CCBC
Spring 2024
School of Mathematics and Science
Mathematics Department
Pre-Algebra, MATH 081, Section EUA, Course Reference Number (CRN) 22362

Table of Contents

Senate Policy #20-12 approved: June 2, 2020; Editorial Changes: February 27, 2023

A. Course Description and Pre-/Co-requisites

Description: MATH 081 – Pre-Algebra begins with a review of integers and rational numbers and then proceeds to the study of algebraic expressions, first degree equations and inequalities in one variable, formulas, proportions, and percent. Another major focus is linear equations, which covers graphing points, determining slope, writing linear equations, and graphing lines. Successful participation in and completion of this course requires that student skills be at the secondary level.

Prerequisite: ASE MATH or a satisfactory score on the mathematics placement test.
Co-requisite: ACLT 052 or ESOL 044

B. Basic Course Information

1. Instructor's name: Anthony Calise
2. Instructor's office room number: BESS Hall 327
   Phone number: 410-307-9595
   Email address: acalise@ccbcmd.edu
3. Instructor's office hours: T/Th 6:20 – 7:20 in BESS Hall 327
4. Response time and form of preferred communication: All e-mails and messages should be responded to within a 24 hour time frame.
5. Department or school phone number(s): Essex 443-840-2662
6. Class meeting day(s), time(s), and location(s):
   Instruction is offered on-campus during the scheduled days and times indicated below. A physical presence on-campus is required.
   T/Th 7:20 – 8:45
7. Statement of student out-of-class work expectations: This is a three-credit/billable hour course offered over 14 weeks. You are expected to spend at least 6 hours of work per week outside of class time including reading, course preparation, homework, studying, etc.
8. Testing center/remote proctoring requirements: You must have proper accommodations and give the instructor at least one week notice.
9. Materials:

Textbook: Students can access the MATH 081 Pre-Algebra Textbook, Fall 2017 Edition online for free through Brightspace or through CCBC's website. A printed copy of the textbook can be purchased from CCBC's bookstore.

Calculator: Calculator use in this course is permitted during class and assessments, but not required. Basic, scientific, and graphing calculators are suitable. Calculators with advanced capabilities, such as the TI-89 or TI-92, are not permitted during examinations. Cell-phone calculators, or other devices with internet capabilities, are also prohibited. When completing assessments, all algebraic steps must be shown to receive full credit.

10. Technical Requirements:

To learn on-site at CCBC, you will need:

- Regular access to a reliable computer desktop, laptop, netbook, etc.
- A stable broadband Internet connection.
- A general understanding of the Brightspace learning management system.

For the full list of technical requirements, check CCBC's Online Learning Technical Requirements.

Students must notify the instructor immediately if any technical difficulties occur at any time during the semester AND should also have a plan in place for backup arrangements in such instances.

11. Other material related to Basic Course Information: Basic Calculator

C. Course Goals Overall

1. Course objectives as listed on the official Common Course Outline

Upon completion of this course the student will be able to:

a. perform arithmetic operations on rational numbers;
b. evaluate the absolute value of rational numbers;
c. evaluate rational numbers with exponents;
d. evaluate roots of perfect squares, cubes, and fourths;
e. simplify arithmetic expressions using order of operations;
f. evaluate algebraic expressions;

g. simplify algebraic expressions;
h. solve first degree equations in one variable;
i. solve first degree inequalities in one variable;
j. graph first degree inequalities in one variable on a number line;
k. evaluate and solve formulas;
l. solve proportions;
m. solve percent problems;
n. plot points on the coordinate plane and write ordered pairs for plotted points;
o. determine if an ordered pair is a solution of a linear equation;
p. determine the x and y intercepts of a line;
q. interpret and calculate slopes of lines;
r. determine equations of lines;
s. graph linear equations;
t. solve systems of linear equations by graphing; and
u. solve application problems by translating English sentences into algebraic equations and solving them.

2. Major topics as listed on the official Common Course Outline
    a. Real Numbers
        1) Operations with Integers
        2) Operations with Rational Numbers
        3) Absolute Value
        4) Numbers in Exponential Form
        5) Roots of Perfect Squares, Cubes, and Fourth Roots
        6) Order of Operations
    b. Algebraic Expressions
        1) Variables
        2) Evaluating Algebraic Expressions
        3) Simplifying Algebraic Expressions
        4) Translating English Phrases to Algebraic Expressions
    c. First Degree Equations in One Variable
        1) Solving One and Two Step Equations

2) Solving Multi-Step Equations
3) Solving Equations with Rational Numbers
4) Application Word Problems

d. First Degree Inequalities in One Variable
1) Solving Inequalities
2) Graphing Inequalities
3) Interval Notation
4) Application Word Problems

e. Applications of Equations
1) Evaluating and Solving Formulas
2) Proportion Problems
3) Percent Problems

f. Linear Equations
1) Points on the Rectangular Coordinate System
2) Intercepts of a Line
3) Slope of a Line
4) Equation of a Line
5) Graph of a Line
6) Solving Systems by Graphing
7) Application Problems

3. Rationale: Mathematics is the foundation of science and technology. Everyone needs mathematics in order to function in society and the world of work, therefore, this course is designed to reflect the understanding that mathematical literacy is important for all students to possess and apply. The curriculum, based on the National Council of Teachers of Mathematics Standards and the National Common Core Mathematics Curriculum as adopted by the Maryland State Department of Education, will allow our students to explore, discover, analyze and apply mathematics. Students will learn from a variety of teaching techniques and strategies which utilize all modes of learning, involving various resources, hands-on activities, and the use of computer technology and calculators. Upon completion of this course, students will be better prepared to function in a global society through

the use of problem solving, communication, and reasoning by integrating the mathematical concepts across the curriculum areas in real-world situations.

4. Other material related to Course Goals: Instructors website: www.mrcalise.com

D. Academic Integrity

1. Academic integrity is a core institutional value at CCBC. Students, faculty, administrators, and staff have the right to a learning environment where academic integrity is valued, respected, and upheld. For CCBC's complete policy regarding student academic integrity, go to the CCBC's College Catalog: Student Code of Conduct: Standards of Classroom Behavior/Academic Integrity. Violation of this policy will result in sanctions according to the Student Code of Conduct.
2. The commercial use of academic material is prohibited under the College's Academic Integrity Policy. This includes, but is not limited to, selling of course material to another person, entity, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the college and/or instructor. Course materials include but are not limited to class notes, instructional slides, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, videos, etc.

E. Netiquette Policy

CCBC Netiquette Statement:

The rules of etiquette that apply when communicating online are different from those that apply when communicating in person. Netiquette rules have emerged to facilitate online interactions in the absence of visual and auditory cues (Marx, 2004). CCBC's Netiquette Statement is grounded on the principles of mutual respect, professionalism, ethics, courtesy, and kindness.

CCBC's Netiquette Statement applies to all individuals who work or learn at CCBC. CCBC's Netiquette Statement also applies to all virtual communication methods including, but not limited to, synchronous lectures, discussion board posts, written

assessments, recorded presentations, artistic representations, social media, and emails.

F. Evaluation

1. Requirements:
   Homework/Quiz Grades: Several Assignments will be given and the top 5 scores will be counted.

   Three In Class Unit Exams, all of which MUST BE COMPLETED!

   Cumulative Final Exam on May 16th 2024
2. Instructor's grading policy: The course grade will be determined as follows:

Course Requirements	**Weight/Points**
Homework/Quizzes	20%
Exams	50%
Final Exam	30 %
Total	100 %

A final course grade will be assigned using the following criteria:

Course Average	**Course Grade**
At least 90%	A
At least 80% and less than 90%	B
At least 70% and less than 80%	C
Less than 70%	F

3. Active Engagement and Attendance Policies:
   Mathematics Department Active Engagement and Attendance Policy:
   a. Active engagement and attendance are critical to student success in college.

b. You are expected to attend all scheduled classes, arriving on time, and remaining until excused by your instructor.
c. You are expected to fully participate in all in-class learning activities as required by your instructor.
d. You are expected to regularly log into Brightspace and other course-related electronic learning platforms, if applicable.
e. You are expected to complete all assignments and/or assessments in the timeframe required by your instructor.
f. You are expected to check for communication from your instructor in Brightspace (Announcements, Messages, Discussion Board posts, etc.) and through your CCBC student email.
g. If you are unable to attend class or participate in course activities, communicate with your instructor immediately. You may be required to provide documentation of the reason for your absence(s).

4. Mathematics Department audit policy: Students may change from credit to audit only during the published 50% refund period, as indicated in the CCBC academic calendar. Students who audit are required to attend class, participate in course activities, and complete assignments (except for tests and the final exam) in accordance with instructor guidelines and due dates. For students who do not meet these requirements, the instructor may change their grade from AU to W.
5. Other material related to Evaluation:

G. Course Procedures

1. Course-related policies and procedures:
   All information can be found on my website www.mrcalise.com
2. College-wide syllabus policies: For college-wide syllabus policies, such as the Student Code of Conduct, Academic Integrity, Grades and Grading (including FX and Audit), Progress Grades, and the Withdrawal and Tuition Refund policies, please select **Syllabus Policies** from the navigation menu on the myCCBC page.

3. College-wide student services: To access information about student services, such as Academic Advising, College and Community Outreach/Success Navigators, and Student Accessibility Services, students may refer to the Student Support Services link on the CCBC catalog home page. Once on the page, select the appropriate catalog academic year at the top if necessary.
4. Contact information for course-related concerns:
   Students should first attempt to take concerns to the faculty member. If students are unable to resolve course-related concerns with the instructor, they should contact
   Choose the campus coordinator from the drop down list.
5. Course calendar/schedule: See item F.2. above (Evaluation – Instructor's Grading Policy) for location of due dates for all major assignments.
   Refer to the CCBC website for the complete Academic Calendar and Final Exam schedule for the semester.
6. Expected end date for access to the course via the Learning Management System: 5/17/24
7. Final Exam: The Final Exam date/time for this course is 5/16/24
8. Other material related to Course Procedures: Not Applicable
   Students are encouraged to seek help from their instructor whenever they encounter academic difficulty. At mid-semester, the instructor will review your progress. If you are struggling at any time, contact the instructor.
   Free tutoring and academic coaching is available.
   Student Accessibility Services provides support and programming for qualified students with documented disabilities.
   Success Navigators serve as the first stop for students in need of human services assistance such as housing information, food insecurity, and clinical counseling.

This syllabus may be changed with notification to the class.

List of Full URLs used in this document:

MATH 081 Pre-Algebra Textbook, Fall 2017 Edition
https://www.ccbcmd.edu/Programs-and-Courses/Schools-and-Academic-Departments/School-of-Mathematics-and-Science/Mathematics/MATH-081-Textbook.aspx

CCBC Online Learning Technical Requirements
http://www.ccbcmd.edu/Programs-and-Courses/CCBC-Online/Online-Services-Resources/Online-Learning-Technical-Requirements.aspx

College Catalog: Student Code of Conduct: Standards of Classroom Behavior/Academic Integrity
https://catalog.ccbcmd.edu/content.php?catoid=39&navoid=3443#behavior

CCBC's Netiquette Statement
https://catalog.ccbcmd.edu/content.php?catoid=45&navoid=13700#netiquette

myCCBC page
https://myccbc.ccbcmd.edu/CCBC/mySyllabi-Policies

CCBC Catalog
http://catalog.ccbcmd.edu/index.php

CCBC Academic Calendar and Final Exam Schedule
http://www.ccbcmd.edu/Resources-for-Students/Registering-for-Classes/Academic-Calendar.aspx

Tutoring and Academic Coaching
http://www.ccbcmd.edu/Resources-for-Students/Tutoring-and-Academic-Coaching.aspx

Student Accessibility Services
http://www.ccbcmd.edu/Resources-for-Students/Disability-Programs-and-Services.aspx

Success Navigators
https://www.ccbcmd.edu/About-CCBC/Administrative-Offices/Enrollment-and-Student-Services/College-Life/College-and-Community-Outreach-Services.aspx