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I. BASIC COURSE INFORMATION:

A. **Mathematics 0320**.   Introductory Algebra.   Operations in the set of real numbers.
Beginning algebraic concepts, skills, and applications.   Solving and graphing linear
equations, inequalities, and systems of equations.   This course may not be used for degree credit
and is not intended for transfer to a senior college.   Three lecture hours and one laboratory hour
each week.   Prerequisite: ABE Math 1000 or TSIA Score of 330-335.   Lab fee.

B. The intended audience is any student needing to strengthen their mathematics background
before taking intermediate algebra mathematics courses.

C. Instructor: George Reed
Office Location: S-203C
Office Hours: 2:00 – 3:00pm
Phone: 936-633-5485
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II. INTENDED STUDENT OUTCOMES:

A. Core Objectives Required for this Course

1.   Critical Thinking: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

2.   Communication: to include effective development, interpretation and expression of ideas through written, oral and visual communication

3.   Empirical and Quantitative Skills: to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

B. Course Learning Outcomes for all Sections

1. Define, represent, and perform operations on real numbers.
2. Recognize, understand, and analyze features of algebraic expressions and equations.
3. Recognize and use algebraic properties, concepts, procedures, and algorithms to
   combine, transform, and evaluate polynomial expressions.
4. Identify and solve linear equations in one or more variables.
5. Identify and solve linear inequalities and systems of linear equations.
6. Model, interpret, and justify mathematical ideas and concepts using multiple
   representations.
7. Connect and use multiple strands of mathematics in situations and problems, as well
   as in the study of other disciplines.

III. ASSESSMENT MEASURES

A. Assessments for the Core Objectives

1. **Critical thinking:** Students will demonstrate the application of critical thinking skills by utilizing reading, creative and appropriate problem solving techniques, and appropriate mathematical tools to solve problems.   These skills will be assessed using a rubric in embedded test questions and/or written homework problems.
2. **Communication:**   Students will communicate mathematical information using complete and correct notation and written and visual communication skills.   A rubric will be used to assess written, oral, and visual communication skills.
3. **Empirical and Quantitative Skills:** Students will use empirical and quantitative skills to answer embedded test questions.   These will be assessed using a rubric.

B. Assessments for Course Learning Outcomes

1. The student's ability to define, represent, and perform operations on real numbers will be assessed through embedded test questions.
2. The student's ability to recognize, understand, and analyze features of algebraic expressions and equations will be assessed through embedded test questions.
3. The student's ability to recognize and use algebraic properties, concepts, procedures, and algorithms to combine, transform, and evaluate polynomial expressions will be assessed through embedded test questions.
4. The student's ability to identify and solve linear equations in one or more variables will be assessed through embedded test questions.
5. The student's ability to identify and solve linear inequalities and systems of linear equations will be assessed through embedded test questions.
6. The student's ability to model, interpret, and justify mathematical ideas and concepts using multiple representations will be assessed through embedded test questions.
7. The student's ability to connect and use multiple strands of mathematics in situations and problems, as well as in the study of other disciplines will be assessed through homework problems.

IV. INSTRUCTIONAL PROCEDURES:

The course is taught using a combination of lectures, discussions, and practice exercises. The amount of time spent using any one technique will vary from class to class and from lesson to lesson as determined to be most appropriate by the instructor.

V. COURSE REQUIREMENTS AND POLICIES:

A. Required Textbooks and Recommended Readings, Materials and Equipment

1. <u>Introductory and Intermediate Algebra for College Students</u>, 4th ed. by Blitzer (Pearson).
2. Access to MyLabsPlus (included with new book bought at AC bookstore)
3. The Angelina College mathematics program, including the developmental program, strives to keep up with modern standards. Therefore, in this course, students **are required** to bring and use a graphing or scientific calculator. **A graphing calculator (TI-83 or TI-84) is strongly recommended for students who plan on advancing to Math 0330 (Intermediate Algebra).**
4. Technical Support---Technical issues do not excuse late homework. Please contact Pearson at 888-883-1299.

B. Course Policies – This course conforms to the policies of Angelina College as stated in the Angelina College Handbook.

1. **Educational Accommodations** – If you have a disability (as cited in Section 504 of the Rehabilitation Act of 1973 or Title II of the Americans with Disabilities Act of 1990) that may affect your participation in this class, you may fill out the Educational Accommodations application within your AC Portal, under the "Student Services" tab. A Student Success team member will contact you once the application is received. At a post-secondary institution, you must self-identify as a person with a disability in order to receive services; for questions regarding the application process you can visit the Office of Student Success and Inclusion in the Student Center (205A); text 936.463.8078; or email access@angelina.edu. To report any complaints of discrimination related to a disability, you should contact Mr. Steve Hudman, Dean of Student Affairs, in Room 101 of the Student Center. You may also contact Dean Hudman by calling (936) 633-5292 or by emailing shudman@angelina.edu.

2. **Attendance –** Attendance is required as per Angelina College Policy and will be recorded every day. Any student with two (2) consecutive absences or three (3) cumulative absences may be dropped from the class. A student may also be dropped who has not enrolled in MyLabsPlus by July 16, 2018. Not working on assignments, including MyLabsPlus homework, is considered non-participation which also subjects you to being dropped from the course. <u>A student with three (3) cumulative absences by August 2, 2018 will be dropped with no option to readmit.</u> Records will be turned in to the academic dean at the end of the semester. Do not assume that non-attendance in class will always result in an instructor drop. **You must officially drop a class or risk receiving an F; the last day to drop with a grade of "W" is August 2, 2018**. This is official Angelina College Policy.

3. **Additional Policies Established by the Instructor**

MAKE-UP EXAMS
No make-up exams will be offered. The grade on the <mark>final exam can replace the lowest exam grade</mark>, including the grades from a missed exam.

STUDENT CONDUCT
A positive environment for learning will be maintained by students being courteous to each other and to the instructor. Eating, drinking, sleeping, and distracting conversations during lecture will not be allowed. Repeated tardiness will result in warning; if continued this will result in further action depending on upon seriousness of problem.   Regular attendance is also expected as per college policy.

Cheating on tests is not tolerated as per Angelina College policy and may result in expulsion from the course. Plagiarism is not tolerated and will result in a zero for any assignment in which it is detected.

CELL PHONES
Cell phones must be turned off or on the silent mode. Students may not have access to cell phones during quizzes and/or tests.

VI. COURSE OUTLINE:
See attached COURSE SCHEDULE

VII. EVALUATION AND GRADING:
1. Your grade will be assessed by:
    a. Four tests valued at 100 points each for a total of 400 points.
    b. Homework on MyLabsPlus valued at 100 points.
       Each homework assignment has a due date which is 11:59 pm on the day before each test. There will a daily 10% penalty for work completed after the due date up to 5 additional days.   The homework grade will be a zero if not done with 5 days of due date.
    d. Weekly lab valued at 50 points total.
    e. A comprehensive final examination valued at 150 points.
         NOTE: TI-89, TI-92, or any calculator with CAS-software may not be used on the final.

2. No makeup tests will be allowed.   <mark>The final exam will replace any one missed test or the lowest test grade during the semester</mark>.

The instructor may modify the provisions of the syllabus to meet individual class needs by informing the class in advance as to the changes being made.

MATH 0320 Summer II 2018
COURSE CONTENT AND ASSIGNMENTS

Lesson	Date	Sections	Pages	Description
1	07/09	1.1	2 - 10	Introduction to Algebra: Variables and Mathematical Models
		1.2	14 - 28	Fractions in Algebra
2	07/10	1.3	32 - 41	The Real Numbers
		1.4	44 - 52	Basic Rules of Algebra
3	07/11	1.5	56 - 62	Addition of Real Numbers
		1.6	65 - 69	Subtraction of Real Numbers
4	07/12	1.7	73 - 83	Multiplication and Division of Real Numbers
		1.8	87 - 98	Exponents and Order of Operations
5	**07/16**	**Review**		**Chapter 1**
		Test I		
6	07/17	2.1	114 - 120	The Addition Property of Equality
		2.2 A	122 - 129	The Multiplication Property of Equality (Multiplication Property Only)
		2.2 B	122 - 129	Solving Linear Equations (Addition and Multiplication Property)
7	07/18	2.3 A	132 - 140	Solving Linear Equations
		2.3 B	132 - 140	Solving Linear Equations (Fractions, Decimals, no Solution, All Real Numbers)
8	07/19	2.4	144 - 151	Formulas and Percent
		2.5	156 – 164	An Introduction to Problem Solving
9	07/23	2.7	182 - 194	Solving Linear Inequalities
10	**07/24**	**Review**		**Chapter 2**
		Test II		
11	07/25	5.1	344-349	Adding and Subtracting Polynomials
		5.2	353-360	Multiplications of Polynomials
12	07/26	5.3	363-368	Special Products
13	07/30	5.5	381-387	Dividing Polynomials
		5.7	404-413	Negative Exponents and Scientific Notation
14	**07/31**	**Review**		**Chapter 5**
		Test III		
15	08/01	3.1	210 – 219	Graphing Linear Equations in Two Variables
		3.2	220 – 233	Graphing Linear Equations Using Intercepts
16	08/02*	3.3	234 - 240	Slope * Last day to drop with "W"
		3.4	381 - 387	The Slope-Intercept Form of the Equation of a Line
17	08/06	3.5	254 - 261	The Point-Slope Form of the Equation of a Line
18	**08/07**	**Review**		**Chapter 3**
		Test IV		
19	08/08	4.1	276 - 284	Problem Solving Using Systems of Equations by Graphing
		4.2	288 – 293	Solving Systems of Linear Equations by the Substitution Method
20	08/09	4.3	297 - 303	Solving Systems of Linear Equations by the Addition Method
21	08/13	All Chapters		Final Exam Review
22	**08/14**	**FINAL EXAM**		**FINAL---All Chapters Bring a Scantron Sheet (50 questions per side)**