**College Algebra**

MAT 133-04

Fall 2020

MWF 11:00-11:50 a.m.

Plaster 306

**INSTRUCTOR INFORMATION**

**INSTRUCTOR:** Mr. Cody Lawson

**OFFICE LOCATION:** Math-Physics Dept Office, Pfeiffer 205

**OFFICE HOURS:** MWF 12:00 p.m-1:00 p.m. Other availability by appointment.

**CONTACT:** 417-476-3487 (Call/Text/Voicemail), Email: clawson@cofo.edu

**GENERAL EDUCATION LEARNING OBJECTIVES**

**The outcomes of the General Education program (specific to MAT133) are that students will**

1. Understand, recognize the value of, and critically assess the Western liberal-arts and American traditions from a Christian worldview perspective.

 D. Apply math, natural science, and social scientific ideas and theories to concrete situations and questions.

1. Demonstrate essential skills and abilities that mark a person as being well-educated and equip them to live out their vocations in family, church, country, and the global community.

 A. Critical thinking
 C. Quantitative thinking

See the following link for a complete list of the GE Learning Objectives and Outcomes: <http://catalog.cofo.edu/preview_program.php?catoid=11&poid=2298>

**GENERAL EDUCATION FORMATIVE WORK**

Pythagorean Theorem – a part of Euclid’s *Elements*

**COURSE DESCRIPTION**

Topics include graphing functions and relations, conic sections, exponential and logarithmic functions, systems of equations, and matrices.

**PREREQUISITES/ CO-REQUISITES**

MAT 013, Math ACT greater than or equal to 22, or required Compass score.

COURSE OBJECTIVES

Upon Successful Completion of this course, a student shall be able to:

1) Understand that algebra is a field that relates to many areas of life.

2) Begin to feel more comfortable with mathematical concepts and acquire positive feelings toward mathematics.

3) Understand the concepts of analysis, problem solving, and critical thinking, and have the ability to view things in a rational and logical manner.

4) Understand and graph functions.

5) Solve linear, quadratic, exponential, and logarithmic equations.

6) Solve systems of linear and non-linear equations and inequalities.

7) Understand the concepts of inverse functions and their relations to problem solving techniques.

**COURSE FEE**

Rover by OpenStax:   College Algebra Access Code  supplied by C of O through course fee of $22

**TEXTBOOKS AND OTHER MATERIALS**

**TEXTBOOK:** OpenStaxCollege. (2015).  *College Algebra.*OpenStax. [www.openstax.org/details/college-algebra,](http://www.openstax.org/details/college-algebra%2C)

*Hardcover:*

ISBN-10: 1-938168-38-0

ISBN-13: 978-1-938168-38-3

*Paperback:*

ISBN-13: 978-1-50669-822-9

*Digital:*

ISBN-10: 1-947172-12-3

ISBN-13: 978-1-947172-12-8

*Also recommended:* Additional notebook, writing utensil, and scientific calculator

**COURSE REQUIREMENTS (assignment, evaluations, outcomes, etc.)**

**GRADING:** The grade for this course will be determined by

 Homework and other assignments........................20%

 Quizzes/Tests........................................................80%

**HOMEWORK/ADDITIONAL ASSIGMENTS:** Online homework will be assigned and completed using the Openstax Rover software.Students are expected to keep track of the corresponding due dates and times shown. Students should show and keep handwritten work from their online homework organized in a note book. Other additional handwritten assignments or worksheets will occasionally be assigned in class. These assignments will be due at the start of the following class period unless otherwise specified

 Missing ANY assignment because of an unexcused absence or tardy will result in a zero grade on that assignment. See more info regarding makeup work under **ATTENDANCE & COURSE POLICIES.**

**QUIZZES AND TESTS:** There will be written quizzes given during the semester and 4 unit tests. **All work must be shown to receive credit.** Combined, these account for 80% of the overall grade in this class. The breakdown is given below.

 **QUIZZES:** Four or five throughout the semester at 20 points each.

 **UNIT TESTS:** Four unit tests at 100 points each. Exams will be announced at least one week prior to the date administered.

 Your lowest test score will be replaced with your grade on the final if it is higher, **BUT** only if you have

 a homework grade percentage of at least 80%.

**FINAL EXAMINATION:** Thursday, December 17, 2019, 10:30 a.m.-12:30 p.m.The fourth unit test will be given as the final exam and may include material from other units.

**GRADING SCALE**

Letter grades will be assigned using the following scale:

 94.00 - 100% A 90.00 – 93.99 A-

 87.00 – 89.99 B+ 83.00 – 86.99 B

 80.00 – 82.99 B- 77.00 – 79.99 C+

 73.00 – 76.99 C 70.00 – 72.99 C-

 67.00 – 69.99 D+ 63.00 – 66.99 D

 60.00 – 62.99 D- Below 60% F

**ACADEMIC HONESTY**

The College of the Ozarks honor code states, “I agree to be an honest, trustworthy, caring and responsible citizen. I will uphold these values in others and myself.” In compliance with this code, College of the Ozarks expects and demands high standards of intellectual honesty from its students. Those high standards demand that dishonest work be rejected and that those students engaging in such work bear the consequences, which may include zero credit on assignments, failing course grades, and/or expulsion from the College. For more information see <http://catalog.cofo.edu/content.php?catoid=5&navoid=287#Academic_Honesty>.

**HONOR CODE**

I agree to be an honest, trustworthy, caring and responsible citizen. I will uphold these values in others and myself.

**ATTENDANCE & COURSE POLICIES**

**ATTENDANCE: Regular attendance is necessary and expected**. \*Students are responsible for obtaining class notes and assignments for those days they are tardy or not in attendance.\* **Being absent does not excuse students from turning in course work by the required due date/time,** although certain exceptions may be made due to emergencies or illness. As required by the Dean of the College, names of students with frequent absences will be sent to the Dean’s Office. As indicated in the Student Planner, continued absenteeism or substandard work may constitute grounds for dismissal from the College.

**CELL PHONES:** If cell phones are brought to class, they should be turned off or to vibrate and should not be used in any way during class. Cell phones should NOT be out during class, even to use as a calculator, and a cell phone out during a quiz or test will constitute cheating.

**CALCULATOR:** No graphing calculators will be allowed during quizzes or tests. You may use a scientific calculator anytime unless otherwise specified. The math office has calculators you may borrow with student ID if needed.

**TEST/LATE/MAKEUP WORK POLICY:** Late homework will not be accepted, and missed tests or quizzes may not be made up, and will result in a grade of 0%. Exceptions may be made at the discretion of the instructor when an absence/tardy is documented and excused. Even when an absence is excused, effort should be made to submit assignments early or on time either by another student or electronically. A makeup exam or quiz may be more difficult than the original.

**OTHER GUIDELINES:**

* As much as possible, class will begin promptly at 11:00 and finish at 11:50. Please be in your seat with book, calculator, paper, and pencil, and be ready to begin by 11:00 a.m.
* If you know you will have to miss class, you should notify the instructor in advance and as soon as possible.
* Respect others. People will have different levels of knowledge and experience with mathematics in this class. No one who is attempting to learn and grow is dumb. Each person in the class should treat each person in the class with respect and value the input of each person. When the professor or a classmate is asking a question, explaining a problem, or leading any type of discussion, no one else should be talking and everyone should be listening to the person who is talking.
* Homework is important. Please plan to complete each assignment as carefully and completely as possible. Homework exercises will be the primary means of studying and learning the course material. If you do not complete homework assignments, you will probably not perform well on the exams. If you don’t understand something, and need help, that’s okay--just don’t leave it at that. You will likely need aid in completing some assignments and need to do even more problems than assigned to master the material. For this, you may email the instructor and visit during office hours, or visit the Math Assistance Center on campus. Additionally, it is typically easy to find instructional websites and YouTube videos for each topic in this course.
* Your attitude toward the class is critical. Try to stay positive. Try to stay engaged. Try to learn the material. This means listening to lectures, taking notes, working in groups, asking and answering questions, working outside of the classroom, etc. I (Mr. Lawson) will do my best to help each of you learn the material and succeed in the course **as long as you have that same goal!**

**CAVEAT**

Course requirements are subject to modification in the event of extenuating circumstances.