College of the Mainland.

## Math 0315.141CL <br> Foundations of Algebra

 Fall 2022TTH STEAM Building, Room 107, 9:30-10:50 AM
Instructor Information: Sandra Coleman, scoleman11@com.edu, (409) 933-8211
Student hours and location: MW 2:00-4:30 PM, STEAM 325-09, and T 2:30-5:00 PM, in TEAMS, or by appointment

Required Textbook/Materials: Intermediate Algebra, $8^{\text {th }}$ edition, by Tobey, Slater, Blair and Crawford by Pearson

Course Description: This course is designed to develop skills and understanding in the following areas: basic algebra concepts to include exponents, factoring and radicals; relations and functions, inequalities, algebraic expressions, and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Prerequisites/co-requisites: Prerequisite of TSIA2 Math Diagnostic 4.
This course does not transfer.

## Course requirements:

Homework Assignments:
Homework for each section will be completed online using MyMathLab.

## Quizzes and Exams:

Four online quizzes will be completed in 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 four unit exams and a comprehensive final. No retakes are permitted.

Required Technology:

- MyMathLab software is required for this class.
- A calculator is also required.
- Access to the internet is necessary to complete online homework, quizzes, and test reviews.

Determination of Course Grade: The course will be determined by the following formula:

$$
\begin{aligned}
\text { Final Average }= & 60 \% \text { Chapter Exam Average }+20 \% \text { Final Exam }+ \\
& 10 \% \text { Homework Average }+\mathbf{1 0 \%} \text { Quiz Average }
\end{aligned}
$$

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 Policy: Your final exam grade will replace your lowest test grade. If you neglect to take a test by its due date, this grade will be the one replaced unless you have prior instructor approval to makeup this test at an alternate time. The late penalty for past due assignments is $20 \%$ of your grade. Occasionally, extra credit points will be offered to the entire class; however, individually, extra credit assignments will not be available.

Attendance Policy: Students at COM are expected to participate every week for which they are registered. Per COM policy, students are required to $\log$ on to their course at least twice per week, but it may be necessary to log on more times each week to complete the assignments required of this course. When students are not actively participating (e.g., contributing to discussions and completing weekly online homework), the faculty member can initiate an instructor drop and, subsequently, the student will receive a $\mathbf{W}$ for the course.

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.

Student Learner Outcomes: Upon successful completion of MATH 0315, 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 and linear inequalities.
5. Model, interpret and justify mathematical ideas and concepts using multiple representations.
6. Model, interpret and justify mathematical ideas and concepts sing multiple representations.
7. Connect and use multiple strands of mathematics in situations and problems, as well as to the study of other disciplines.

Academic Dishonesty: Any incident of academic dishonesty will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty - such as cheating on exams is an extremely serious offense and will result in a grade of zero on that exam and the student will be referred to the Office of Student Conduct for the appropriate disciplinary action.

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 Mr. Leslie Richardson, Chair of the Math Department, at 409-933-8329 or lrichardson@com.edu.

Course outline:

| Week | Dates | Topics | Sections | Due |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Aug. 22-28 | Orientation Operations with Variables and Grouping Symbols Evaluating Variable Expressions and Formulas First Degree Equations with One Unknown Solving Word Problems | $\begin{aligned} & 1.5 \\ & 1.6 \\ & 2.1 \\ & 2.4 \end{aligned}$ | Aug. 28 |
| 2 | Aug. 29-Sept. 4 | Linear Inequalities <br> Absolute Value Equations <br> Quiz A: Sections 1.5, 1.6, 2.1, 2.3, \& 2.4 <br> Absolute Value Inequalities <br> Review for Test 1 | $\begin{aligned} & 2.6 \\ & 2.3 \\ & 2.8 \end{aligned}$ | Sept. 4 |
| 3 | Sept. 5-Sept 11 | Test 1 (Sections 1.5, 1.6, 2.1, 2.3, 2.4, 2.6, \& 2.8) <br> Graphing Linear Equations <br> Slope of a Line <br> Equations of a Line <br> Quiz B: Sections 3.1-3.3 <br> Systems of Linear Equations | $\begin{aligned} & 3.1 \\ & 3.2 \\ & 3.3 \\ & 4.1 \\ & \hline \end{aligned}$ | Sept. 6 <br> Sept. 11 |
| 4 | Sept. 12-18 | Rules of Exponents (exclude scientific notation) Polynomials: Adding, Subtracting, Multiplying, Dividing <br> Synthetic Division <br> Quiz C: Section 1.4, 5.1, \& 5.3 <br> Applications of Systems of Equations Review for Test 2 | $\begin{aligned} & 1.4 \\ & 5.1 \\ & 5.3 \\ & 4.3 \end{aligned}$ | Sept. 18 |
| 5 | Sept. 19-25 | Test 2 (Sections 3.1-3.3, 4.1, \& 4.3) <br> GCF, Factor by Grouping <br> Factoring Trinomials <br> Special Case Factoring <br> Mixed Factoring <br> Solving Equations by Factoring <br> Review for Test 3 | $\begin{gathered} 5.4 \\ 5.5 \\ 5.6 \\ 5.7 \text { Online } \\ 5.8 \end{gathered}$ | Sept. 20 <br> Sept. 25 |
| 6 | Sept. 26-Oct. 2 | Test 3 (Sections 1.4, 5.1, and 5.3-5.8) <br> Rational Expressions, Simplifying, Multiplication, Division <br> Addition, Subtraction Rational Expressions Graphing Functions | $\begin{aligned} & 6.1 \\ & 6.2 \\ & 3.6 \\ & \hline \end{aligned}$ | Sept. 27 <br> Oct. 2 |
| 7 | Oct. 3-9 | Radical Expressions and Functions (square root only) | 7.2 | Oct. 9 |
| 8 | Oct. 10-16 | Simplifying, Adding, and Subtracting Radicals Multiplying and Dividing Radicals | $\begin{aligned} & 7.3 \\ & 7.4 \end{aligned}$ | Oct. 16 |
| 9 | Oct. 17-23 | Quiz D (Sections 7.2-7.4) <br> Complex Numbers (exclude division) | 7.6 | Oct. 23 |
| 10 | Oct. 24-30 | Review for Test 4 |  | Oct. 30 |
| 11 | Oct. 31-Nov. 6 | Test 4 (Sections 6.1, 6.2, 3.6, 7.2, 7.3, 7.4, \& 7.6) |  | Nov. 3 |
| 13 | Nov. 7-13 | Review for Final Exam |  | Nov. 13 |
| 14 | Nov. 13-20 | Final Exam (comprehensive) |  | Nov. 17 |

## 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://build.com.edu/uploads/sitecontent/files/student-services/Student Handbook 2019-2020v5.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. https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

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 Michelle Brezina at 409-933-8124 or mvaldes1@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 5 . The last date to withdraw from the 16 -week session is November 18 . The last date to withdraw for the $2^{\text {nd }} 8$-week session is December 1.
$\mathrm{F}_{\mathrm{N}}$ Grading: The $\mathrm{F}_{\mathrm{N}}$ grade is issued in cases of failure due to a lack of attendance, as determined by the instructor. The $\mathrm{F}_{\mathrm{N}}$ 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 $\mathrm{F}_{\mathrm{N}}$ grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an $\mathrm{F}_{\mathrm{N}}$ 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.

## 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.

