Intermediate Algebra with Geometry (MDEV 003)
Fall Quarter, 2003

Time/Place: MTWRF 8:00-8:50 a.m. RGH 112
Instructor: Jonathan Duncan (duncjo@wwc.edu)
Office: Kretchmar Hall 330, phone: 527-2097
Office Hours: 10:00 T, 11:00 R, 1:00 MWF, or by appointment

Basic Geometry for College Students,

Webpage: http://math.wwc.edu/courses/003a/

This course is a review of high school algebra and geometry including topics such as sets, numbers, exponents, polynomials, rational expressions, graphs, lines, triangles, circles, and proofs. Credits do not apply toward graduation, or for students seeking VA benefits. We will cover selections from chapters 1-8 in your algebra text, and chapters 1-7 and 10 in your geometry book. The deadline for withdrawing from the course is Tuesday, 18 November and the final will be given on Monday, 15 December.

Topics

1. Basic Algebraic Properties, Equations and Inequalities:
   Fundamental definitions, real numbers, arithmetic with real numbers, linear equations in one variable, formulas, linear inequalities, absolute value equations, rectangular coordinate system, equations of lines, linear inequalities in two variables, functions, systems of linear equations

2. Polynomials and Rational Expressions:
   Properties of exponents, polynomial arithmetic, factoring of polynomials, reducing rational expressions, rational expression arithmetic

3. Rational Exponents, Roots, and Quadratics:
   Rational exponents, simplifying radicals, radical expression arithmetic, completing the square, the quadratic formula

4. Geometry:
   basic geometric figures, angles, parallel and perpendicular lines, triangles, quadrilaterals and other polygons, perimeters and areas of polygons, circles, volume

Objectives

Upon completion of this course, students will have:

1. prepared to take college mathematics courses.
2. developed demonstrable understanding of the topics outlined above.
3. successfully engaged in mathematical thinking, reasoning, and problem solving.
4. become proficient in expressing clear and accurate solutions to mathematical problems in written form.

The following requirements encourage and measure the successful completion of these objectives.

Quizzes (O2,O3)

Short 10 point quizzes based on previous homework will be given promptly at the beginning of class on Mondays, Wednesdays and Fridays, excluding those days which fall directly before, on, or after a schedule exam. Make-up and early quizzes will not be given for any reason. Your lowest two quiz scores will be dropped at the end of the quarter. In the event that you miss more than two quizzes due to appropriate and verifiable reasons, additional quiz scores may, at the discretion of the instructor, be dropped.
Homework (O3,O4)

Mathematics is not a spectator sport. Daily 10 point assignments will be given, each due at the beginning of the next class period. These assignments should be considered the minimal amount of homework required to pass the course. Assignments which are more than one class period late will not be accepted for any reason. Your lowest two homework scores will be dropped at the end of the quarter. If you miss more than two assignments due to appropriate and verifiable reasons, additional scores may, at the discretion of your instructor, be dropped.

Please observe the following guidelines when preparing your homework. Papers which do not meet these criteria may not be accepted.

1. Use letter (8.5 × 11) sized paper with clean edges (not torn out of a notebook).
2. Multi-page assignments must be stapled or paper-clipped together.
3. Fold the assignment lengthwise like a book and write your name, the course number, and assignment number(s) on the front cover.
4. Use a pencil, write legibly, and organize your problems and solutions in a logical manner.
5. Show all essential steps in solving the problem. Include figures, and notes when appropriate. A reader must be able to easily verify that you not only have the correct answer, but have also expressed a correct solution to the problem.

Exams (O1,O2,O3)

There will be five exams during the course of the quarter, including the two-hour comprehensive final. The first four exam dates are subject to in-class change, and will be announced at least one week in advance. You may request alternative exam dates in advance only for appropriate and verifiable reasons. The final exam may only be taken out of schedule after consultation with the Associate Academic Dean.

<table>
<thead>
<tr>
<th>Exam</th>
<th>Topic</th>
<th>Date</th>
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<tbody>
<tr>
<td>Exam I</td>
<td>Algebra chapters 1 and 2</td>
<td>10 October</td>
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<tr>
<td>Exam II</td>
<td>Algebra chapters 3 and 4</td>
<td>24 October</td>
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<tr>
<td>Exam III</td>
<td>Algebra chapters 5 and 6</td>
<td>7 November</td>
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<tr>
<td>Exam IV</td>
<td>Algebra chapters 6 and 7</td>
<td>21 November</td>
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<tr>
<td>Final</td>
<td>Comprehensive, emphasis on algebra 8, and geometry</td>
<td>Mon, 15 Dec 10:00 a.m.</td>
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Grades (O1)

Your final letter grade will be based on your quarter average as shown below. Your quarter average is made up of seven scores: your homework average, quiz average, and four exam scores. Weights for each of these are given below. Appropriate (to your instructor) modifications of the final letter grades may be made in individual cases for progress, unusual circumstances, etc.

<table>
<thead>
<tr>
<th>Score Weights</th>
<th>Letter Grades (lowest percent)</th>
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<tbody>
<tr>
<td>Final 26%</td>
<td>A+ 98% B+ 87% C+ 76% D+ 65%</td>
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<tr>
<td>Exams I-III 4×13%</td>
<td>A 91% B 80% C 69% D 58% F 0%</td>
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<tr>
<td>Homework 11%</td>
<td>A- 89% B- 78% C- 67% D- 56%</td>
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<tr>
<td>Quizzes 11%</td>
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Disabilities

Students with a physical and/or learning disability who require accommodations should contact the instructor or Disability Support Services at 527-2366. This syllabus is available in alternative formats upon request.