



Department of Mathematics and Computer Science

Syllabus
Math 1314.034IN Spring 2023
College Algebra

Professor: Sheri Aajul

E-mail: saajul@com.edu

Please include your course & section in the subject line when emailing.

Virtual Student Hours: Four half-hour zoom links to student/office hours are in D2L Brightspace content. Students should feel free to ask MATH 1314 questions during this time frame as well as MATH 0320 questions. My office hours are on Sunday from noon to 2 pm. You are always welcome to send email.

Important Note: Internet is Required

This course uses Brightspace with integrated MyMathLab (MML) and COM email, so please check your email regularly. You will need access to the internet to gain access to course materials. *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 can get access on campus in the Innovations Computer Lab, TVB 1324, the Library and the Tutoring Center, ICB 104.

1. Required Textbook/Materials

The textbook used in this course is: *College Algebra*, by Beecher, Penna, Bittinger, fifth edition, published by Pearson. An electronic copy of the text is integrated into MyMathLab, so no hardcopy text is needed (unless you want one.) Please use the multimedia version of the textbook available in MyMathLab via the Multimedia Library Tab. Use this schedule found on this syllabus to determine the chapter/section to read. The multimedia textbook has embedded videos and worked examples so it is a huge help to master course material.

A scientific calculator is required and a graphing calculator is suggested for this course. A Texas Instruments TI-84 Plus is recommended as it will make your life much easier on chapter 6 material. Instructions on how to graph and perform matrix operations using a TI-84 calculator may be found in course content of our Blackboard course. Please do not use an internet accessing calculator, a Computer Algebra System (CAS) calculator or any stored programs beyond what comes pre-packed in the calculator.

MyLab Math (Pearson)

Please access MyMathLab via Brightspace (in the content section of our course). A document in Course Administration walks you through using the MyMathLab course. Note that MyMathLab contains course text, multimedia, homework, quizzes, tests and grades.

2. Course Description

College Algebra is an in-depth study and applications of polynomial, rational, radical, exponential, and logarithmic functions, and systems of equations using matrices.

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. Note that the penalty applies only to late problems and not necessarily to the entire assignment. Late close dates are as follows: 1.1-2.5 closes on 3/12/23; 3.2 – 4.6 closes on 4/9/23; 5.1-5.6 closes on 04/30/23; and 6.1-6.4 closes on 5/7/23.* Please keep up with the course and do not procrastinate.

Quizzes and Exams

There are four quizzes, four chapter exams and a comprehensive final exam. All of the quizzes and exams are to be done online using MyMathlab. Please see the schedule (below) to know when assessments are open.

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 it on an assessment. If you really get stuck, you may use your hardcopy textbook, 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. Quizzes have time limits of one hour; exam 1-4 time limits are two hours; and final exam time limit is two and one half hours. There are no retakes on exams, but you can earn bonus points on each exam by posting to an associated discussion in Blackboard. The discussions are open during the time the material covered by the exam is open, with the closing date posted in the discussion. At most 4 percentage points of extra credit is added to your final exam score (for a max score of 100%) for submit a course evaluation. Quizzes have time limits of one hour; exam 1-4 time limits are two hours; and final exam time limit is two and one half hours.

4. Determination of Course Grade/Detailed Grading Formula

Grading Formula:

The course grade will be determined by the following formula:

$$\text{Final Average} = 64\% \text{ Chapter Exam Average} + 16\% \text{ Final Exam} \\ + 10\% \text{ Homework Average} + 10\% \text{ Quiz Average}$$

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 the 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 being able to take the exam.

6. Attendance Policy

You must log in and be active in MyMathLab at least three times each week. In addition to time spent in doing homework, taking quizzes and exams it will be necessary to study, using the course materials, 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. Table Mapping SLO's and Core Objectives

Student Learner Outcomes	SLO assessed via this assignment	SLO maps to Core Objective	Core Objective assessed via this assignment
1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.	Exam 1		
2. Recognize and apply polynomial, rational, exponential and logarithmic functions and solve related equations.	Exam 2, Exam 3	Critical Thinking Skills (CT)	2 application problems on Exam 3
3. Apply graphing techniques.	Quiz 3	Communication Skills (CS)	Graphing question on Exam 1
4. Evaluate all roots (zeros) of higher degree polynomials and rational functions.	Quiz 2		
5. Recognize, solve and apply systems of linear	Exam 4	Empirical and Quantitative	2 application problems on Exam 4

equations using matrices.		Skills (EQS)	
---------------------------	--	--------------	--

Only the Core Objectives Critical Thinking and Empirical & Quantitative Skills will be assessed this semester. Communication Skills will not be assessed.

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, lrichardson@com.edu.

11. Course Calendar and Pacing (includes both MATH0320 & MATH1314) Notice that the MATH1314 schedule is on the right.

Date Range	MATH0320 Assignments/Assessments	Due Date	MATH1314 Assignments/Assessments
Week 1 1/17 – 1/22	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 (opens early but isn't due until 1/29)	1/22/2023	Orientation Homework
Week 2 1/23 – 1/29	3.2 Slope of a Line 3.3 Graphs and the Equations of a Line 3.5 Concept of a Function 3.6 Graphing Functions from Equations Quiz B (Sections 3.5 & 3.6)	1/29/2023	1.1 Introduction to Graphs
		2/1/2023 Census Day	
Week 3 1/30 – 2/5	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)	2/5/2023	1.2 Functions and Graphs

Week 4 2/06 – 2/12	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)	2/12/2023	1.3/1.4 Linear Functions and Equations
Week 5 2/13 – 2/19	Test 2 (4.1, 4.3, 5.4, 5.5, 5.6 & 5.8) 5.2 Dividing Polynomials 5.3 Synthetic Division 6.1 Rational Expressions: Simplifying, Multiplying, Dividing	2/19/2023	1.5 Zeros of Linear Functions
Week 6 2/20 – 2/26	6.2 Add/Subtract Rational Expressions 6.3 Complex Rational Expressions 6.4 Rational Equations Quiz E (Sections 6.1 & 6.4)	2/26/2023	Quiz 1: Sections 1.1-1.5
Week 7 2/27 – 3/5	Test 3 (5.2, 5.3, 6.1, 6.2, 6.3 & 6.4)	3/5/2023	2.1 Increasing/Decreasing Piecewise Functions 2.2 Algebra of Functions 2.3 Composition of Functions 2.5 Transformations of Functions (opens early but due 3/12)
Week 8 3/6 – 3/12	7.6 Complex Numbers Quiz F (Section 7.6)	3/12/2023	Exam 1 (Chapters 1 & 2, excluding 2.4) 3.2 Quadratic Functions 3.3 Graphs of Quadratic Functions
Week 9 3/13 – 3/19		Spring Break	
Week 10 3/20 – 3/26	8.1 Quadratic Equations	3/26/2023	4.1 Polynomial Functions 4.2 Graphs of Polynomial Functions 4.3 Remainder, Factor Theorems
Week 11 3/27 – 4/2	8.2 Quadratic Formula	4/2/2023	4.5 Rational Functions Quiz 2 Finding Zeros (over 3.2, 4.3, 4.5) 4.6 Inequalities
Week 12 4/3 – 4/9	7.5 Radical Equations	4/7/23 Holiday 4/9/2023	Exam 2 (Chapters 3 and 4) 5.1 Inverse Functions 5.2 Exponential Functions
Week 13 4/10 – 4/16	5.7 Factor Polynomial Completely	4/16/2023	5.3 Logarithmic Functions Quiz 3 Graphing Techniques (over 5.1-5.3) 5.4 Properties of Logarithmic Functions
Week 14 4/17 – 4/23	Test 4 (5.7, 7.5, 7.6, 8.1, 8.2)	4/23/2023	5.5 Exponential, Logarithmic Equations 5.6 Modeling with Exponential and Logarithmic Functions
Week 15 4/24 – 4/30	Comprehensive Final Exam opens early	4/24/2023 W-Day	Exam 3 (Chapter 5) <i>See TI-84 handouts for Exam 4 material</i> 6.1/6.3 Solving Linear Systems 2-D general as well as via Gaussian/Gauss-Jordan Elimination

			6.2 Solving Linear Systems 3-D
Week 16 5/1 – 5/7	<i>Comprehensive Final Exam closes this week</i>	5/7/2023	6.4 Matrix Operations Quiz 4 (over 6.1-6.4) Exam 4 (Chapter 6) Review for Final Exam Homework (due 12/5/2022) Final Exam opens on Sunday, 5/7/23
Week 17 5/8 – 5/10		5/10	Final Exam (due Wednesday, 5/10/23)

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 [Student Handbook 2022-2023 v4.pdf \(com.edu\)](#). *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 March 1. The last date to withdraw from the 16-week session is April 24. The last date to withdraw for the 2nd 8-week session is May 3.

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.