Syllabus
Math 172 – College Algebra
Spring 2016

Course Number 12864 Section T2
TR 9:30 – 10:45 , Room D104

Instructor: Henry Kopij
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Office Hours: TR 1:15-2:15 D205

TEXTBOOK: College Algebra by Beecher , 4th edition.

Course Description: This course is a rigorous algebra course, that strengthens the proficiency with algebraic skills and the conceptual understanding needed to be successful in the Calculus sequence. The topics include: sets, polynomial, exponential, logarithmic and rational functions, rational exponents, right triangle trigonometry, exponential, logarithmic and rational equations, linear and quadratic inequalities, absolute value equations and inequalities, linear and non linear systems.

Required Materials:
- Textbook Title: College Algebra by Beecher, 4th edition
- Notebook or binder
- TI 83 or 84 graphing calculator
- Access to MyMathLab software (optional)

ATTENDANCE : Attendance will be taken during every class. You are expected to attend each class and to be in class on time. You are also responsible for any material covered in class, including homework assignments and scheduling of exams.

GRADING: 1) Quizzes 15%
                2) Tests 60%
                3) Final 25%

	B+ = 87-89	C+ = 77 - 79	D+ = 67 -69
A = 93-100	B = 83-86	C = 73 - 76	D = 63-66

A- = 90-92   B = 80-82   C- = 70 - 72   D- = 60-62

MAKE-UP TESTS : Attendance on test days is mandatory. You will be informed of the dates at least a week in advance. Make-up tests may be given with prior consent only and need to be made up before the next scheduled class meets.

HOMEWORK : Homework will be assigned during each class and will be gone over on the following class. Generally, homework will not be graded, however I may give weekly quizzes that may be taken directly from the homework.

CLASS PARTICIPATION: I strongly encourage everyone to participate in class and to ask any questions that you may have. If you miss a class be sure to get the notes and assignments that you may have missed from a classmate.

Support Services: Free tutoring is available in room C-117 at the Thames Tutoring Center (860-885-2311). Appointments are required in advance.

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. Please note that accommodations cannot be provided until you provide written authorization from a DSP.

_TRCC Disabilities Service Providers Counseling & Advising Office Room A-119	
Matt Liscum (860) 383-5240	☐　　Physical Disabilities ☐　　Sensory Disabilities ☐　　Medical Disabilities ☐　　Mental Health Disabilities
Chris Scarborough (860) 892-5751	☐　　Learning Disabilities ☐　　ADD/ADHD ☐　　Autism Spectrum

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 present only your own best work.

Cell Phones and Beepers: Cell phones and beepers should be off during class.

Class Cancellation:
myCommNet Alert is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college is delayed or closed due to weather.

All students are encouraged to sign up for myCommNet Alert. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site. http://www.trcc.commnet.edu/div_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html

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

1. Define absolute value, find distances on the number line, on the coordinate plane.
2. Simplify expressions with rational exponents, write them in radical form, simplify, combine, rationalize radical expressions.
3. Solve linear and quadratic inequalities, absolute value equations and inequalities, express answers in interval form.
4. Perform operations on complex numbers, conjugates, represent complex numbers graphically.
5. Perform operations on radical expressions, rational exponents, solve radical equations.
6. Find the domain and range of functions, combine functions, identify odd and even functions, graph piece-wise defined functions, find compositions of functions, inverses, and transformations of functions.
7. Find the characteristics of polynomial functions, solve polynomial equations, find zeroes (roots) and x-intercepts of polynomials, apply the Fundamental theorem of Algebra, The Remainder and Factor Theorems, analyze end behavior.
8. Graph rational functions, find vertical, horizontal, slant asymptotes.
9. Graph exponential and logarithmic functions, use properties of exponentials and logarithms, solve exponential and logarithmic equations.
10. Solve systems of linear equations in several variables.
11. Solve nonlinear systems of equations.
12. Apply the Right Triangle Trigonometry.

Digication:
All students are required to maintain an online learning portfolio in Digication that uses the college template. Through this electronic tool students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her learning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students will have the option to create multiple portfolios

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Text: <u>College Algebra 4th ed.</u> - Beecher

Chapter	Section	Assignment
1	1.1	72/11, 21, 31, 41, 51, 61, 75, 87
	1.2	86/5, 15, 19, 21, 25, 31, 35, 39, 41, 45, 55, 65, 75
	1.3	103/7, 17, 27, 37, 47, 57, 67, 73
	1.4	118/1, 7, 13…..55
	1.5	133/15, 25, 35…..75
	1.6	142/3, 13, 23, 33, 39, 45
2	2.1	166/5, 15, 23, 33, 35, 41, 45, 51
	2.2	177/1, 5, 11, 19, 29, 39, 49
	2.3	185/3, 15, 21, 23, 33, 39
	2.4	206/1, 3, 5, 19, 33, 35, 39, 41, 53, 63, 107, 109, 113
3	3.1	239/7, 17, 27…87
	3.2	253/1, 11, 21…..91, 99
	3.3	267/3, 9, 13, 17, 19, 23, 25, 27, 31, 39, 41, 45
	3.4	278/1, 11, 21, 31, 41, 51, 61, 71, 83
	3.5	283/1, 13, 17, 21, 29, 35, 43, 51, 55
4	4.1	306/1 – 41, eoo
	4.2	318/1, 9, 13, 17, 19, 25, 29, 33, 39, 43, 45
	4.3	326/3, 7, 11, 19, 23, 25, 31, 35, 41, 45, 51
	4.4	337/1, 3, 21, 37, 43, 51, 55, 61, 69, 81, 97
	4.5	357/1, 3, 13, 17, 21, 23, 27, 35, 37, 57, 59
	4.6	368/1, 3, 5, 25, 29, 55, 57, 61
5	5.1	396/1, 5, 13, 17, 21, 25, 27 , 33, 43, 47, 51, 69, 75
	5.2	408/1, 3, 7, 9, 13, 15, 27, 29, 49, 51
	5.3	426/1 – 77 eoo, 97
	5.4	437/1 – 73 eoo
	5.5	448/1 – 61 eoo
	5.6	459/1, 3, 7, 9, 13

6	6.1	490/1, 3, 5, 9, 19, 23, 31, 41, 57
	6.2	499/1, 5, 9, 13, 29
	6.8	557/3, 5, 13, 17, 23 (If time permits)