

# Department of Mathematics and Computer Science

# Syllabus Math 0320.034IN Summer 2022 Intermediate Algebra

Professor: Sheri Aajul E-mail: <u>saajul@com.edu</u>

College of the Mainland (COM) email should be read weekly or more frequently.

**Virtual Student Hours**: Student/Office hours are available 6/6/2022 - 8/8/2022. Week 1 office hours are on Wednesday, 6/8/2022, from 4:00 - 6:00 PM. Office hours for all other weeks are on Monday from 11:00 a.m. -1:00 pm (for both MATH0320 and MATH1314). Multiple half-hour zoom links to student/office hours is in Blackboard content, but usually sent out via email as well. Students should feel free to ask MATH 1314 as well as MATH 0320 questions during this time.

Important Note: Internet is required as is regular reading of College of the Mainland email. This course uses Blackboard and COM email in addition to MyMathLab (MML). Please check your COM email (at least) weekly. You will need access to the internet to gain access to course materials using Blackboard, COM email, and MyMathLab (MML) software. Some devices like iPads/tablets and cellphones present problems with gaining access to quizzes/tests, so they are not acceptable devices for this class. If you do not have your own internet access, you should be able to get access on campus in the Innovations Computer Lab, TVB 1324, the Library and the Tutoring Center, TVB 1310.

## 1. Required Textbook/Materials

The textbook used in this course is: <u>Intermediate Algebra</u>, 8<sup>th</sup> edition, by Tobey, Slater, Blair and Crawford, published by Pearson. An electronic copy of the text is integrated into MyMathLab, so no hardcopy text is needed (unless you want one.) On the other hand, **you will need to buy a MyMathLab access code (but you can use free access for two weeks if waiting on financial aid.)** You can procure access through the COM Bookstore (and must use this route if using financial aid) or directly from Pearson MyMathLab: <a href="https://mlm.pearson.com/northamerica/mymathlab/">https://mlm.pearson.com/northamerica/mymathlab/</a>

While MATH0320 may be completed using a TI-30, a TI 84 Plus graphing calculator is recommended for this course (since it is requested for MATH1314.) Do not use internet accessing calculators, symbolic manipulation calculators (CAS or computer algebra system), or stored programs beyond what comes pre-packed in the calculator. In particular, cell phones as well as CAS models including (but not limited to) the TI-89, TI NSpire, CAS, HP 50g, and Casio Classpad 330 are not allowed. Do not use a CAS calculator or online program for quizzes and/or exams.

#### MyMathLab (Pearson)

Please access MyMathLab via Blackboard (in the content section of our course). You must use your College of the Mainland (COM) email account to register for MyMathLab. Note: MyMathLab offer a two week grace period for free use if your funds are not immediately available, and you can access this option when you register for our course in MyMathLab. Our MyMathLab course ID is aajul60277, and our MyMathLab course name is Math-0320-034IN-SU22 Intermediate Algebra

# 2. Course Description

This course is designed to develop skills and understanding in the following areas: relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. This course does not transfer.

## 3. Course Requirements

## **Homework Assignments**

There is an assigned homework for each section to be completed online using MyMathLab. Most homework allows late submission with a 20% penalty, except if close to an exam or end of course, then there is no late submission option. Late close dates are as follows: All Exam 1 homework closes on 6/19/22; All Exam 2 homework closes on 6/26/22; All Exam 3 homework closes on 7/3/22; and all Exam 4 homework closes on 7/31/22. Please keep up with the course and do not procrastinate.

#### **Ouizzes and Exams**

There are six quizzes, four chapter exams and a comprehensive final exam. All of the quizzes and exams are to be done online using MyMathlab.

You may use your approved calculator (which does not access the internet or contain other than original stored programs) on all assessments. I suggest that you create a formula/concept sheet which has three columns, one for the name of the formula or concept, one for the formula or concept, and one for an example of the formula or concept. Study this document regularly and commit the formulas and concepts to memory, but keep the formula sheet handy in case you need it to check a problem on an assessment. If you really get stuck, you may use your hardcopy textbook, and homework and class notes on assessments. No other material or help is allowed. Do your own work.

You can retake each quiz just once (with its time frame) to improve your score; the higher score will be the one that counts. There are no retakes on exams. Quizzes have time limits of two hours; exam 1-4 as well as the final exam have time limits of two and one half hours. At most 4 percentage points of extra credit will be added to your final exam score (for a max score of 100%) for submitting a course evaluation.

## 4. Determination of Course Grade/Detailed Grading Formula

#### **Grading Formula:**

The course grade will be determined by the following formula:

Final Average = 64% Chapter Exam Average + 16% Final Exam + 10% Homework Average + 10% Quiz Average

## The Final Exam score will replace the lowest Chapter Exam Score when it is larger.

#### **Grading Scale:**

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

## 5. Make-up policy

If you are unable to make a scheduled exam within days specified in the course outline, you will be allowed to make up the exam provided that you notify the instructor before the end of the scheduled exam period and have a legitimate reason for not be able to take the exam.

# 6. Attendance Policy

You must log in and be active in MyMathLab each week, preferable at least three times. In addition to time spent in doing homework, taking quizzes and exams it will be necessary to study, using the course materials. Please plan to spend at least 4 hours per week to be successful in the class.

# 7. 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. I will make every effort to respond to your email within 24 hours of receiving it.

#### 8. Student Learning Outcomes

Upon successful completion of M0320, students will:

- 1. Define, represent and perform operations on real and complex numbers.
- 2. Recognize, understand and analyze features of a function
- 3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
- 4. Identify and solve absolute value, polynomial, radical, and rational equations.
- 5. Identify and solve absolute value and linear inequalities.
- 6. Model, interpret and justify mathematical ideas and concepts using multiple representations.
- 7. Connect and use multiple strands of mathematics in situations and problems, as well as to the study of other disciplines.

## 9. Academic Dishonesty

Do your own work on assessments. 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.

## 10. 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 the Department Chair, Leslie Richardson, at (409) 933-8329, <a href="mailto:lirchardson@com.edu">lirchardson@com.edu</a>.

# 11. Course Calendar and Pacing

*NOTE:* The pace of the first three MATH0320 exams is fast then the dual courses shift to greater emphasis on MATH1314.

# Side-By-Side MATH0320 - MATH1314 Course Calendars

<b>Date Range</b>	MATH0320 Assignments/Assessments	<b>Due Date</b>	MATH1314 Assignments/Assessments
Week 1 6/06 – 6/12	Orientation Homework 2.3 Absolute Value Equations 2.6 Linear Inequalities 2.8 Absolute Value Inequalities  Quiz A (Sections 2.6 & 2.8) 3.1 Graphing Linear Equations with Two Unknowns 3.2 Slope of a Line 3.3 Graphs and the Equations of a Line	6/12/2022	Orientation Homework 1.1 Introduction to Graphs
Week 2 6/13 – 6/19	3.5 Concept of a Function 3.6 Graphing Functions from Equations  Quiz B (Sections 3.5 & 3.6)  Test 1 (2.3, 2.6 2.8, 3.2, 3.3, 3.5, 3.6)  4.1 Systems of Linear Equations in 2 Variables  4.3 Applications of Systems of Equations  Quiz C (Section 4.3)	6/19/2022	1.2 Functions and Graphs
		6/14/2022 Census	
Week 3 6/20 – 6/26	5.4 GCF, Factoring by Grouping 5.5 Factoring Trinomials 5.6 Special Cases of Factoring 5.8 Solving Equations by Factoring Quiz D (Sections 5.5, 5.6 & 5.8) Test 2 (4.1, 4.3, 5.4, 5.5. 5.6 & 5.8) 5.2 Dividing Polynomials 5.3 Synthetic Division	6/26/2022	1.3 & 1.4 Linear Functions and Equations

6.1 Rational Expressions: Simplifying, Multiplying, Dividing 6.2 Add/Subtract Rational Expressions 6.3 Complex Rational Expressions 6.4 Rational Equations Quiz E (Sections 6.1 & 6.4) Test 3 (5.2, 5.3, 6.1, 6.2, 6.3 & 6.4)	7/3/2022	1.5 Zeros of Linear Functions  Quiz 1: Sections 1.1-1.5
Quiz F (Section 7.6)	7/10/2022	<ul> <li>2.1 Increasing/Decreasing Piecewise Functions</li> <li>2.2 Algebra of Functions</li> <li>2.3 Composition of Functions</li> <li>2.5 Transformations of Functions</li> <li>Exam 1 (Chapters 1 &amp; 2, excluding 2.4)</li> <li>3.2 Quadratic Functions</li> <li>3.3 Graphs of Quadratic Functions</li> </ul>
8.1 Quadratic Equations 8.2 Quadratic Formula	7/17/2022	<ul> <li>4.1 Polynomial Functions</li> <li>4.2 Graphs of Polynomial Functions</li> <li>4.3 Remainder &amp; Factor Theorems</li> <li>4.5 Rational Functions</li> <li>Quiz 2 Finding Zeros (over 3.2, 4.3, 4.5)</li> </ul>
<ul><li>5.7 Factor Polynomial Completely</li><li>7.5 Radical Equations</li></ul>	7/24/2022	4.6 Inequalities  Exam 2 (Chapters 3 and 4) 5.1 Inverse Functions 5.2 Exponential Functions 5.3 Logarithmic Functions Quiz 3 Graphing Techniques (over 5.1-5.3)
Test 4 (5.7, 7.5, 7.6, 8.1, 8.2) Comprehensive Final Exam opens early	7/31/2022	5.4 Properties of Logarithmic Functions 5.5 Exponential, Logarithmic Equations 5.6 Modeling with Exponential and Logarithmic Functions  Exam 3 (Chapter 5) 6.1 Solving Linear Systems 2-D 6.3 Matrices and Systems of Linear Equations
	W-Day	
Comprehensive Final Exam closes this week	8/7/2022	6.2 Solving Linear Systems 3-D 6.4 Matrix Operations Quiz 4 (over 6.1-6.4) Exam 4 (Chapter 6) Homework to prepare for final exam Final Exam opens on Sunday, 8/8/2022 Final Exam closes on Wednesday 8/10/2022
	7.6 Complex Numbers  Quiz F (Section 7.6)  8.1 Quadratic Equations 8.2 Quadratic Formula  5.7 Factor Polynomial Completely 7.5 Radical Equations  Test 4 (5.7, 7.5, 7.6, 8.1, 8.2)  Comprehensive Final Exam opens early	Test 3 (5.2, 5.3, 6.1, 6.2, 6.3 & 6.4) 7.6 Complex Numbers Quiz F (Section 7.6)  8.1 Quadratic Equations 8.2 Quadratic Formula  7/17/2022  5.7 Factor Polynomial Completely 7.5 Radical Equations  7/24/2022  Test 4 (5.7, 7.5, 7.6, 8.1, 8.2) Comprehensive Final Exam opens early  8/1/2022 W-Day  Comprehensive Final Exam closes this week  8/7/2022

# **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. <a href="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</a>.

8/8 - 8/10

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. <a href="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</a>

**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 <a href="https://hbankston@com.edu">hbankston@com.edu</a>. 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 <a href="https://hbankston@com.edu">hbankston@com.edu</a>. Counseling services are available on campus in the student center for free and students can also email <a href="mailto:counseling@com.edu">counseling@com.edu</a> 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 from the 10-week session is August 1<sup>st</sup>, but don't wait until the last minute as it takes time to meet with your advisor and for the advisor to process the withdrawal.

 $F_N$  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 <a href="https://www.com.edu/coronavirus">www.com.edu/coronavirus</a>. In compliance with <a href="https://www.com.edu/coronavirus">Governor Abbott's May 18 Executive Order</a>, 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 com.edu/coronavirus for future updates.	vaccinated	to protect	against	COVID-19.	Please	visit