

MA103 COLLEGE ALGEBRA (DUAL CREDIT)

Fall 2018

Instructor: Dr. Andrew McCrady

Time: MWF 10:00 - 10:50

Email: amccrady@centralmethodist.edu

CMU Mission Statement: Central Methodist University prepares students to make a difference in the world by emphasizing academic and professional excellence, ethical leadership, and social responsibility.

Course Description: A study of equations and inequalities, functions and graphs, and systems of equations and inequalities. Prerequisite: ACT Math subscore of 22 or greater.

Course Objectives: Students will be able to simplify and solve linear, polynomial, and exponential equations as well as model applications from a problem solving perspective. Students will develop critical thinking and mathematical reasoning skills.

Materials:

- This course uses MyOpenMath, a FREE learning platform. All students must create a username and password on <https://www.myopenmath.com>.
- This course uses the textbook *College Algebra Essentials* by Robert Blitzer.
- Students may use any calculator EXCEPT for phones/tablets/computers. In particular, graphing calculators (such as the TI84) are allowed. Extra calculators will NOT be provided during quizzes or exams.

Measurable Learning Outcomes:

1. Use algebra to combine and compose functions, find and verify inverse functions, and relate functions to their graphs.
2. Use transformations of functions to build equations and graphs.
3. Solve linear equations and inequalities.
4. Use linear functions to model real-world phenomena and solve applied problems.
5. Solve quadratic and polynomial equations and inequalities.
6. Use quadratic and polynomial functions to model real-world phenomena and solve applied problems.
7. Solve radical equations.
8. Use radical and power functions to model real-world phenomena and solve applied problems.
9. Solve exponential and logarithmic equations.
10. Use exponential and logarithmic functions to model real-world phenomena and solve applied problems.
11. Find zeros, asymptotes, and domain of rational functions and use these to solve rational inequalities.
12. Use systems of equations to model and solve applied problems.

Common Core Competencies: Math Literacy 6-7. Students will demonstrate mathematical reasoning by applying appropriate methods and procedures.

Course Policies and Information:

- **Students with Disabilities**-please refer to the “students with disabilities policy at <http://www.centralmethodist.edu/academics/learning-teaching/disability-accommodations.php>. A particularly important excerpt is the following:
“Central Methodist University does not discriminate on the basis of race, color, religion, sex, national origin, age, or federally defined disability/state defined handicap (“disability”). This includes but is not limited to recruitment and admission of students, educational programs, services, activities, financial aid, and scholarship programs. The University complies with all federal and state non-discrimination requirements.”
Additional help can be obtained from the Center for Learning and Teaching. It is the responsibility of the student to take the initiative in obtaining accommodations.
- **Email**- students are responsible for any course information, assignments, course updates, or information sent by the instructor or the University to a student’s email of record.
- **Course Schedule**- This can be found at the end of this syllabus, and any subsequent changes on myCMU. Please note that the instructor reserves the right to alter this schedule in order to respond to special circumstances and/or better meet the need of the students.
- **Academic Conduct**- Honesty and integrity are expected at all times. All students are expected to do their own work. Quizzes and exams must be taken without the use of any unauthorized resources or help from others. Any student found to have committed academic misconduct may suffer any or all of the following consequences: 1) score of zero for the work in question; 2) an “F” for the class; 3) Notification sent to the appropriate university officials. Furthermore, said student will come under the auspices of the CMU Academic Conduct Policy <http://www.centralmethodist.edu/academics/catalog/clas-catalog/policies/recognitions-sanctions.php>. It is the responsibility of CMU students to familiarize themselves with the policies of the university.
- **Attendance Policy**- When a student misses class, he/she should (1) look at the course schedule to see what was missed, and (2) read the assigned sections in the book and see the class notes in MyOpenMath. There are **NO** make-up quizzes. See the quiz policies on the next page for more details. Make-up exams may be given at the instructor’s discretion. See the exam policies on the next page for more details.
- **Civility Policy**- All students must behave in a manner appropriate to the learning environment. Students are expected to attend class, complete assignments on time, be respectful, act with integrity, participate in class exercises, and follow all policies. In particular,
 - Everyone in the classroom must be treated with respect. Rude, disrespectful, distracting, and/or disruptive comments and/or behavior are unacceptable. Examples of such unacceptable behavior are excessive chit-chatting, sleeping, disturbing another student or engaging in behaviors deemed disruptive by the instructor. Offending students will be asked to leave the class, treated as absent for the class, and may be dropped from the course if the behavior is repeated.
 - Cell phones must be put away during class time. Students using cell phones in class may be asked to leave and treated as absent for the class.

Grades and Assessments: The grading scale for the course is standard.

- A– 90-100%
- B– 80-89%
- C– 70-79%
- D– 60-69%
- F– 0-59%

A student's overall grade is calculated using the following weighted categories:

HW Avg.	20%
Quiz Avg.	15%
Midterm Exams 1, 2, 3	15% each
Final Exam	20%

- **Homework:** Most homework assignments are online and completed in MyOpenMath. Each homework assignment is worth the same weight, regardless of differences in number of questions per assignment. There are **NO homework extensions**, all homework due dates are firm. To account for **ANY** reason a student cannot complete a homework assignment (sickness, death in the family, technology trouble, etc.), the lowest three homework scores are dropped.
- **Quizzes:** Quizzes will be taken during class. Each quiz is worth the same weight, regardless of differences in the number of questions per quiz. Questions will be similar to examples covered in the previous lecture, unless otherwise stated by the instructor. There are **NO** make-up quizzes. To account for **ANY** reason a student misses a quiz (sickness, death in the family, technology trouble, etc.), the lowest two quiz scores are dropped.
- **Midterm Exams:** There are three midterm exams, see the calendar for dates. These exams are during regular class time. The midterm exams have a free response format so that students may earn partial credit. In the rare case that a student should miss an exam due to an emergency, a make-up exam may be given at the instructor's discretion. The student must provide appropriate documentation for missing an exam.
- **Final Exam:** The final exam is **comprehensive**. The format is also free response so that students may earn partial credit.

Dual Credit MA103 F18 Tentative Schedule	
Week 1 8/20-8/24	1.1, 1.2, 1.3
Week 2 8/27-8/31	1.4, 1.5
Week 3 9/3-9/7	CMU off 9/3 Finish 1.5, 1.6
Week 4 9/10-9/14	1.7, Review, Exam 1
Week 5 9/17-9/21	2.1, 2.2, 2.3
Week 6 9/24-9/28	2.4, 2.5
Week 7 10/1-10/5	2.6, 2.7, 2.8
Week 8 10/8-10/12	3.1, Review, Exam 2
Week 9 10/15-10/19	CMU off 10/15 3.2
Week 10 10/22-10/26	3.3, 3.4, 3.5
Week 11 10/29-11/2	3.5 continued, 3.6, 3.7
Week 12 11/5-11/9	3.7 continued, 4.1, 4.2
Week 13 11/12-11/16	4.2 continued, Review, Exam 3
Week 14 11/19-11/23	CMU Thanksgiving Break
Week 15 11/26-11/30	4.3, 4.4, 4.5
Week 16 12/3-12/7	5.1, 5.2, Review