MATH 1314
College Algebra

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Office: MCS 220H

Office Hours: Office hours will be virtual and in-person by appointment. Information on how to set appointment through Navigate will be provided.

Teaching Philosophy

I believe that all students can learn mathematics given appropriate instruction and by appropriate practice. I understand that each student is unique and possesses a variety of experiences which they can bring to bear on their learning and interactions with classmates. I recognize that all individuals have a right to mutual respect and to be accepted by others without biases based on differences of any kind.

Course Information

Course Description

Exponents and radicals, logarithms, factoring, algebraic quotients, systems of equations, inequalities, absolute value, complex numbers, quadratic equations, binomial theorem, progressions, theory of equations, and determinants.

Prerequisite and Co-requisite Courses

Completion of Mathematics Texas Success Initiative (TSI) requirements.

Prerequisite Skills

Accessing Internet websites and proficiency with a scientific calculator are expectations of this course.

Student Learning Outcomes

Upon completion of this course, students will be able to:

- **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.
- **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.
- **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.
- **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 Delivery

This course meets daily in a face-to-face setting. Students are expected to attend class to receive instruction, participate in activities, and take assessments.

Required Texts and Materials

Textbook: College Algebra from OpenStax. This is a free textbook available online at OpenStax[1]. A print version is available for purchase via the campus bookstore if you would prefer a hard copy. This course also utilizes an online homework through My Open Math[2] which will be accessed through the Blackboard course.

Technology Requirements

To successfully complete this course, student needs to have regular and reliable access to a computer and printer. Please note that tablets and phones will not always support the online tools utilized in this course. A reliable internet connection is also required. A scientific calculator will be allowed on some assessments, a graphing calculator will not be allowed on any assessments. If you are planning to use campus owned technology, get a copy of the hours of operation for the various locations and set your study schedule accordingly. For technology assistance, contact the IT Service Center, which is located in MCS 111. Their phone number is (325) 942-2911 or check out their web page at IT Support[3].

Communication

Faculty will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

Virtual communication: Office hours appointments may be done with the assistance of Collaborate, which is included in Blackboard.

Grading

Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Percent of Total Grade
Assignments and homework	15
Assessments	70
Final Exam	15
Total	100%

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

    A = 89.5 -100 points
    B = 79.5 – 89.5 points
    C = 69.5 – 79.5 points
    D = 59.5 – 69.5 points
    F = 0-59.4 points

Assignment and Activity Descriptions

Assignment and Homework Policy

- Assignments will be accessed through Blackboard. Student will be expected to print out files as assigned. Student is also expected to work problem sets from text and access other assignments through MyOpenMath (MOM).

- Due dates will be shown in course calendar in Blackboard. Any student who is having trouble meeting set deadline must contact the instructor before the assignment is due during regular business hours.
- Pencil and paper assignments will be submitted through Gradescope.
- At the end of the semester, the three lowest assignment/homework scores will be dropped.

Assessments

- This course has been designed to promote mastery learning. The following standards will be assessed during the course:
  Standard 1: The learner will demonstrate understanding of and ability to apply rules of exponents and radicals.
  Standard 2: The learner will demonstrate ability to completely factor given expressions and will be able to explain, in text format, how to factor any trinomial.
  Standard 3: The learner will demonstrate ability to solve linear and rational equations.
  Standard 4: The learner will demonstrate ability to solve quadratic, radical, absolute value, and other types of equations using factoring and other methods as appropriate.
  Standard 5: The learner will solve linear, absolute value, quadratic, and rational inequalities.
  Standard 6: The learner will determine whether given relation is a function and determine the domain and range of any given function.
  Standard 7: The learner will write, graph, and interpret linear functions from given information.
  Standard 8: The learner will identify key components of quadratic functions from equations, graph, and verbal descriptions and use those components to solve application problems.
  Standard 9: The learner will write, graph, and evaluate exponential functions.
  Standard 10: The learner will write, graph, and evaluate logarithmic functions.
  Standard 11: The learner will solve logarithmic and exponential functions.
  Standard 12: The learner will solve systems of linear equations in two and three variables.
- Each standard will be assessed separately. Assessment 1 will cover Standard 1, Assessment 2 will cover Standard 2, and so on. Any score below 60 will be recorded in the gradebook as a 0.
- Each assessment may be retaken as many times as needed, at the convenience of the instructor, with the following restrictions:
  - Only one retake will be allowed during a 24 hour period.

- First attempt is made during scheduled course time (see course calendar for specific dates).
- Second attempt must be scheduled with the instructor via email at least 24 hours in advance. Student will receive no higher than a 90 in the gradebook.
- Third attempt will be allowed after student demonstrates mastery of the content by scoring 80 or higher on the MOM assignment(s) that support the specific assessment and must be scheduled with the instructor via email at least 24 hours in advance.. Student will receive no higher than a 90 in the gradebook.
- Subsequent attempts will be allowed after student meets with instructor during office hours to discuss previous attempts and must be scheduled with the instructor via email at least 24 hours in advance.. Student will receive no higher than an 80 in the gradebook.
- The final score on each assessment will be the grade of the most recent attempt. Please note that this means a retake could lower the recorded score.
- The deadline for completing all assessment retakes is May 7 by 3:00 PM.

Final Exam

The final exam for this course will be comprehensive and as such will contain test items for the standards as well as other material covered during the course. There is only one attempt allowed for the final exam. The final exam for this course is scheduled for August 13, 10:00 AM.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)[4]
- [Angelo State University Catalog](#)[5]

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#).[6]

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website.[7] The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures[8] for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's Academic Integrity policy[9] in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).[10]

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)[11] for more information.

Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Miller, J.D.
Special Assistant to the President and Title IX Coordinator
Mayer Administration Building, Room 210
325-486-6357
michelle.boone@angelo.edu

You may also [file a report online](#)[12] 24/7.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information, visit the [Title IX website](#).[13]

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

Course Schedule

Date	Topic or Module	Activities
July 12	Orientation, 1.1	Syllabus, Technology, Clarifying Activities
July 13	1.1, 1.2	Clarifying Activities
July 14	1.3, 1.4	Clarifying Activities
July 15	1.5,	Clarifying Activities
July 16	1.6	Clarifying Activities
July 19	Standard 1, 2.1	Assessment 1, Clarifying Activities
July 20	2.2, 2.3	Clarifying Activities
July 21	Standard 2, 2.4	Assessment 2, Clarifying Activities
July 22	2.5, 2.6	Clarifying Activities
July 23	Standard 3, 2.7	Assessment 3, Clarifying Activities
July 26	Standard 4, Standard 5	Assessment 4, Assessment 5
July 27	3.1, 3.2	Clarifying Activities
July 28	4.1, 5.1	Clarifying Activiites
July 29	Standard 6, 6.1	Assessment 6, Clarifying Activities
July 30	6.2, 6.3	Clarifying Activities
August 2	6.4, Standard 8	Clarifying Activities, Assessment 8
August 3	6.5, 6.6	Assessment 6 Clarifying Activities
August 4	7.1, 7.2	Clarifying Activities
August 5	Standard 9, Standard 10	Assessment 9, Assessment 10
August 6	Standard 11	Assessment 11
August 9	7.1, 7.2	Clarifying Activities
August 10	Standard 12	Assessment 12
August 11	All Topics	Review for Final Exam
August 12	All Topics	Review for Final Exam
August 13	All Topics	Final Exam

[1] www.openstax.org/details/college-algebra

2 www.myopenmath.com

3 https://www.angelo.edu/services/technology/support/

[4] https://www.angelo.edu/current-students/student-handbook/

[5] https://www.angelo.edu/academics/catalog/

[6] https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96

[7] https://www.angelo.edu/current-students/disability-services/

[8] https://www.angelo.edu/content/files/14197-op-1011-grading-procedures

[9] https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96

[10] https://www.angelo.edu/current-students/writing-center/academic_honesty.php

[11] https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of

[12] http://www.angelo.edu/incident-form

[13] https://www.angelo.edu/title-ix