## Math 1314.304CL <br> College Algebra <br> Course Semester (Fall 2023) <br> 9:38-10:30 (MTWRF)

Instructor Information: Christopher Billot, Email: cbillot@com.edu, Phone Number: 281-482-3413
Student hours and location: The class will meet at Friendswood High School (MTWRF) from 9:38-10:30 in room 1469. My office hours will be (MTWRF) from 8:00am8:30am in room 1469 at Friendswood High School.

## Required Textbook/Materials:

Textbook: College Algebra, by Beecher, Penna, Bittinger, fifth edition, published by Pearson and appropriate Math Lab account.
Calculator: TI 83 Plus or TI 84 Plus is recommended.
TI 89, TI Nspire, or higher is prohibited.
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.

## Course requirements:

## Homework Assignments

There is assigned homework for each section to be completed online using MyMathLab. Students are expected to have their work completed by the due date. Late work will not be accepted.

## Quizzes and Exams

There are four quizzes, four-chapter exams, and a comprehensive final exam. All quizzes are to be done online using MyMathLab. You can retake each quiz just once to improve your score; the highest score will be the one that counts. For each quiz, you will need to turn in the work associated with each problem to your instructor to receive credit for the quiz. Quizzes can be retaken but just once to improve your score. The higher score will be recorded. There are no retakes on any of the exams.

## Grading Formula:

The course grade will be determined by the following formula:
Final Average: 64\% Chapter Exam Average Grading Scale: Grade A: Final Average [89.5-100]

| $16 \%$ | Final Exam |
| :--- | :--- |
| $10 \%$ | Homework Average |
| $10 \%$ | Quiz Average |

Grade B: Final Average [79.5-89.5)
Grade C: Final Average [69.5-79.5)
Grade D: Final Average [59.5-69.5)
Grade F: Final Average [0-59.5)
The Final Exam score will replace the lowest Chapter Exam Score when it is larger.

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

Will be determined at the discretion of the instructor based on the circumstances of the student. If you are unable to make a scheduled chapter exam, you will be allowed to make up the exam outside of class provided you notify the instructor prior to the exam and have a legitimate reason for the absence.

Attendance Policy: Attendance and classroom participation is required. Excessive absenteeism may result in a student being withdrawn from the course. More than three absences are considered excessive.

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. (Faculty may add additional statement requiring monitoring and communication expectations via D2L or other LMS.)

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

| Student Learner Outcomes | SLO assessed via <br> this assignment | SLO Maps to Core Objective | Assessed via this <br> assignment |
| :--- | :--- | :--- | :--- | :--- |
| 1. |  |  |  |
| 2. <br> demonstrate and apply knowledge of properties of functions, including <br> Recognize and apply polynomial, rational, exponential and logarithmic <br> functions and solve related equations. | Exam 1 |  |  |
| 3. Apply graphing techniques. | Quiz 3 \& Exam 3 | Critical Thinking Skills (CT) | 2 application <br> problems on Exam 3 |
| 4.Evaluate all roots (zeros) of higher degree polynomials and rational <br> functions. <br> 5. Recognize, solve and apply systems of linear equations using matrices. Quiz 2 Exam 4 | Communication Skills (CS) | Graphing question on <br> Exam 1 |  |

## 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 od 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.

Student Concerns: If you have questions or concerns about any aspect of this course, please contact me at cbillot@com.edu. If after discussing your concern with me and you continue to have questions, please contact Dr. Leslie Richardson at (409) 933-8329 or lrichardson@com.edu.

Course outline: (include calendar with lecture topics, due dates)
Math 1314 College Algebra Fall 2023 Calendar

| Month | Week | Date | Day | Topic | Sections |
| :---: | :---: | :---: | :---: | :---: | :---: |
| August | 1 | 14 | Monday | Student Holiday | Holiday |
|  |  | 15 | Tuesday | Introductions to Class | Intro |
|  |  | 16 | Wednesday | Purchase Math Lab | Intro |
|  |  | 17 | Thursday | Introduction to Graphing | 1.1 |
|  |  | 18 | Friday | Lab Day | Lab |
|  | 2 | 21 | Monday | Functions and Graphs | 1.2 |
|  |  | 22 | Tuesday | Lab Day | Lab |
|  |  | 23 | Wednesday | Linear Functions, Slope, and Applications | 1.3 |
|  |  | 24 | Thursday | Lab Day | Lab |
|  |  | 25 | Friday | Equations of Lines and Modeling | 1.4 |
|  | 3 | 28 | Monday | Linear Equations, Functions, Zeros, and Applications | 1.5 |
|  |  | 29 | Tuesday | Lab Day | Lab |
|  |  | 30 | Wednesday | Quiz 1 (1.1-1.5) | Quiz |
|  |  | 31 | Thursday | Increasing, Decreasing, and Piecewise Functions | 2.1 |
| September |  | 1 | Friday | Lab Day | Lab |
|  | 4 | 4 | Monday | Student Holiday | Holiday |
|  |  | 5 | Tuesday | The Algebra Functions | 2.2 |
|  |  | 6 | Wednesday | Lab Day | Lab |
|  |  | 7 | Thursday | The Composition of Functions | 2.3 |
|  |  | 8 | Friday | Lab Day | Lab |
|  | 5 | 11 | Monday | Transformations | 2.5 |
|  |  | 12 | Tuesday | Review for Exam 1 | Review |
|  |  | 13 | Wednesday | Review for Exam 1 | Review |
|  |  | 14 | Thursday | Exam 1 (Ch. 1 \& 2) | Exam |
|  |  | 15 | Friday | Exam 1 (Ch. 1 \& 2) | Exam |
|  | 6 | 18 | Monday | Student Holiday | Holiday |
|  |  | 19 | Tuesday | Simple Interest and Discount | 3.2 |
|  |  | 20 | Wednesday | Compound Interest | 3.3 |
|  |  | 21 | Thursday | Lab Day | Lab |
|  |  | 22 | Friday | Quiz 2 (3.2 \& 3.3) | Quiz |
|  | 7 | 25 | Monday | Annuities, Future Value, and Sinking Funds | 4.1 |
|  |  | 26 | Tuesday | Lab Day | Lab |
|  |  | 27 | Wednesday | Annuities, Present Value, and Amortization | 4.2 |
|  |  | 28 | Thursday | Lab Day | Lab |
|  |  | 29 | Friday | Systems of Two Linear Equations in Two Variables | 4.3 |
| October | 8 | 2 | Monday | Larger Systems of Linear Equations | 4.5 |
|  |  | 3 | Tuesday | Lab Day | Lab |
|  |  | 4 | Wednesday | Applications of Systems of Linear Equations | 4.6 |
|  |  | 5 | Thursday | Review for Exam 2 | Review |
|  |  | 6 | Friday | Review for Exam 2 | Review |
|  | 9 | 9 | Monday | Exam 2 | Exam |
|  |  | 10 | Tuesday | Exam 2 | Exam |
|  |  | 11-13 | WRF | Student Holiday | Holiday |
|  | 10 | 16 | Monday | Inverse Functions | 5.1 |
|  |  | 17 | Tuesday | Lab Day | Lab |
|  |  | 18 | Wednesday | Exponential Functions | 5.2 |
|  |  | 19 | Thursday | Lab Day | Lab |
|  |  | 20 | Friday | Logarithmic Functions | 5.3 |


| Month | Week | Date | Day | Topic | Sections |
| :---: | :---: | :---: | :---: | :---: | :---: |
| October | 11 | 23 | Monday | Lab Day | Lab |
|  |  | 24 | Tuesday | Quiz 3 (5.1-5.3) | Quiz |
|  |  | 25 | Wednesday | Properties of Logarithmic Functions | 5.4 |
|  |  | 26 | Thursday | Lab Day | Lab |
|  |  | 27 | Friday | Solving Exponential Equations and Logarithmic Equations | 5.5 |
|  | 12 | 30 | Monday | Applications and Models: Growth and Decay; Compound Interest | 5.6 |
|  |  | 31 | Tuesday | Review for Exam 3 | Review |
| November |  | 1 | Wednesday | Review for Exam 3 | Review |
|  |  | 2 | Thursday | Exam 3 (Ch. 5) | Exam |
|  |  | 3 | Friday | Exam 3 (Ch. 5) | Exam |
|  | 13 | 6 | Monday | System of Equations in Two Variables | 6.1 |
|  |  | 7 | Tuesday | Lab Day | Lab |
|  |  | 8 | Wednesday | Systems of Equations in Three Variables | 6.2 |
|  |  | 9 | Thursday | Lab Day | Lab |
|  |  | 10 | Friday | Matrices and Systems of Equations | 6.3 |
|  | 14 | 13 | Monday | Matrix Operations | 6.4 |
|  |  | 14 | Tuesday | Lab Day | Lab |
|  |  | 15 | Wednesday | Inverse Matrices | 6.5 |
|  |  | 16 | Thursday | Lab Day | Lab |
|  |  | 17 | Friday | Quiz 4 (6.1-6.5) | Quiz |
|  | 15 | 20-24 | MTWHF | Thanksgiving Holiday | Holiday |
|  | 16 | 27 | Monday | Determinants and Cramer's Rule | 6.6 |
|  |  | 28 | Tuesday | Lab Day | Lab |
|  |  | 29 | Wednesday | Systems of Inequalities and Linear Programming | 6.7 |
|  |  | 30 | Thursday | Lab Day | Lab |
| December |  | 1 | Friday | Partial Fractions | 6.8 |
|  | 17 | 4 | Monday | Lab Day | Lab |
|  |  | 5 | Tuesday | Review for Exam 4 (Ch. 6) | Review |
|  |  | 6 | Wednesday | Review for Exam 4 (Ch. 6) | Review |
|  |  | 7 | Thursday | Exam 4 (Ch. 6) | Exam |
|  |  | 8 | Friday | Exam 4 (Ch. 6) | Exam |
|  | 18 | 11 | Monday | Review for Final Exam | Review |
|  |  | 12 | Tuesday | Review for Final Exam | Review |
|  |  | 13 | Wednesday | Final Exam | FINAL |
|  |  | 14 | Thursday | Final Exam | FINAL |
|  |  | 15 | Friday | Finalize Grades |  |

W-Day: November 28 ${ }^{\text {th }}, 2023$

## 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 2023-2024 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 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 $1^{\text {st }} 8$-week session is October 11 . The last date to withdraw from the 16 -week session is November 28 . The last date to withdraw for the $2^{\text {nd }} 8$-week session is December 7 .

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.

