THREE RIVERS COMMUNITY COLLEGE
Intermediate Algebra Math 137
Fall 2016

Course Number: 31243 Section T7
TR 11:00 pm – 12:15 pm, Room D212

Instructor: Henry Kopij
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Office Hours: 10:00 am – 11:00 am D205
                or by appointment

Text: **Elementary & Intermediate Algebra 5th Ed**., Barrato

Course Description:
This course cultivates understanding and different representations of functions. The course covers linear, quadratic, exponential, rational, radical functions, equations and expressions and operations on them with emphasis on modeling and solving real world problems.

Course Outcomes:

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

1. Find the greatest common factor of a set of terms.
2. Factor a monomial from a polynomial.
3. Factor a polynomial by grouping.
4. Factor a difference of squares.
5. Factor sums and differences of cubes.
6. Factor a perfect square trinomial.
7. Completely factor trinomials.
8. Factor a trinomial that is quadratic in form.
9. Use the ac method to determine factorability.
10. Use the ac method to factor a trinomial.
11. Recognize factoring patterns.
12. Apply appropriate factoring strategies.
13. Determine if a polynomial is prime.
14. Solve quadratic equations by factoring.
15. Find zeroes of a quadratic function.
16. Use factoring to solve problems.
17. Evaluate, estimate and simplify radical expressions.

18. Apply the Pythagorean Theorem.

19. Use the product and quotient properties to simplify radical expressions.
20. Add, subtract, multiply and divide radical expressions.
21. Solve equations containing radical expressions, including two radicals and cube root equations.
22. Simplify expressions with rational exponents.
23. Use a calculator to estimate the value of a rational exponent.
24. Convert between radical and exponential expressions.
25. Use the imaginary number i.
26. Add, subtract, multiply and divide complex numbers.
27. Solve quadratic equations by using the square-root method, completing a square and the quadratic equation.
28. Use the discriminant to classify quadratic equations.
29. Use the quadratic equation to solve applications.
30. Find the axis of symmetry and vertex of a parabola and graph the curve.
31. Solve quadratic equations by graphing.
32. Solve equations that are in quadratic form.
33. Evaluate and simplify rational expressions.
34. Use rational expressions to solve applications.
35. Add, subtract, multiply, divide and simplify rational expressions.
36. Find the LCD of unlike rational expressions.
37. Solve rational equations, proportions and formulas for a variable.
38. Use rational expressions to solve applications.
39. Graph exponential functions and use exponential functions to solve applications.
40. Solve an exponential equation.

Required Materials:
Three-ring notebook and tabbed dividers to create sections for class notes and homework. The homework section should be organized so that the instructor can check it periodically in order to determine a homework grade.

Calculators – A graphing calculator is required for this course**.** TI-83 or TI-84 calculators are recommended for this course. You will be required to bring a calculator to every class and to use it for homework assignments and exams. **Cell phones will not be allowed as calculator**. **No handheld devices besides calculators are allowed when testing.**

Attendance: Students who are absent 3 times will have one point added to their final grade, 2 absences will add two points, 1 or fewer will add 3 points to the final grade. A 10 minute weekly quiz will be given at the beginning of class and no make-ups are allowed.

Grading Criteria:
4 announced tests each worth 100 points (60% of grade)
Weekly quizzes 10% of grade (Best 8 of 10 scores worth 100 points)
Homework 10% of grade worth 100 points
Final Exam worth 200 points (20% grade)

Homework: Homework will be assigned during each class and will be gone over on the following class. Homework Assignments from the textbook (10% of grade). Assignments are listed in the syllabus. All work must be kept in a notebook with assignments clearly listed (showing all work) where they will be viewed by the instructor. All assignments must be completed prior to the test date for each scheduled exam.

Exams: Will be administered in class. **No make-up exams will be allowed unless there is an unavoidable situation that can be documented.** A student must contact the instructor on the day of the exam or earlier in order to be allowed to take a make up exam. If a student misses an exam the final exam grade will be used as a replacement for missed exam. Any subsequent missed tests will result in a zero. Students that take all the exams may use their final exam to replace their lowest exam grade.

Extra Credit – No "extra credit" is given in this course. **Extra credit is factored in when considering my attendance policy and the ability to drop the lowest quiz and exam grades.**

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

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

Inclement Weather: You can check for delays or cancellations by going to www.trcc.commnet.edu or by calling 860 886-0177.

CLASS PARTICIPATION: I strongly encourage everyone to participate in class and to ask any questions that you may have.

Plagiarism and Academic Honesty:
 At TRCC, we expect the highest standards of academic honesty. The Board of Trustees' Proscribed Conduct Policy prohibits cheating on examinations, unauthorized collaboration on assignments, unauthorized access to examinations or course materials, plagiarism.

Disabilities   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.

College Disabilities Service Provider

Matt Liscum, Counselor (860) 215-9265 Room A113	• Learning Disabilities • ADD/ADHD • Autism Spectrum • Mental Health Disabilities
Elizabeth Willcox, Advisor (860) 215-9289 Room A113	• Medical Disabilities • Mobility Disabilities • Sensory Disability

GOOD LUCK

Digication Statement:

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

Math 137 Intermediate Algebra

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Chapter	Section	Assignment
6	6.1	486/3-81 mult of 3
	6.2	497/3-66 mult of 3, 85
	6.3	507/18-66 mult of 3, 83
	6.4	517/5-105 mult of 5, 121
	6.5	524/33-81 eoo
	6.6	537/5-60 mult of 5, 61, 65, 71, 79, 83, 89

Exam 1

7	7.1	560/1-63 odd
	7.2	573/1-61 odd
	7.3	584/3-21 mult of 3, 33-81 mult of 3, 87, 89
	7.4	593/3-57 mult of 3
	7.5	603/3-96 mult of 3
	7.6	611/1-49 odd

Exam 2

8	8.1	633/3-63 mult of 3
	8.2	652/3-69 mult of 3
	8.3	665/24-42 mult of 3, 55
	8.4	678/3-33 mult of 3, 41, 43, 45

Exam 3

9	9.1	698/3-81 mult of 3
	9.2	710/3-39 mult of 3, 43
	9.3	721/5-55 mult of 5
	9.6	762/3-81 mult of 3

10	10.4	819/3-60 mult of 3

Exam 4

Final