

Instructor: Mr. Karl Wilcox
Room: 1208
Office Phone: (325) 691-1000 ext. 8343

E-mail: karl.wilcox@abileneisd.org
Tutoring times: During Power Hour or by appointment before/after school.

Textbook: *College Algebra*, 12th edition, by Gustafson and Hughes.

Course Content: See the attached Student Learning Outcome and Content sheet at the end of the syllabus for topics that are covered.

Attendance: You are expected to attend all scheduled class meetings, arrive on time, and stay for the entire class period. Class attendance is crucial in this course to keep up with the material. If you are missing a class for a school-sponsored event when there is a scheduled quiz or test it is your responsibility to let me know so that we can arrange a make-up time. Quizzes/Exams missed due to an unexcused absence cannot be made up.

Quizzes: We will have a quiz *almost* every week that we do not have an exam. If you know you will be absent on a quiz day, you need to make plans to take the quiz the day before during Power Hour. Quizzes will be averaged with homework to represent 15% of your overall grade. To receive full credit, work must be shown on quizzes.

Homework: Homework will be assigned 1 – 2 times per week from the textbook. Late homework will not be accepted. Keeping up with homework will help prepare you for the exams. Homework combined with quizzes will represent 15% of your overall grade.

Late Work: **I do not accept late work.** Two homework grades and two quiz grades will be dropped to account for any emergencies or bad days.

Exams: We will have four regular exams and a comprehensive final exam. There will be no make-up or retakes of exams. However, I will replace your lowest exam score with your final exam, if it is a higher score. If you know that you will miss a scheduled exam it is your responsibility to let me know at least 3 days before the exam so we can set up an alternate time for you to complete the exam.

Final Exam: We will have a *comprehensive* Final Exam on:
Thursday, Dec. 12th, 2019 during 3rd period in Room 1310
and Friday, Dec. 13th, 2019 during 3rd period in Room 1310

Grading Scheme:

Homework and Quiz Average	15%
Each Exam (4)	15%
Final Exam	25%

The following table determines how letter grades will be assigned in the course.

90% and above	80% to 89%	70% to 79%	60% to 69%	Less than 60%
A	B	C	D	F

Drop Date: Thursday, October 31st, 2019, is the last day to drop a course with a W or withdraw from the university.

Special Needs: Persons with disabilities which may warrant academic accommodations must contact the Student Affairs Office, Suite 112, Houston Harte University Center, (325) 942-2047, to request such accommodations prior to any accommodations being implemented. You are encouraged to make this request early in the semester so that appropriate arrangements can be made. For more information email studentservices@angelo.edu.

Academic Honor

Code Statement: Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is available on the web at <http://www.angelo.edu/forms/pdf/honorcode5.pdf>.

Class

Expectations: Students are expected to silence and not use cell phones during the class period. Students will be courteous and attentive when both the instructor and other students are offering answers and/or explanations.

Student Absence for Observance of Religious Holy

Day : A student who intends to observe a religious holy day should make that intention known in writing to the instructor one week prior to the absence. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code 11.20.

Mathematics 1314 – College Algebra

Student Learning Outcomes

- 1. Students will demonstrate factual knowledge including the mathematical notation and terminology used in this course.** Students will read, interpret, and use the vocabulary, symbolism, and basic definitions used in college algebra including the real numbers, exponents, radicals, polynomials, factoring, functions, equations, inequalities, and graphs.
- 2. Students will describe the fundamental principles including the laws and theorems arising from the concepts covered in this course.** Students will identify and apply the laws and formulas that result directly from the definitions; for example, the quadratic formula, rules of exponents, and properties of logarithms.
- 3. Students will apply course material along with techniques and procedures covered in this course to solve problems.** Students will use the facts, formulas, and techniques learned in this course to simplify algebraic expressions, graph functions, and solve inequalities, equations and systems of equations.
- 4. Students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field or related fields.** Students will acquire a level of proficiency in the fundamental concepts and applications necessary for further study in academic areas requiring college algebra as a prerequisite, or for work in occupational fields requiring a background in algebra. These fields might include education, business, finance, marketing, computer science, physical sciences, and engineering, as well as mathematics.

Course Content

Textbook: *College Algebra*, 12th Edition, by Gustafson and Hughes. The following chapters including the particular sections listed are covered.

- 0. A Review of Basic Algebra:** Real Numbers; Integer Exponents and Scientific Notation; Rational Exponents and Radicals; Polynomials; Factoring Polynomials; Rational Expressions.
- 1. Equations and Inequalities:** Linear Equations and Rational Equations; Applications of Linear Equations; Complex Numbers; Quadratic Equations; Applications of Quadratic Equations; Other Types of Equations; Inequalities; Absolute Value.
- 2. Functions and Graphs:** Functions and Function Notation; The Rectangular Coordinate System and Graphing Lines; Linear Functions and Slope; Writing and Graphing Equations of Lines.
- 3. Functions:** Graphs of Functions.
- 4. Polynomial and Rational Functions:** Quadratic Functions.
- 5. Exponential and Logarithmic Functions:** Exponential Functions and Their graphs; Logarithmic Functions and Their graphs; Properties of Logarithms; Exponential and Logarithmic Equations.
- 6. Linear Systems:** Systems of Linear Equations; Partial Fractions.

Core Curriculum Student Learning Objectives:

Core Objective (Critical Thinking): Gather, analyze, evaluate, and synthesize information relevant to a question or issue. (CT1)

- **Course Student Learning Objective:** Students will use mathematical facts, formulas, and techniques to analyze and interpret information related to algebraic expressions and equations.
- **Assessment:** Assessment exam that demonstrates CT1.

Core Objective (Communication): Develop, interpret, and express ideas through effective visual communication. (CS3)

- **Course Student Learning Objective:** Students will create and interpret graphs of algebraic and transcendental functions.
- **Assessment:** Assessment exam that demonstrates CS3.

Core Objective (Empirical and Quantitative Skills): Manipulate and analyze observable facts and arrive at an informed conclusion. (EQS2)

- **Course Student Learning Objective:** Students will use the facts, formulas, and techniques learned in this course to draw conclusions about the properties of various algebraic expressions, equations, and functions.
- **Assessment:** Assessment exam that demonstrates EQS2.

Course Calendar*

Week #	Dates	Chapter in Book Covered
1	8/21 – 8/23	Syllabus, 0.1
2	8/26 – 8/30	0.2, 0.3
3	9/3 – 9/6	0.3, 0.4
4	9/9 – 9/13	0.5, 0.6
5	9/16 – 9/20	Review, <u>Test 1</u>
6	9/23 – 9/27	1.1, 1.2
7	9/30 – 10/4	1.3, 1.4
8	10/7 – 10/11	1.5, 1.6
9	10/15 – 10/18	1.6, Review, <u>Test 2</u>
10	10/21 – 10/25	1.7, 1.8
11	10/28 – 11/1	2.1 – 2.4
12	11/4 – 11/8	3.1, Review, <u>Test 3</u>
13	11/11 – 11/15	4.1, 5.1, 5.3
14	11/18 – 11/22	5.5, 5.6
15	12/2 – 12/6	6.1, Review, <u>Test 4</u>
16	12/9 – 12/13	Review and <u>Final</u>
17	12/16 – 12/20	Project

*The course calendar is a guideline and is subject to change as necessary.