MATH 1314.030 (College Algebra)
Syllabus – Spring 2018
MWF 9-9:50 am

Instructor of Records Information:
Instructor: Harvey D. Johnson
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Office Telephone #: (325) 486-5435
E-mail: Harvey.Johnson@angelo.edu

Office Hours:
Mon. & Wed. — 01:30 pm-03:30 pm
Tues. & Thurs. — 02:00 pm-04:00 pm
Fri. —10:15 am-10:45 am, 12:00pm-01:30 pm
(and all other times by appointment only)

Textbook “Only”:
College Algebra, 12th ed., by R. David Gustafson and Peter D. Frisk

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 to disciplinary action and possible expulsion from ASU.

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 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.

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 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 that 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/ --- OP 10.19)

Incomplete Grade Policy:
It is the policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty involved if you experience serious illness or a personal misfortune that would keep you from completing course. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

Course Policies
Major Examinations - There will be 4 major examinations excluding the final examination. Each of the major examinations will be designed to be completed in forty-five to sixty minutes. There will be no "make-up" for any major examination; however a major examination can be taken early under certain reasonable circumstances. No examination grades will be dropped. Each major examination will be given in MCS 110 from 05:00 P.M. - 07:00 P.M. as indicated below:

- Examination I will be given Monday, February 12th
- Examination II will be given on Monday, March 05th
- Examination III will be given on Monday, April 02nd
- Examination IV will be given on Monday, April 23rd.

Short Quizzes - There will be between 5 and 20 short quizzes of about 10 to 15 minutes duration which will usually be announced. These short quizzes will consist of problems similar to those in the homework assignments. There will be no "curve" or "make-up" on short quizzes; however the lowest quiz score made on only one short quiz will be dropped.

Final Examination - The final examination is compulsory, is comprehensive, and will be given on Monday, May 09, 2018, from 08:00 am - 10:00 am for this course.

Homework - Usually no homework will be taken up by me and graded. Class discussions visits to my office for help when necessary, and short quizzes covering the skills demonstrated in the lecture sessions and developed in the homework assignments should provide ample coverage.

Class Attendance - Class attendance records will be kept for the lecture sessions.

Semester Score - The sum of 60% of the average of the 4 one-hour major examinations scores, 10% of the combined short quiz scores and 30% of the final examination score will constitute the semester score.

Grading Scale - 100-91.5 A 91.4-89.5 A- 89.4-87.5 B+ 87.4-81.5 B 81.4-79.5 B- 79.4-77.5 C+ 77.4-71.5 C 71.4-69.5 C- 69.4-67.5 D+ 67.4-61.5 D 61.4-59.5 D- 59.4-0 F

Course Content - Exponents and Radicals, Factoring, Algebraic Quotients, Solving Quadratic Equations, Inequalities, Absolute Value of a Real Number, Rectangular Coordinate System, Slope of Slanted Straight Lines, Writing Equations of Straight Lines, Functions, Logarithms, Solving Consistent and Inconsistent Linear Systems of Equations, Partial Fractions Decomposition

Note: Monday, April 02, 2018, is the last day to drop a class or withdraw from the University for the regular 16-week spring 2018 semester.
Student Learning Objective/Outcomes for College Algebra:
The 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.

The 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 student should be able to write and apply the quadratic formula, rules of exponents, and properties of logarithms.

The students will apply course material along with the techniques and procedures covered in this course to solve problems. Students will use the facts, formulas, and the techniques learned in this course to simplify algebraic expressions and graph functions as well as solve inequalities, equations, and systems of equations.

The 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 college algebra. Also, the occupational fields might include but is by no means limited to education, business, finance, marketing, computer science, physical sciences, and engineering as well as mathematics.

Course Content:
**Textbook:** *College Algebra, 12th ed.*, by Gustafson and Hughes. The electronic supplement MindTap Math will not be required. The following chapters including the particular sections listed are covered.

**A Review of Basic Algebra:** Real Numbers; Integer Exponents and Scientific Notation; Rational Exponents and Radicals; Polynomials; Factoring Polynomials; Rational Expressions.

**Equations and Inequalities:** Linear Equations and Rational Equations; Applications of Linear Equations; Quadratic Equations; Applications of Quadratic Equations; Complex Numbers; Polynomials and Radical Equations; Inequalities; Absolute Value.

**The Rectangular Coordinate System and Graphs of Equations:** The Rectangular Coordinate System; the slope of a Nonvertical Line; Writing Equations of Lines.

**Functions:** Functions and Function Notation; Quadratic Functions.

**Exponential and Logarithmic Functions:** Exponential Functions and Their Graphs; Logarithmic Functions and Their Graphs; Properties of Logarithms.

**Linear Systems:** Systems of Linear Equations; Partial Fractions Decomposition.

**Note to the Student on Regarding 4 Major Examinations:**
If only one major examination is missed, then the zero which will be received will be replaced with the score that is made on the Final Examination. If a second major examination is missed, then 90% of the higher of the remaining two major examinations will be used to replace the zero which will be given. If either a third or a fourth major examination is missed, a nonreplaceable grade of zero will be given.

**Day Planner for College Algebra:**
In the preparation of compilation of the following list of topics to be covered in Finite College Algebra during the spring 2018 semester, effort has been made by the instructor of records to be as accurate as possible and to avoid redundancy. In addition, the instructor of records retains the right to supplement and/or modify any topic contained in the list when appropriate without having to provide advance notification.
1 W Syllabus, 01 Sets of Real Numbers
2 F 0.1 Sets of Real Numbers
3 M 0.2 Integer Exponents and Scientific Notation
4 W 0.2 Cont’d
5 F 0.3 Rational Exponents and Radicals
6 M 0.3 Cont’d
7 W 0.3 Cont’d, 0.4 Polynomials
8 F 0.4 Cont’d
9 M 0.5 Factoring Polynomials
10 W 0.5 Cont’d End Exam I Material
11 F 0.6 Rational Expressions
12 M REVIEW FOR EXAMINATION I Exam I from 5-7 pm in MCS 110
13 W 0.6 Cont’d, 1.1 Solving Linear and Rational Equations
14 F 1.1 Cont’d, 1.2 Applications of Linear Equations
15 M 1.2 Cont’d
16 W 1.3 Complex Numbers
17 F 1.4 Quadratic Equations
18 M 1.4 Cont’d, 1.5 Applications of Quadratic Equations
19 W 1.5 Cont’d End Exam II Material
20 F 1.6 Solving Other Types of Equations
21 M REVIEW FOR EXAMINATION II Exam II from 5-7 pm in MCS 110
22 W 1.6 Cont’d, 1.7 Inequalities
23 F 1.7 Cont’d
24 M 1.7 Cont’d, 1.8 Absolute Value
25 W 1.7 Cont’d
26 F 2.1 Functions and Function Notation
27 M 2.2 Rectangular Coordinate System and Graphing
28 W 2.3 Linear Functions and Graphs
29 F 2.4 Writing and Graphing Equations of Lines End Exam III Material
30 M REVIEW FOR EXAMINATION III Exam III from 5-7 pm in MCS 110
31 W 4.1 Quadratic Functions
32 F 5.1 Exponential Functions and Their Graphs
33 M 5.3 Logarithmic Functions and Their Graphs
34 W 5.5 Properties of Logarithms
35 F 5.6 Exponential and Logarithmic Equations End Exam IV Material
36 M 6.1 Systems of Linear Equations
37 W 6.1 Cont’d, 6.6 Partial Fractions
38 F 6.6 Cont’d
39 M IDEA, CUMULATIVE REVIEW FINAL EXAMINATION
41 F CUMULATIVE REVIEW
