Elementary Algebra Syllabus

MAT K095-T3   CRN 12067 Spring 2016
Three Rivers Community College   Norwich, CT 06360
Max Wentworth, Instructor
Email: mwentworth@trcc.commnet.edu
Phone Number (860) 456-1804 (Please call between 10AM and 6PM only)
Monday/Wednesday 3:30-4:45 Room: D215
Office Hours: Monday 1:00PM-1:45PM and Wednesday 5:00PM-5:45 Room: D205E

Course Description

Through lecture, discussion of material, and practice, this course prepares students for college level courses. This course introduces functions, their graphs, modeling with functions. Topics include simplifying expressions, solving equation, using modeling to solve real world problems, systems of equations, expressions which contain exponents, and polynomials.

Method of Evaluation
1) Quizzes 10%
1) Take Home Assignments 10%
2) Tests 60%
3) Final 20%

Quizzes will be unannounced and at the beginning of class. Quizzes may not be made up.

Take Home Assignments will be due one week after they are assigned. Students are encouraged to work together on take home assignments, but each student is responsible for understanding the material. Late assignments will be accepted one class after they are due with 5 points taken off. A zero will assigned for any take home which is not handed in before or during the grace period.

Tests will be announced one week in advance. If you are going to be absent the day of a test, you **must** let me know, by email or phone before or on that day. Failure to do so will result in a zero for that test.

Final will be comprehensive.

Academic Integrity

Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to succeed in the classroom and beyond. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. In this class and in the course of your academic career, present only your own best work; and act at all times with honor.

ALEKS Class Code **QG3QJ-AMEJQ** (Optional)

ALL CELL PHONE WILL BE SHUT OFF AND PUT AWAY DURING CLASS

Grades	Equivalent	Quality Points
A	93-100	4.0
A-	90-92	3.7
B+	87-89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	77-79	2.3
C	73-76	2.0
C-	70-72	1.7
D+	67-69	1.3
D	63-66	1.0
D-	60-62	0.7
F	Below 60	0.0

Required Text

Elementary and Intermediate Algebra Edition: 5th, Author: Baratto, ISBN: 9780073384467, Copyright Year: 2014 Publisher: McGraw-Hill

Disabilities Statement

If you have a disability that may affect your progress in this course, please meet with a Disability Service Provider (DSP) as soon as possible. You can make an appointment with a DSP by calling (860) 383-5217. Please note:
1.) For academic adjustments, you will have to provide documentation of your disability to the DSP.
2.) Instructors cannot provide adjustments until you have delivered written authorization (from a DSP) to the instructor.
3.) Adjustments take effect when you deliver your written authorization to the instructor in person (provided there is adequate time for the instructor to make necessary arrangements).
4.) Adjustments do not apply to tests/assignments that were due prior to your delivering written authorization to your instructor in person.

College Withdrawal Policy

Students may withdraw, at the Registrar's Office, for any reason on or before May 9, 2016.

Resources

Free tutoring is available at the Tutoring and Academic Success Center (TASC).
Please use the service as needed.

All students are required to maintain a learning portfolio in Digication that uses the (Three Rivers) College Template.

Course Outcomes

After the successful completion of the course the student will be able to:

0. Pre-algebra Review
Add, subtract, multiply and divide fractions
Add, subtract multiply and divide integers
Use order of operations to simplify expressions

1. From Arithmetic to Algebra:
Simplify algebraic expressions
Solve algebraic equations using the addition and multiplication properties of equality
Solve linear inequalities

2. Functions and Graphs:
Solve problems involving rate, time and distance
Solve geometric problems involving perimeter and area
Graph inequalities on a number line
Use set builder and interval notation
Find the union and intersection of finite sets
Identify whether a relation is a function
Find the domain and range for a continuous function

3. Graphing Linear Functions:
Graph linear functions
Write equations for linear functions
Write equations for parallel and perpendicular lines

4. Systems of Linear Equations:
Solve a system of linear equations by graphing
Solve a system of linear equations by substation
Solve a system of linear equations by the addition method
Solve word problems using systems of equations

5. Exponents and Polynomials:
Use the product rule, quotient rule, power rule for exponents
Use the zero exponent rule and negative exponents
Use scientific notation
Add and subtract polynomials
Multiply polynomials
Square a binomial
Divide a polynomial by a monomial

7. Roots and Radicals
Evaluate expressions containing radicals
Simplify expressions containing radicals
Use the Pythagorean Theorem

Elementary and Intermediate Algebra by Baratto, Bergman 5th ed

Section	Topics	Homework	
Ch.0	**Review of Pre-algebra**		
0.1	Review of fractions	p. 10	1 – 91 every other odd
0.2	Real Numbers	p. 19	1 - 69 odd
0.3	Adding and subtracting real numbers	p. 28	1 - 73 odd
0.4	Multiplying and dividing real numbers	p. 39	1 – 77 odd
0.5	Exponents and Order of Operations	p. 48	1 - 75 odd
Ch. 1			
1.1	Algebraic Expressions	p. 63	1, 5, 7, 19, 21, 25, 27
1.2	Evaluating algebraic expressions	p. 75	1-21
1.3	Simplifying Algebraic Expressions	p. 87	27-67, 81-89
1.4	Solving equations using addition property	p. 102	41-61, 71 -77
1.5	Solving equations using multiplication property	p. 113	13-39, 59-63
1.6	Combining the rules to solve equations	p. 126	11-59, 73, 75, 85, 87
1.7	Linear inequalities	p. 141	25-33, 38-55
Ch. 2			
2.1	Formulas and problem solving	p. 161	1-21, 31-35
2.2	Sets and set notation	p. 175	15-27, 35-43,
2.3	Two-variable equations	p.186	1, 7, 15, 17
2.4	The Cartesian coordinate system	p. 198	1-21, 35, 39, 51
2.5	Relations and Functions	p. 212	17-21, 33, 3741-47
2.6	Tables and graphs	p. 226	7-21, 45-49
Ch. 3			
3.1	Graphing linear Functions	p. 256	1, 3, 7, 11, 21, 23
3.2	The Slope of a line	p.279	7-15, 19-41, 47-51, 55, 59,
3.3	Linear equations	p. 294	1, 3, 5, 11-21, 23-31, 33-43
Ch. 4			
4.1	Systems of Linear equations	p. 347	5 - 23, 25-31, 33-38
4.2	Solving systems in one variable graphically	p. 358	1-9
4.3	Solving systems in 2 Variables	p. 373	1-25, 33, 35, 51-55
Ch. 5			
5.1	Positive Integer Exponents	p. 414	1-51
5.2	Integer Exponents and Scientific notation	p. 427	1-35, 83, 89, 91, 97, 105, 107
5.3	An introduction to Polynomials	p. 436	1 -15, 37
5.4	Adding and subtracting Polynomials	p. 444	11, 17, 23, 31, 37
5.5	Multiplying Polynomials	p. 455	1-19, 25-37, 49-53, 61-67
5.6	Dividing Polynomials	p. 465	1-19
Ch.7			
7.1	Roots, radicals, Pythagorean Theorem	p. 560	1-9, 59-63