown on both the course outline on this syllabus and on the assignment list on MyMathLab. Unlike the homework assignments, <u>the quizzes must be taken in one sitting</u>, 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 MyMathLab:** There are four exams which cover the chapters in the text book. The exams are taken on MyMathLab and are to be finished by the due dates shown on the course outline on this syllabus and on the course outline on MyMathLab. 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. 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 MyMathLab:** The comprehensive final exam is taken on MyMathLab and must be finished by the due date shown on the course outline on 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:**

Discussion Forums	5%
Comprehensive Final Exam	20%
Average of Chapter Exams	60%
Homework Average	7%
Quiz Average	8%
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 point penalty for all homework and quizzes submitted after the due date.

There are no make-up exams unless:

1) the student notifies the instructor before the exam due date, and

2) the reason for the requested make-up exam is extraordinary.

Extra-credit may be given on assignments at the discretion of the instructor.

**Attendance Policy:** Students in online courses at COM are expected to participate every week. Per COM policy, students are required to log on to their course at least twice per week, but logging in every day is recommended.

**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.

### **Table Mapping SLO's and Core Objectives**

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

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 <u>lrichardson@com.edu</u>.

# **Course Outline:**

<u>Week</u> 1	<u>Date</u> 8/23	<u>Assignments</u> Orientation Homework Due 8/27 <b>Discussion Forum <u>Introduce Yourself</u> Due 8/27</b>
	8/25	<ul> <li>2.1 Set Concepts Due 8/27</li> <li>2.2 Subsets Due 8/30</li> <li>2.3 Venn Diagrams and Set Operations Due 8/30</li> </ul>
2	8/30	<ul> <li>Discussion Forum <u>Sets and Subsets</u> Due 9/3</li> <li>2.4 Venn Diagrams with Three Sets and Verification of Equality of Sets Due 9/3</li> </ul>
	9/1	2.5 Application of Sets Due 9/6 Quiz 1 (Section 2.5, SLO 1) Due 9/6
3	9/6 9/8	<ul> <li>3.1 Statements and Logical Connectives Due 9/10</li> <li>3.2 Truth Tables for Negation, Conjunction, and Disjunction Due 9/13</li> </ul>
4	9/13	3.3 Truth Tables for the Conditional and Biconditional Due 9/17
	9/15	3.4 Equivalent Statements Due 9/20 Quiz 2 (Section 3.2, 3.3, 3.4, SLO 2) Due 9/20
5	9/20 9/22	Review for Exam 1 Due 9/22 Exam 1 (2.1 – 3.5) Due 9/22 11.1 Empirical and Theoretical Probabilities Due 9/27 11.2 Odds Due 9/27
6	9/27 9/29	<b>Discussion Forum</b> <u>Probability and Odds</u> <b>Due 10/1</b> 11.3 Expected Value Due 10/1 11.4 Tree Diagrams Due 10/4
7	10/4 10/6	<ul><li>11.4 The Diagrams Due 10/4</li><li>11.5 OR and AND Problems Due 10/8</li><li>11.6 Conditional Probability Due 10/11</li></ul>
8	10/11 10/13	Review for Exam 2 Due 10/13 <b>Exam 2 (11.1 – 11.6) Due 10/13</b> 11.7 The Counting Principle and Permutations Due 10/18

9	10/18	11.8 Combinations Due 11/22
	10/20	<ul><li>11.9 Solving Probability Problems Using Combinations Due 10/25</li></ul>
		Quiz 3 (Section 11.1, 11.5, 11.6, 11.7, 11.8, 11.9, SLO 4) Due 10/25
10	10/25	<b>Discussion Forum</b> <u>Combinations &amp; Permutations</u> <b>Due 10/29</b> 11.10 Binomial Probability Formula Due 10/29
	10/27	12.2 Frequency Distributions and Statistical Graphs Due 11/1 Quiz 4 (Section 12.2, SLO 5) Due 11/1
11	11/1 11/3	<ul><li>12.3 Measures of Central Tendency Due 11/5</li><li>12.4 Measures of Dispersion Due 11/8</li><li>Review for Exam3 Due 11/8</li></ul>
12	11/8	Exam 3 (11.7 – 12.4) Due 11/8 6.2, 6.3, 6.10 Formulas, Applications of Algebra, Functions Due 11/12
	11/10	10.1 Percent Due 11/15
13	11/15 11/17	<ul> <li>10.2 Personal Loans and Simple Interest Due 11/19</li> <li>10.3 Compound Interest Due 11/22</li> <li>Quiz 5 (Section 10.1, 10.2, 10.3, 6.10, SLO 6) Due 11/22</li> </ul>
14	11/22 11/24	<ul> <li>10.4 Installment Buying Due 11/29</li> <li>10.5 Buying a House with a Mortgage Due 11/29</li> <li>Quiz 6 (Section 10.2, 10.3, 10.4, 10.5, SLO 3) Due 11/29</li> </ul>
15	11/29 12/1	Review for Exam 4 Due 12/1 Exam 4 (6.2, 6.3, 6.10, 10.1 – 10.5) Due 12/1
16	12/6 12/8	Review for Comprehensive Final Exam Due 12/8 Comprehensive Final Exam Due 12/8

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.

<<u>https://build.com.edu/uploads/sitecontent/files/student-</u>

<u>services/Student\_Handbook\_2019-2020v5.pdf</u>. 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. <<u>https://build.com.edu/uploads/sitecontent/files/student-</u> 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 Holly Bankston at 409-933-8520 or <u>hbankston@com.edu</u>. The Office of Services for Students with Disabilities is located in the Student Success Center.

**Counseling Statement:** Any student needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or <u>hbankston@com.edu</u>. Counseling services are available on campus in the student center for free and students can also email <u>counseling@com.edu</u> to set up their appointment. Appointments are strongly encouraged; however, some concerns may be addressed on a walk-in basis.

**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 is Friday, November 19<sup>th</sup>.

 $F_N$  Grading: The  $F_N$  grade is issued in cases of *failure due to a lack of attendance*, as determined by the instructor. The  $F_N$  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  $F_N$  grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an  $F_N$  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.

**COVID-19 Statement:** All students, faculty, and staff are expected to familiarize themselves with materials and information contained on the College of the Mainland's Coronavirus Information site at <u>www.com.edu/coronavirus</u>. In compliance with <u>Governor Abbott's May 18 Executive Order</u>, face coverings/masks will no longer be required on COM campus. Protocols and college signage are being updated. We will no longer enforce any COM protocol that requires face coverings. We continue to encourage all members of the COM community to distance when possible, use hygiene measures, and get vaccinated to protect against COVID-19. Please visit <u>com.edu/coronavirus</u> for future updates.

#### **Success Tips:**

- Schedule your study time and be diligent in sticking with it. It is recommended that you allocate two hours outside of class for each hour in class.
- Find a study partner. Studying with another person can help keep you motivated and on task.
- Be an active learner.
  - Attend all your classes and be on time.
  - Listen carefully, take good notes and participate in class.
  - Review your class notes regularly
  - Read the textbook.

- Do all the assignments.
- Study for all the exams using the reviews provided. Rework homework problems.
- Seek help when something is unclear, don't put it off.
- Have a positive attitude. You can learn math!
- Use resources that are available.
- Use the instructor's office hours.
  - Use the free tutoring that is available in the Math Lab, TVB 1306

# To register for MyMathLab,

Use a reliable web platform (Google or Firefox are recommended for windows) and go to **mymathlab.com**.

Under Register Now, click on student.

Read the new page and click on **OK! Register Now**.

Under Enter course ID, enter griffiths35221 and click on continue.

Read the new page.

- --If you have a Pearson account, enter user name and password and click sign in.
- --If you do not have a Pearson account, click **create**. On the new page enter the requested information (follow their lead), accept the license agreement, and click **create account**.

Read the new page.

- --If you have the course access code, click **access code**, enter it, and click **finish**.
- --If you do not have the course access code, you can either:
- --pay for your access to MyMathLab using a credit card or Pay Pal, click the amount, enter the requested information, and follow their lead, or
- --take advantage of the 14 day free trial offer. In the sentence toward the bottom of the page, click **Get temporary access without payment for 14 days**, on the next page, click **yes**. Warning! If you choose this option and fail to pay within the 14 days, you will be dropped from MyMathLab and you will lose all the grades you have earned.

## To Read the e-text on MyMathLab,

Log onto MyMathLab. Click on your course. Click on **Multimedia Library** on the menu on the left. Select the chapter using the drop down menu. Check the **Multimedia Textbook** box. Click **Find Now**. Scroll down. Click on the section you wish to read. Begin reading. You can move forward or backward through the pages using the right arrow or left arrow at the top of the page toward the left.

## To Watch a Video on MyMathLab,

Log onto MyMathLab. Click on your course. Click on **Multimedia Library** on the menu on the left. Select the chapter using the drop down menu. Select the unit using the drop down menu. Check the video box. Click **Find Now**. Click on the video title you wish to watch, (there may be more than one).

# To do a homework assignment on MyMathLab,

- 1. Log into My Math Lab:
- Go to <u>www.mymathlab.com</u>
- Click the Log In button and enter your Login Name and Password
- Click on the appropriate class
- Click on the ALL ASSIGNMENTS button
- Click on the homework assignment or quiz you wish to do.
  - 2. Read the question and instructions for entering the answer carefully, and show all appropriate work in your notebook.
  - 3. Enter your answer in the box provided, and then click the CHECK ANSWER button.
  - 4. If needed, click the SIMILAR EXERCISE button to redo the exercise.
  - 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 both you and your professor.
  - 6. Click on the next question to continue.