

College Algebra (MA103 for 3 credit hours)

Fall 2017 - Spring 2018

Cameron High School ~ 2nd, 5th, and 7th Period

Instructor: Mrs. Greene - Room 206 - (816) 882-1036 Ext 1083
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Website: <https://chsdragonmath.weebly.com>
Plan: 6th Period 1:21 – 2:08, Gold Day Block 1:33 - 3:00

Course Description: MA103 is a study of equations and inequalities, functions and graphs, and systems of equations and inequalities. MA103 is a 3 credit hour class.

Course Objective: Students will be able to simplify and solve linear, polynomial, and exponential equations, and develop the skills to develop and use mathematical models. Students will also acquire an appreciation of how these concepts and models are applied in real-world situations.

Mission: Central Methodist University prepares students to make a difference in the world by emphasizing academic and professional excellence, ethical leadership, and social responsibility. (The student is reminded that they are in a collegiate setting with all the privileges and responsibilities there in.)

Prerequisite: In order to participate in the dual credit option, the student must be a junior or senior, have an appropriate test score, and have a cumulative 3.0 GPA. An appropriate test score is classified as an ACT-math sub score of at least a 20 or instructor approval.

Dual Credit: College Algebra is offered with dual credit through Central Methodist University. *Central Methodist University's mission is to prepare students to make a difference in the world by emphasizing academic and professional excellence, ethical leadership and social responsibility.* Dual credit is offered as a 3-credit hour dual credit course called *MA103 College Algebra*.

Cost: Cameron High School provides the textbook at no charge to the student. The total cost is \$240 for the 3 credit hour class. Dual credit applications will be available the first day of class. The application and payment is due to the instructor by the school's deadline. The student and parent must sign a promissory note to pay the balance in full to Cameron High School. If the student wishes to withdraw from the dual credit option, a partial refund is available up thru November 1st.

Core Competency: MA103 is designed to enable students to demonstrate mathematical reasoning by applying appropriate methods and procedures to problem solving and meets the Math Literacy Core Competencies.

Measurable Learning Outcomes: By the end of the course, students should be able to

- Simplify and solve linear equations and inequalities,
- Graph linear equations and functions,
- Solve systems of linear equations,
- Apply properties of exponents to simplify polynomial functions,
- Factor polynomials,
- Simplify rational expressions,
- Solve radical equations and simplify radicals,
- Solve quadratic equations using a variety of strategies,
- Graph quadratic and higher degree polynomial functions,
- Solve exponential equations using logarithms, and
- Create and solve models for problems in all areas above.

Class Resources and Recommended Materials: HAVE YOUR SUPPLIES WITH YOU DAILY!

- *College Algebra* (5th Ed.) by Blitzer (2010), Pearson, ISBN: 978-0-321-55983-8
- Pencil (*All work needs to be completed in pencil.*)
- College Algebra notebook (for notes)
- Notebook paper *or* spiral notebook (for assignments)
- Scientific Calculator (TI-30XS Two Line Input available at Walmart for under \$15)

Expectations: This course will be treated like a college course and students will be expected to show initiative and responsibility in being independent learners. It is to the benefit of the student to be present for all classes and to turn in work on time. Students are expected to bring all necessary materials to class, to be in their assigned seats when the bell rings. Cell phones, iPods, MP3 players, and other electronic devices (besides calculators) are to be silent, and in cell phone holder.

Consequences:

1st Offense: Teacher warning and documentation

2nd Offense: Student will serve after school detention the next day or when stated by the teacher.

3rd Offense: Discipline Referral Form to office

Additional or Severe Offenses: See Student Planner

I reserve the right to advance through the above steps more quickly in the event of repeated and/or severe offenses. Severe offenses result in immediate administrator involvement.

Attendance, Absences, and Makeup Work: Attendance will be taken daily, and you are expected to attend class regularly and establish adequate study patterns. CMU reserves the right to drop a student's dual credit for excessive absences. **Make up work is the student's responsibility; the instructor will not remind the student of what was missed. For known absences, get the work ahead of time!** The easiest way to see what was missed or to request make-up work is to visit the website. ***Class time is not the place to ask for make-up work:*** please visit before school, after school, or Dragon Time. Because new concepts and methods are introduced each week, class attendance is very important. Refer to CMU's attendance policy that is found in the First Class Handbook.

General Assignment Policies:

- All quizzes and exams must be completed on or before the date scheduled. ***Once a student begins a quiz or test they must finish the exam in the same sitting.***
- If a student misses a class date on which an exam will be given, the student may make arrangements to take the exam in advance. In rare cases, and at the instructor's discretion, make up exams may be given should a genuine emergency or illness occur.
- Not all assignments will be taken for a grade.
- Keeping a well-organized notebook is a key element for developing growth and understanding in mathematical concepts. Notebooks should contain the following:
 - Instructor-led examples presented in each class,
 - Problem sets for each assignment that are detailed and organized to demonstrate processes used to solve the problem. Problem sets must be complete according to the calendar given with this syllabus.
 - Common errors and alternative solutions from other students.
 - Individual test problems with the correct solution.

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| Course Grades: | Assignments | 10% |
| | Quizzes | 25% |
| | Exams | 50% |
| | Midterm & Final Exam | 15% |

Grading Policy: The school district's policy will be used to determine all final grades recorded on the student's high school transcript:

A: 95-100% A-: 90-94% B+: 87-89% B: 83-86% B-: 80-82% C+: 77-79%
 C: 73-76% C-: 70-72% D+: 67-69% D: 63-66% D-: 60-62% F: below 60%.

The grade reported to Central Methodist University for dual credit is based on the following:

A: 90-100% B: 80-89% C: 70-79% D: 60-69% F: below 60%.

Work must be shown on all assignments.

Note: Since this is a dual credit course, everyone is required to take the final exam.

Retake Policy: Exams cannot be redone; students have one attempt to do their best. Retakes of assignments/quiz will be addressed on a case-by-case basis. *Students will only be allowed to retake for extenuating circumstances.*

Late Work: Missing or late assignments will result in a ZAP per building policy (see student planner).

Hints for Success:

1. Please ask specific questions when you don't understand a concept. I encourage you to ask questions during class.
2. Work on problems on a daily basis. Mathematics is a subject that is best learned when it is performed on a regular basis.
3. Ask for assistance whenever needed. I am available every day during **DRAGON TIME**, before school, and most days after school. Check the schedule posted on my door.
4. The lessons in this math class, like most math classes, build on each other; falling behind will make future topics more difficult to understand.
5. If the student begins to have difficulties with this course, please do not hesitate to talk to the instructor. Mrs. Greene is always available by email or Remind 101. Remind 101 is the best way to reach her.
6. The work and effort the students put into understanding the concepts, into the algebraic skills, and into mastery will help them to be successful on quizzes and exams and will serve them well in future courses.

Academic Honesty Policy: Central Methodist College's policy on academic honesty is strictly enforced. While working together for the common cause of learning is encouraged, outright copying of another's work is dealt with severely. A zero will be given for such work. The Academic Honesty policy may be read in detail at http://www.centralmethodist.edu/admissions/_docs/CLASstudenthandbook.pdf Students can learn a great deal by collaborating with others and discussing ideas. It is encouraged for the students to work with their colleagues on practice assignments and to study together to prepare for exams. However, it is expected that everything turned in to the teacher will be personal work. In practice assignments, the students may get an idea for a solution from another student, but the actual solution to the problem should be written independently without referring to another student's work. It is never acceptable to take credit for another person's work or ideas. Cheating is a serious offense and any student caught cheating will be subject to receiving a zero on that particular assignment and a corresponding discipline. Cheating, unauthorized collaborating, plagiarism, etc. will not be tolerated and the student will be punished and may lose his/her dual credit. See the student handbook for Cameron's policies.

Copying is cheating and will NOT be tolerated.