

# Syllabus Math 1314.242CL – Fall 2021 College Algebra T/TR 6:00-7:20pm, 7:30-9:20pm

**Instructor Information:** Danielle Smith

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(409) 933 - 8244

**Student Hours and location:** T/TH 5:30-6:00 Steam 105

**Required Textbook:** College Algebra, 5th edition by Beecher, Penna, Bittinger, from Pearson. We will be using MyMathLab for all assignments and some assessments, so you will need an access code. The access code can be purchased with the book, or separately. The course ID number for this course is

**Course Description:** College Algebra is an in-depth study and applications of polynomial, rational, exponential, and logarithmic functions, and system of equations using matrices.

## **Course requirements**

**HW:** There will be a homework assignment for each section we cover in class to be done online using MyMathLab.

**Quizzes/Exams:** There are four quizzes to be done online using MyMathlab. You can retake each quiz just once to improve your score; the higher score will be the one that counts. There will also be regular in-class quizzes. In-class quizzes cannot be made-up or retaken. There will be four chapter-exams and a comprehensive final. These will be done in class. **There are no retakes on any of the exams.** 

All due dates are on the course outline.

**Determination of Course Grade/Detailed Grading Formula:** The course grade will be determined by the following formula:

10% HWAverage + 10% Quiz Average + 64% Exam Average + 16% Final Exam = Final Average

# 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)

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

Late homework can be submitted, but there is a 20% grade penalty on late assignments. Quizzes and Tests must be taken on days scheduled unless you notify me in advance of any issues. There is no extra credit.

**Attendance Policy:** Attendance and participation is required.

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 also be sending out information to your COM email address, please be sure to check it regularly.

| Student Learner Outcome  | Maps to Core Objective                  | Assessed via this<br>Assignment |
|--|---|---------------------------------|
| 1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions and inverses | Critical Thinking Skills (CT)           | Exam 1                          |
| 2. Recognize and apply polynomial, rational, exponential and logarithmic functions and solve related equations.                  | Critical Thinking Skills (CT)           | Exam 2, 3                       |
| 3. Apply Graphing Techniques   | Visual Communication Skills (CS)        | Exam 2, 3                       |
| 4. Evaluate all roots (zeros) of higher degree polynomials and rational functions.   | Critical Thinking Skills (CT)           | Exam 2                          |
| 5. Recognize, solve and apply systems of linear equations using matrices.  | Empirical and Quantitative Skills (EQS) | Exam 4                          |

Only Communication Skills will be assessed this semester.

**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 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 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 Leslie Richardson, Mathematics Dept. Chair at <a href="mailto:lrichardson@com.edu">lrichardson@com.edu</a>.

### **Course outline:**

| $\mathbf{W}\mathbf{k}$ | Date           | Topic  | Section |
|------------------------|----------------|--|---------|
| 6                      | Sep. 27-Oct. 1 | Introduction to Graphing                             | 1.1     |
|                        | -              | Functions and Graphs                                 | 1.2     |
|                        |                | Linear Equations, Functions, Zeros, and Applications | 1.5     |
|                        |                | (HW 1.1 – 1.5 due 10/5)                              |         |
| 7                      | Oct. 4-8       | Quiz 1: 1.1-1.5                                      |         |
|                        |                | Increasing, Decreasing and Piecewise Functions       | 2.1     |
|                        |                | The Algebra of Functions                             | 2.2     |
|                        |                | The Composition of Functions                         | 2.3     |
|                        |                | Transformations                                      | 2.5     |
|                        |                | (HW 2.1- 2.5 due 10/12)                              |         |

| 8  | Oct. 11-15     | Review for Exam 1  Exam 1 Ch. 1, 2 (10/12)  |                   |
|----|----------------|---|-------------------|
|    |                | Quadratic Equations: Functions, Zeros, and Models Analyzing Graphs of Quadratic Functions   | 3.2<br>3.3        |
| 9  | Oct. 18-22     | Polynomial Functions and Models Graphing Polynomial Functions Polynomial Division: The Remainder Theorem and  | 4.1<br>4.2        |
|    |                | the Factor Theorem Rational Functions (HW 3.2-4.5 due 10/26)  | 4.3<br>4.5        |
| 10 | Oct. 25-29     | Quiz 2: 3.2, 4.3, 4.5 Review for Exam 2 Exam 2 Ch. 3, 4 (10/26) Inverse Functions Exponential Functions and Graphs Logarithmic Functions and Graphs (HW 5.1-5.3 due 11/2) | 5.1<br>5.2<br>5.3 |
| 11 | Nov. 1-5       | Quiz 3: 5.1-5.3 Properties of Logarithmic Functions Solving Exponential Equations and Logarithmic Equations Applications and Models (HW 5.4-5.6 due 11/9)                 | 5.4<br>5.5<br>5.6 |
| 12 | Nov. 8-12      | Review for Exam 3  Exam 3 Ch. 5 (11/9)  Matrices and Systems of Equations  Systems of Equations in Three Variables  Matrix Operations  (HW 6.2-6.4 due 11/16)             | 6.3<br>6.2<br>6.4 |
| 13 | Nov. 15-19     | Quiz 4: 6.2 – 6.4 Geometry: Lines and Angles Geometry: Quadrilaterals Geometry: Triangles   |                   |
| 14 | Nov. 22-26     | Geometry: Prisms, Cylinders, Cones, and Spheres<br>Right Triangle Trigonometry<br>(HW due 11/21)  |                   |
| 15 | Nov. 29-Dec. 3 | Review Exam 4  Exam 4 Ch. 6 + Geometry and Trigonometry (12/2)  Review for Final Exam   |                   |
| 16 | Dec. 6-10      | Review for Final Exam Final Exam (12/9)   |                   |

### **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>. 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 1<sup>st</sup> 8-week session is October 6. The last date to withdraw from the 16-week session is November 19. The last date to withdraw for the 2<sup>nd</sup> 8-week session is December 2.

 $\mathbf{F}_N$  **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 vaccinated to protect against COVID-19. Please visit com.edu/coronavirus for future updates.