

**WKU – WKU On Demand
Mathematics 116 - College
Algebra Three Semester Hours**

Syllabus

- Instructor:** Dr. Joseph Stokes
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- Text:** Bittinger, Marvin L., Beecher, Judith A., Ellenbogen, David J., Penna, Judith A., College Algebra, Fourth Edition. Boston: Addison Wesley, 2009.
ISBN-9780321528322
- Text Supplement:** Penna, Judith A. Graphing Calculator Manual, Boston: Addison Wesley.
- Technology:** TI-83 or TI-84 Calculator (TI-89 or equivalent calculators are not permitted on exams.)
- Course Summary:** Twenty-five (25) Lessons
Midterm Examination
Final Examination
- Prerequisite:** You are qualified to take Mathematics 116 if you satisfy the conditions in either 1 or 2 listed below.
1. Completed an intermediate algebra course with a grade of C or better in a college.
- OR
2. Had two years of high school algebra plus either condition (a) or (b) listed below.
 - (a) an algebra score of at least 14 on the WKU Math Placement Exam
or
 - (b) a Math ACT score of at least 22 and a GPA of at least 3.0 in high school algebra.

To the student:

This course is designed for those who need an understanding of algebra beyond what is normally taught in high school. The sequence Math 116-117 is equivalent to Math 118. Anyone who has the appropriate prerequisite may take the course as an elective or for General Education credit. It does not count toward the major or minor in mathematics at Western Kentucky University.

If this is your first attempt at a course in which your work is independent and at your own pace, then some advice is appropriate. Set aside some definite time to work on the course. An hour each day is better than one study time of seven hours each week. The best strategy for each lesson is to read and study the indicated pages in the text and refer to the calculator manual as needed. This strategy is important because you are not exposed to the benefit of classroom discussion in a WKU On Demand course. After you feel that you are beginning to understand the material, work a few of the odd-numbered exercises so that you can check your answers. Only then should you begin the assigned problems in each lesson.

Technology enables us to very rapidly complete computations and to solve more difficult problems than otherwise possible. You should learn to use the TI-83 calculator. This is the only required technology and is sufficient for all the assigned problems in each lesson. The only calculator permitted during the midterm and final examinations is either the TI-83 or TI-84. The reason for this is to assure that no one has an advantage or is placed at a disadvantage during examinations. Remember that technology merely helps with computations. You must still understand the concepts and be able to interpret results to fully master a mathematics course. You should also keep in mind that a calculator gives approximate answers. Therefore, if an exact answer is requested, then the use of a calculator is inappropriate.

For consistency with WKU's Quality Enhancement Plan, most of the lessons contain some application problems and others that require thinking beyond merely substituting numbers into a formula. By the end of the course, you will have grown to love these problems.

You may submit up to four lessons per cover sheet each week. Such an arrangement allows time for feedback and helps you avoid repeating past mistakes. All assignments should be done in numerical order on 8 ½" by 11" paper with or without lines. Always write with an erasable pencil. All work should be submitted in the same order as the assigned exercises. When beginning a new lesson write the lesson number at the top of your first page and number each exercise exactly as it is in the text. Clearly identify each of your answers. A good way to do this is to enclose answers in rectangles. Since you are expected to use your TI-83 calculator for some calculations, there may be very few, if any, intermediate steps for these problems. If, however, there are distinct steps to an exercise, show these intermediate steps on your paper you plan to submit.

Upon completion of the first twelve lessons, you must take a midterm examination and after lesson 25 a comprehensive final examination. Each of these is supervised by WKU On Demand or someone approved by them. Request forms for examinations are enclosed in this packet and should be submitted to WKU On Demand at least 10 days prior to the date on which the examination is to be administered. All completed materials, including the final examination, must be received by WKU On Demand at least 14 days prior to the date the course grade is needed.

When you complete the course you will have earned three grades – one for the lessons, another for the midterm examination and the third one for the comprehensive final examination. If your final examination grade is less than 50 percent, then your grade for the course is F. If your final examination percentage is the highest of your three grades, then your letter grade will be based solely on your final examination percentage. Otherwise, the three percentage grades will be averaged to obtain your course percentage. Letter grade equivalents of percentage grades are as follows:

$$\begin{array}{l} 90 \leq \text{percentage} \leq 100 \quad A \\ 80 \leq \text{percentage} < 90 \quad B \end{array}$$

70	≤	percentage	<	80	C
50	≤	percentage	<	70	D
0	≤	percentage	<	50	F

As you work through the lessons, you may need help with some of the exercises. Feel free to seek assistance from anyone who knows the material and is willing to help. Don't let anyone do your assignments because you are the person who must score at least 50 percent on the final to pass the course. Furthermore, you are permitted to use neither your text nor notes on examinations. You are expected to use your TI-83 or TI-84 on examinations, thus don't forget to bring that with you with no algebra programs or formulas stored on it.

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