

# Math 1314.306CL

# College Algebra Course Semester (Fall 2023) 10:36-11:31 (MTWRF)

Instructor Information: Christopher Billot, <a href="mailto:cbillot@com.edu">Email: cbillot@com.edu</a>, <a href="mailto:Phone Number">Phone Number</a>: 281-482-3413

**Student hours and location:** The class will meet at Friendswood High School (MTWRF) from 10:36-11:31 in room 1469. My office hours will be (MTWRF) from 8:00am-8:30am 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:

<u>Final Average</u> :	64%	Chapter Exam Average	<u>Grading Scale</u> :	Grade A: Final Average [89.5 – 100]
	16%	Final Exam		Grade B: Final Average [79.5 – 89.5)
	10%	<b>Homework Average</b>		Grade C: Final Average [69.5 – 79.5)
	10%	Quiz Average		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 this assignment	SLO Maps to 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 equations using matrices.	Exam 4	Empirical and Quantitative Skills (EQS)	2 application problems on Exam 4

## **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 <a href="mailto:cbillot@com.edu">cbillot@com.edu</a>. If after discussing your concern with me and you continue to have questions, please contact Dr. Leslie Richardson at (409) 933-8329 or <a href="mailto:lichardson@com.edu">lichardson@com.edu</a>.

# Math 1314 College Algebra Fall 2023 Calendar

Month	Week	Date	Day	Торіс	Sections
IVIOTICIT	Week	14	Monday	Student Holiday	Holiday
		15	Tuesday	Introductions to Class	Intro
		16	Wednesday	Purchase Math Lab	Intro
	1	17	Thursday	Introduction to Graphing	1.1
			•		
		18	Friday	Lab Day	Lab
	2	21	Monday	Functions and Graphs	1.2
August		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
		28	Monday	Linear Equations, Functions, Zeros, and Applications	1.5
		29	Tuesday	Lab Day	Lab
	3	30	Wednesday	Quiz 1 (1.1 – 1.5)	Quiz
		31	Thursday	Increasing, Decreasing, and Piecewise Functions	2.1
		1	Friday	Lab Day	Lab
		4	Monday	Student Holiday	Holiday
		5	Tuesday	The Algebra Functions	2.2
	4	6	Wednesday	Lab Day	Lab
		7	Thursday	The Composition of Functions	2.3
		8	Friday	Lab Day	Lab
		11	Monday	Transformations	2.5
		12	Tuesday	Review for Exam 1	Review
	5	13	Wednesday	Review for Exam 1	Review
		14	Thursday	Exam 1 (Ch. 1 & 2)	Exam
September	•	15	Friday	Exam 1 (Ch. 1 & 2)	Exam
		18	Monday	Student Holiday	Holiday
		19	Tuesday	Simple Interest and Discount	3.2
	6	20	Wednesday	Compound Interest	3.3
		21	Thursday	Lab Day	Lab
		21 <b>22</b>	Thursday <b>Friday</b>	Lab Day Quiz 2 (3.2 & 3.3)	Lab <b>Quiz</b>
			,		
		22	Friday	Quiz 2 (3.2 & 3.3)	Quiz
	7	<b>22</b> 25	Friday Monday	Quiz 2 (3.2 & 3.3) Annuities, Future Value, and Sinking Funds	Quiz 4.1
	7	22 25 26	Friday Monday Tuesday	Quiz 2 (3.2 & 3.3) Annuities, Future Value, and Sinking Funds Lab Day	Quiz 4.1 Lab
	7	22 25 26 27	Friday Monday Tuesday Wednesday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization	<b>Quiz</b> 4.1 Lab 4.2
	7	22 25 26 27 28	Friday Monday Tuesday Wednesday Thursday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds  Lab Day  Annuities, Present Value, and Amortization  Lab Day	Quiz 4.1 Lab 4.2 Lab
	7	22 25 26 27 28 29	Friday Monday Tuesday Wednesday Thursday Friday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds  Lab Day  Annuities, Present Value, and Amortization  Lab Day  Systems of Two Linear Equations in Two Variables	Quiz 4.1 Lab 4.2 Lab 4.3
	7	22 25 26 27 28 29 2	Friday  Monday  Tuesday  Wednesday  Thursday  Friday  Monday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds  Lab Day  Annuities, Present Value, and Amortization  Lab Day  Systems of Two Linear Equations in Two Variables  Larger Systems of Linear Equations	Quiz 4.1 Lab 4.2 Lab 4.3 4.5
		22 25 26 27 28 29 2	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day	Quiz 4.1 Lab 4.2 Lab 4.3 4.5 Lab
		22 25 26 27 28 29 2 3 4	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Friday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day  Applications of Systems of Linear Equations	4.1 Lab 4.2 Lab 4.3 4.5 Lab
		22 25 26 27 28 29 2 3 4 5	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day  Applications of Systems of Linear Equations Review for Exam 2	4.1 Lab 4.2 Lab 4.3 4.5 Lab 4.6 Review
October		22 25 26 27 28 29 2 3 4 5	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Friday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day  Applications of Systems of Linear Equations Review for Exam 2  Review for Exam 2	4.1 Lab 4.2 Lab 4.3 4.5 Lab 4.6 Review Review
October	8	22 25 26 27 28 29 2 3 4 5 6	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Monday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day  Applications of Systems of Linear Equations Review for Exam 2  Review for Exam 2  Exam 2	4.1 Lab 4.2 Lab 4.3 4.5 Lab 4.6 Review Review Exam
October	8	22 25 26 27 28 29 2 3 4 5 6	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Monday Thursday Tuesday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day  Applications of Systems of Linear Equations Review for Exam 2  Review for Exam 2  Exam 2  Exam 2	Quiz 4.1 Lab 4.2 Lab 4.3 4.5 Lab 4.6 Review Review Exam Exam
October	8	22 25 26 27 28 29 2 3 4 5 6 9	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Monday Triday Monday Triday Monday Tuesday Wefr	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day  Applications of Systems of Linear Equations Review for Exam 2 Review for Exam 2 Exam 2 Exam 2 Student Holiday	Quiz 4.1 Lab 4.2 Lab 4.3 4.5 Lab 4.6 Review Review Exam Holiday
October	8	22 25 26 27 28 29 2 3 4 5 6 9 10 11-13 16	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Thursday Friday Wednesday Thursday Friday Monday Tuesday WeF Monday Tuesday WeF Monday Tuesday Wednesday	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day  Applications of Systems of Linear Equations Review for Exam 2 Review for Exam 2  Exam 2  Student Holiday Inverse Functions	Quiz           4.1           Lab           4.2           Lab           4.3           4.5           Lab           4.6           Review           Review           Exam           Holiday           5.1
October	8	22 25 26 27 28 29 2 3 4 5 6 9 10 11-13 16 17	Friday Monday Tuesday Wednesday Thursday Friday Monday Tuesday Wednesday Wednesday Thursday Friday Monday Triesday Monday Tuesday Wef Monday Tuesday Wef	Quiz 2 (3.2 & 3.3)  Annuities, Future Value, and Sinking Funds Lab Day  Annuities, Present Value, and Amortization Lab Day  Systems of Two Linear Equations in Two Variables Larger Systems of Linear Equations Lab Day  Applications of Systems of Linear Equations Review for Exam 2 Review for Exam 2  Exam 2  Exam 2  Student Holiday Inverse Functions Lab Day	Quiz 4.1 Lab 4.2 Lab 4.3 4.5 Lab 4.6 Review Review Exam Exam Holiday 5.1 Lab

Month	Week	Date	Day	Topic	Sections
	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
October		27	Friday Solving Exponential Equations and		5.5
				Logarithmic Equations	
	12	30	Monday	Applications and Models: Growth and Decay;	5.6
				Compound Interest	<u> </u>
		31	Tuesday	Review for Exam 3	Review
		1	Wednesday	Review for Exam 3	Review
		2	Thursday	Exam 3 (Ch. 5)	Exam
		3	Friday	Exam 3 (Ch. 5)	Exam
		6	Monday	System of Equations in Two Variables	6.1
		7	Tuesday	Lab Day	Lab
November	13	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
		27	Monday	Determinants and Cramer's Rule	6.6
	16	28	Tuesday	Lab Day	Lab
		29	Wednesday	Systems of Inequalities and Linear Programming	6.7
		30	Thursday	Lab Day	Lab
		1	Friday	Partial Fractions	6.8
	17	4	Monday	Lab Day	Lab
December		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<sup>th</sup>, 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 <a href="https://www.com.edu/student-services/docs/Student\_Handbook\_2023-2024\_v2.pdf">https://www.com.edu/student-services/docs/Student\_Handbook\_2023-2024\_v2.pdf</a>. 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<sup>st</sup> 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<sup>nd</sup> 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 <a href="https://www.com.edu/community-resource-center/">https://www.com.edu/community-resource-center/</a>. 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 <a href="mainland-dean-feet