Math 1314 – College Algebra – Fall 2017

Instructor: Dr. Susan Abernathy-Taylor
Office: MCS 220i
Phone: 325.486.5442
Office Hours: MWF: 9-11am
MW: 12-1pm
Th: 3:15-4:15pm
or by appointment

Email: All of the following addresses work.
They all go to the same inbox; you need only send an email to one of them.
susan.abernathy@angelo.edu
susan.taylor@angelo.edu
staylor28@angelo.edu

Disclaimer: This syllabus is current and accurate as of its posting date, but will not be updated. For the most complete and up-to-date course information, contact the instructor.

Class Meetings: Section 020: MWF 8:00-8:50am in MCS 214
Section 010: MWF 11:00-11:50am in MCS 110

Note: You do not have to purchase a hard copy of the book but you MUST purchase a WebAssign access code.

Attendance: Students are expected to attend every class. Attendance will be taken daily, and excessive absences will be reported to the appropriate university authorities.

Grades: Grades will be roughly determined as follows:
Tests: 60% (15% each)
Homework: 15%
Quizzes: 5%
Final Exam: 20%

Final grades will be based on a standard 10-point grading scale (A is 90+, B is 80-89.99, C is 70-79.99, D is 60-69.99, F is below 60).

Homework: Homework will be assigned online through WebAssign. Late homework is not accepted.

Setting up WebAssign:
1. Go to https://webassign.net and click “Enter class key” in the upper righthand corner.
2. Enter our class key: angelo 8014 2093. You should see our class title (Math 1314) and my name (Abernathy) come up.
3. Follow the directions to either set up a new account or log in if you already have a WebAssign account.

You will need to pay for an access code (bundled with your textbook in the bookstore or purchased directly from WebAssign without a hard copy of the book). You may access WebAssign for free from the start of the course on Monday, 8/28/2017, through Sunday, 9/10/2017. After this free trial ends, you will be required to pay for access. Not having an access code does not warrant an extension on homework.
**Quizzes:** There will be quizzes in class during the semester, most often on Fridays at the beginning of class. Quizzes will be announced ahead of time. There are no make-up quizzes but the lowest quiz grade will be dropped.

**Tests/Final Exam:** There will be four evening exams during the semester and a cumulative final. If it benefits you, your final exam grade will replace your lowest test grade. This means that if you miss one test, your final exam grade will replace that zero. If you miss a second test, you will receive a grade of zero for it. Make-up exams will be given (or not) at the discretion of the instructor.

<table>
<thead>
<tr>
<th>Test</th>
<th>Date and Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>Monday, September 25, 5-7pm</td>
</tr>
<tr>
<td>Test 2</td>
<td>Monday, October 16, 5-7pm</td>
</tr>
<tr>
<td>Test 3</td>
<td>Monday, November 6, 5-7pm</td>
</tr>
<tr>
<td>Test 4</td>
<td>Monday, November 27, 5-7pm</td>
</tr>
<tr>
<td>Final Exam</td>
<td>8am class (Section 020): Monday, December 11, 8-10am</td>
</tr>
<tr>
<td></td>
<td>11am class (Section 010): Wednesday, December 13, 10:30am-12:30pm</td>
</tr>
</tbody>
</table>

**Student Responsibilities:** The student is solely responsible for:

- **Maintaining academic honesty.**
- **Completing each assignment by the specified due date.**
- **Obtaining assignments and other materials for classes missed.**
- **Positively contributing to the classroom environment.** Be courteous; don’t use your phone in class; be on time; don’t disrupt your fellow classmates.
- **Being proactive about their grade in this course.** You are not given a grade in a college course; you EARN your grade. You may want or need a particular grade to graduate, maintain a scholarship, or stay in athletics, for instance. **It is your responsibility to put in as much effort as it takes to earn this grade.** This includes utilizing (as needed) all available study aid options (going to office hours and/or Math Lab, reading outside textbooks, meeting with the instructor, etc.) to resolve any questions or concerns you might have about any aspect of the course.

**Student Disability Services:** 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.

The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting:

Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
dallas.swafford@angelo.edu
Title IX: Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or discrimination, you may contact ASU's Title IX Coordinator:

Michelle Boone
Director of Title IX Compliance
325-486-6357
michelle.boone@angelo.edu

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. ([http://www.angelo.edu/opmanual/](http://www.angelo.edu/opmanual/) -- OP 10.19)

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 for more information.

Student Conduct Policies

- **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 Statement of Academic Integrity

- **Plagiarism**: Plagiarism is a serious topic covered in ASU’s Academic Integrity policy 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 via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center.

- **Copyright Policy**

  Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

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
- Angelo State University Catalog
**Daily Schedule:** The subject matter listed below is tentative and subject to change. For current information about course topics, please contact the instructor.

1. Syllabus, 0.1
2. 0.1
3. 0.2
4. 0.2
5. 0.3
6. 0.3
7. 0.3/0.4
8. 0.4
9. 0.5
10. 0.5
11. 0.6
12. Review in class, **Test 1 5-7pm (9/25)**
13. 0.6/1.1
14. 1.1/1.2
15. 1.2
16. 1.3
17. 1.4
18. 1.4/1.5
19. 1.5
20. 1.6
21. Review in class, **Test 2 5-7pm (10/16)**
22. 1.6/1.7
23. 1.7
24. 1.7/1.8
25. 1.8
26. 2.1
27. 2.2/2.3
28. 2.4
29. 3.1
30. Review in class, **Test 3 5-7pm (10/6)**
31. 4.1
32. 5.1
33. 5.3
34. 5.5
35. 5.6
36. 6.1
37. Review in class, **Test 4 5-7pm (10/27)**
38. 6.1
39. 6.6
40. Cumulative review
41. Cumulative review/Core Assessment
42. Cumulative review
43. **Final Exam**
   8am class: Mon 12/11 8am
   11am class: Wed 12/13 10:30am

---

**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 electronic supplement MindTap Math may also be required. 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.