

Angelina College
Division of Science and Mathematics
MATH 0330 – Intermediate Algebra
Instructional Syllabus – Summer II 2018 (MTWR)

I. BASIC COURSE INFORMATION:

- A. Intermediate Algebra – MATH 0330 –A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and 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. Lab fee.
Prerequisite: MATH 0320 or equivalent.
- B. The intended audience is any student needing to strengthen their mathematics background before taking college level mathematics courses.
- C. Instructor: George Reed
Office Location: S-203C
Office Hours: 2:00-3:00pm
Phone: 936-633-5485
E-mail Address: greed@angelina.edu

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 and complex numbers.
2. Recognize, understand, and analyze features of a function.
3. Recognize and use algebraic (field) properties, concepts, procedures (including factoring), and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational expressions.
4. Identify and solve absolute value, polynomial, radical, and rational equations.
5. Identify and solve absolute value and linear inequalities.
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 and complex numbers will be assessed through embedded test questions.
2. The student's ability to recognize, understand, and analyze features of a function will be assessed through embedded test questions.
3. The student's ability to recognize and use algebraic (field) properties, concepts, procedures, and algorithms to combine, transform, and evaluate absolute value, polynomial, radical, and rational equations will be assessed through embedded test questions.
4. The student's ability to identify and solve absolute value, polynomial, radical, and rational equations will be assessed through embedded test questions.
5. The student's ability to identify and solve absolute value and linear inequalities 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 on written homework problems.
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. Introductory and Intermediate Algebra for College Students, 5th 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. TI-89 and TI-92 calculators may NOT be used.**
4. A 3-ring binder, loose-leaf notebook paper, and dividers.

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. Not working on assignments, including MyLabsPlus homework, is considered non-participation which also subjects you to being dropped from the course. A student with four (4) cumulative absences by June 25th will be dropped with no option to readmit. 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.** 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 final exam can replace the lowest exam grade, 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

Pagers, cellular phones, earphones, and similar electronic devices should be silent or off and out of sight during the entire class period. Failure to follow this rule **may result in the student being asked to leave the classroom.** Students may not have access to cell phones during quizzes and/or tests. Failure to follow this rule **may result in the student receiving a zero for the quiz or test. If a student receives a zero on a test due to this rule, the zero will not be replaced by the final exam score.**

Technical issues do not excuse late homework. Please contact Pearson on their 24/7 helpline, [\(888\)883-1299](tel:8888831299).

VI. **COURSE OUTLINE:**

See attached COURSE SCHEDULE

VII. **EVALUATION AND GRADING:**

1. Your grade will be assessed by:
 - a. Three tests valued at 100 points each for a total of 300 points.
 - b. Homework on MyLabsPlus valued at 100 points.
Each homework assignment has a due date which is 11:59pm the day before each test. There will be 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 within 5 days of the due date.
 - c. Weekly lab valued at 50 points total.
 - d. 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. The final exam will replace any one missed test or the lowest test grade during the semester.

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 0330 COURSE SCHEDULE – MTWR
Summer II 2018

<u>Lesson</u>	<u>Date</u>	<u>Sections</u>	<u>Pages</u>	<u>Description</u>	<u>Book Problems (in addition to MLP)</u>
1	07/09	6.1	426-435	Introduction and Syllabus The Greatest Common Factor & Factoring by Grouping	
2	07/10	6.2 6.3	435-443 444-451	Factoring Trinomials Whose Leading Coefficient is 1 Factoring Trinomials Whose Leading Coefficient is Not 1	
3	07/11	6.4 6.5	452-461 462-470	Factoring Special Forms A General Factoring Strategy	
4	07/12	6.6	470-482	Solving Quadratic Equations by Factoring	
5	07/16	8.1 8.2	586-596 596-609	Introduction to Functions Graphs of Functions	
6	07/17	9.1 9.3	642-653 663-674	Reviewing Linear Inequalities (Objective 1 only) Equations and Inequalities Involving Absolute Value (Objectives 1-4)	
7	07/18	Review		Review for Exam 1	
8	07/19	Exam #1		Exam #1 (Chapters 6,8, and 9)	
9	07/23	10.1 10.2	691-704 705-715	Radical Expressions and Functions (Objectives 1,5, and 7) Rational Exponents	
10	07/24	10.3 10.4	715-723 723-731	Multiplying and Simplifying Radical Expressions (Objectives 1, 2(No example 3), and 3) Adding, Subtracting, & Dividing Radical Expressions	
11	07/25	10.5 10.6	732-742 742-752	Multiplying and Rationalizing Denominators (Objectives 1 and 2 only, no rationalizing denominators) Radical Equations	
12	07/26	Review		Review	
13	07/30	Exam #2		Exam #2 (Sections 10.1 – 10.6)	
14	07/31	10.7 11.1	752-762 771-788	Complex Numbers (Objectives 1 through 4) The Square Root Property (Objectives 1 and 4 only)	
15	08/01	11.2 11.3	788-803 803-822	The Quadratic Formula Quadratic Functions and Their Graphs	
16	08/02*	Review		Review	
17	08/06	Exam #3		Exam #3 (Sections 10.7, 11.1 – 11.3)	
18	08/07	7.1 7.2	489-500 500-506	Rational Expressions & Their Simplification Multiplying and Dividing Rational Expressions	
19	08/08	7.3 7.4	507-515 515-526	Adding & Subtracting with the Same Denominator Adding & Subtracting with Different Denominators	
20	08/09	7.6	535-547	Solving Rational Equations	
21	08/13	Review		Review for Final Exam	
22	08/14	Final		Comprehensive Final Exam	

*Last day to drop with a “W”