MAT095_Maurice_F11

ELEMENTARY ALGEBRA (MATH 095)
CRN 31016
INSTRUCTOR – BARBARA MAURICE
FALL 2011
ROOM   E 204
TR 11:00-12:15
OFFICE: RM C206; OFFICE PHONE: 860- 383-5221
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COURSE DESCRIPTION
This course extends the basic algebra skills acquired in MATH 075. The topics include: signed numbers, solving first-degree equations, exponents, polynomials, factoring, graphing, systems of linear equations, inequalities, radicals and scientific notation. (This course does not count towards the minimum requirements for graduation.

PREREQUISITE
Acceptable placement score or Math 075 with a "C" grade or better.

The prerequisite for Intermediate Algebra (Math 137) is a "C" grade or better in Math 095 which translates to at least a 75 average.

TEXTBOOK
Beginning Algebra by Martin-Gay (Fifth Edition).

MAT095 Course Outcomes

1. Evaluate algebraic expressions
2. Determining if a given number is a solution to an equation or an inequality
3. Determining if an ordered pair is a solution to a linear equation in 2 variables

4. Add, subtract, multiply, and divide real numbers and raise a real number to an integer power
5. Add, subtract, multiply, and divide Polynomials
6. Simplify, add, subtract, multiply, and divide Radicals
7. Rules for Exponents
8. Greatest Common Factor (factoring)
9. Factor by Grouping
10. Factor trinomials of the form $x^2 + bx + c$
11. Factor trinomials of the form $ax^2 + bx + c$
12. Factor Perfect Square Trinomials
13. Factor the Difference of Two Squares
14. Factor Completely
15. Converting between Scientific Notation and standard notation

16. Order of Operations (manipulation)
17. Properties of Real Numbers (manipulation)
18. Simplifying Algebraic Expressions (manipulation)

19. Graphing in a Rectangular Coordinate System
20. Graphing Linear Equations by plotting points, using intercepts, and using the Slope-Intercept form
21. Graphing the solution to a Linear Inequality in one variable.
22. Graphing a System of Linear Equations in two variables
23. Rates of change (slopes)
24. Identifying Linear Equations (Linearity)
25. Solving Linear Inequalities in one variable
26. Finding the Equation of a Line (manipulation)
27. Solving Linear Equations in one variable
28. Solving formulas for a specified variable
29. Solving a System of Linear Equations in two variables (two methods)
30. Solving equations with degree 2 or greater by factoring
31. Two forms for the equation of a line (transforming back and forth)

32. Finding an unknown number word problem
33. Solving consecutive numbers (including odd and even) word problems
34. Solving dimension problems using geometric formulas
35. Solving Percent and Mixture problems
36. Solving table problems such as rate, time, and distance
37. Solving linear inequality problems
38. Solving linear equation in two variables problems
39. Solving System of 2 linear equations in 2 variables word problems
40. Solving factorable Quadratic Equation word problems

TENTATIVE SCHEDULE

T	8/30	Review of basics	1.3-1.4
R	9/1	Review of basics	1.5-1.8
T	9/6	Algebraic expressions, add./mult. properties of equality	2.1-2.3
R	9/8	Solving linear equations, problem solving	2.4-2.5
T	9/13	Problem solving, formulas, inequalities	2.6-2.9
R	9/15	Review	
T	9/20	TEST #1 (CH. 1-2)	
R	9/22	Coordinate system, graphing, intercepts	3.1-3.3
T	9/27	Slope, equations of lines	3.4-3.5
R	9/29	Equations continued	3.5
T	10/4	Systems of equations	4.1-4.2
R	10/6	Systems of equations, problem solving	4.3-4.4
T	10/11	Review	

R   10/13   TEST #2 (CH. 3-4)

T   10/18   Exponents   5.1

R   10/20   Add./subt./mult. of polynomials   5.2-5.3

T   10/25   Special products, negative exponents, scientific notation   5.4-5.5

R   10/27   Division of polynomials, radicals   5.6 & 8.1

T   11/1   Review

R   11/3   TEST # 3 (CH. 5)

T   11/8   GCF, factoring by grouping   6.1

R   11/10   Factoring $x^2 + bx + c$, $ax^2 + bx + c$ 6.2-6.4

T   11/15   Factoring binomials   6.5

R   11/17   Factoring strategy, quadratic equations   6.6

T   11/22   Instructor discretion

R   11/24   THANKSGIVING RECESS

T   11/29   Problem Solving; Review   6.7

R   12/1   TEST # 4 (CH.6)

T   12/6   Review

R   12/8   FINAL EXAM

F   12/9   Last day to withdraw from classes

T   12/13   Make – up

R   12/15   To be used as needed

12/29 Grades available on web (www.online.commnet.edu)

Attendance/Homework/Requirements

It is strongly suggested that students make every effort to attend ALL classes.   Homework will be assigned on a daily basis. All homework assignments must be completed. Students will be required to have a two-section math notebook. One section is to be dedicated to class notes while the other section will be dedicated to homework. The student's math notebook should be available to the instructor at each class. Students are allowed to use a calculator.
CELL PHONES MUST BE TURNED OFF DURING CLASS.

Methods of Evaluation/Make-ups

Tests will be announced. Unannounced quizzes may be given at the discretion of the instructor. Tests that are missed for any reason <u>cannot</u> be made up (with the exception of snow conditions). If a student misses one of the first THREE tests, a make-up test will be given at the end of the semester. A student can also use this make-up test to replace their lowest test grade. Final grades will be assigned according to the following:

IN ORDER TO MOVE ON TO MATH 137 STUDENTS MUST EARN A C (75 AVERAGE)

CLASS AVERAGE	FINAL GRADE
90 -100	A- / A
80 - 89	B- / B+
70 - 79	C- / C+
60 - 69	D- / D+
Below 60	F

College Withdrawal Policy

Students may withdraw, in writing at the Registrar's Office, for any reason until the end of the 10th week of classes. From the 11th week through the end of the 13th week, a student may withdraw with the signature of the instructor or advisor.

Statement on Disabilities

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the Disabilities Counseling Service at 383-5240. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. Please note that I cannot provide accommodations based upon disability until I have received an accommodation letter from the Disabilities Counselor. Your cooperation is appreciated.

College Withdrawal Policy

Class Cancellation

The Three Rivers web site provides a full listing of radio and television stations that alert students to school closings and delays. Go to: www.trcc.commnet.edu and click on General Information and Weather Procedures.

TENTATIVE HOMEWORK ASSIGNMENTS

(eoo – every other odd)

1.3	1-83 odd
1.4	1-89 odd
1.5	1-29 odd, 35-53 odd, 65-79 odd
1.6	1-67 odd, 79-87 odd
1.7	1-111 odd
1.8	1-89 odd

Chapter 1 Review/ Test: As needed

2.1	1-81odd
2.2	1,3,5,13 17-69 odd
2.3	1-79 odd
2.4	1-53 odd; pg. 105: 1-35 odd
2.5	1-37 odd
2.6	15-29 all, 31,45,46,49,55
2.7	23-26 all, 45,46,53
2.8	1-4 all,15,17,19,41,43
2.9	11-48 odd

Chapter 2 Review/Test: As needed

3.1	17-31 odd, 39-59 odd
3.2	1-41 odd
3.3	1-53 odd
3.4	1-57 odd
3.5	1-35 odd, 39-67 eoo, 69,71,75,77

Chapter 3 Review/Test: As needed

4.1	1-7 odd, 9-19 odd, 39-51 odd
4.2	1-37 odd
4.3	1-37 odd, 51,53
4.4	11, 13,17,19, 25, 27, 29,31,32, 33,35, 38

Chapter 4 Review/Test: As needed

5.1	1-103 odd
5.2	35-44 odd,55-69 odd
5.3	1-49 odd
5.4	1-77 odd
5.5	1-75 odd
5.6	1-27 odd, 28

Chapter 5 Review Test: As needed

8.1	1-63 odd

6.1	1-71 odd
6.2	1-59 odd
6.3	39-50 all
6.4	1-8 odd, 13-49
6.5	1-49 odd

Pages 400-401 odd

6.6	19-75 odd

Chapter 6 Review/Test: As needed