

Math 137 Syllabus for Spring 2014

Course: Intermediate Algebra MAT* K137

Prerequisites: Math 095 with a grade of B- or better OR Acceptable Placement Score

Three Rivers Community College

CRN: 10415

Instructor: Linda Edmonds

Phone #: (860) 456-3879 ext 389 (7AM-3PM) – leave a message

E-mail: Linda.edmonds@ct.gov - SUBJECT – MATH 137 (please include this in subject line!)
ledmonds@trcc.commnet.edu

Text: Elementary & Intermediate Algebra: Graphs and Models; 4th Edition by Bittinger, Ellenbogen, Johnson

MyMathLab Course Access Code: edmonds03973

HW, quizzes and Midterm will be online. Register at www.pearsonmylabandmastering.com for my course.

Use of Calculators: This course **requires** the use of a **TI83 Plus or TI84 Plus** graphing calculator.

(TI 86 or TI 89 – Engineering Tech students) SUPPORT FOR TI 86 OR TI 89 SEE TUTOR CENTER

Meeting Time: Wednesday 6:30 to 9:15 PM

Office Hours: Email or call for an appointment **before or after class**

Class Cancellation: In case of increment weather, check the college website for class cancellations or call 860-886-0177 for recorded message on the college phone.

Course Description: This course continues the development of algebraic skills and concepts. It also touches lightly on right triangle trigonometry. The topics include linear equations, right triangle trigonometry applications, functions and graphs, applications of systems of equations, inequalities, rational expressions and equations, operations on radicals and radical equations, rational exponents, quadratic equations, exponential and logarithmic functions. Classwork is carried out in small groups with active notetaking and strategic concept analysis.

Course Objectives: The objective of this course and skills are listed below on Math 137 Course Outcome list. Students should review the list and focus on the mastery of these outcomes and foundational skills for those outcomes.

Course Evaluation: The course is set up to be worth 1000 points broken down as follows:

Weekly Attendance / Participation/HW	200 points (15/week, 1 excused absence with no penalty if email is sent before class)
6 Chapter Quizzes based on HW Problems	300 points
Midterm Exam	200 points
Final Exam	300 points

There will be 6 online quizzes in MyMathLab / Course Compass based on online Homework problems. A midterm exam will be given which must be completed online. ALL quizzes and midterm can have corrections submitted by the deadline for partial credit. Must have explanations for errors and corrections. A cumulative final exam will be given **in class**. **In general, make-up of a missed test/ quiz is not allowed. I MUST RECEIVE AN EMAIL BEFORE 3PM ON DUE DATE FOR CONSIDERATION**

OF AN EXTENSION. Exceptions to this rule may be made for extraordinary circumstances (grade may be adjusted). Test dates will be announced a week in advance.

	B+ 87-89	C+ 77-79	D+ 67-69	
A 94-100	B 83-86	C 73-76	D 63-66	F <60
A- 90-93	B- 80-82	C- 70-72	D- 60-62	

Attendance: For the learning process to be effective, you are expected to attend each class regularly, to arrive on time, and to take exams on their assigned dates. If you miss a class, you are still responsible for the material covered, homework assigned, and any announcements. If you will be missing a class for any reason, please call or email me as soon as possible.

Homework: All homework assignments are to be completed with MyMathLab online. Students will be expected to do sections of homework they determine necessary for their learning needs. Weekly assignments will be posted and opened after class. Students are expected to complete assignments weekly but will also be able to return to each assignment to redo until the semester ends.

Official Communication: All official class communication will be through your TRCC email (check on commnet) and through MyMathLab.

Support Services: TASC is the college's free tutoring and academic success center. Sign up for a tutor or drop in as needed to the Thames Tutoring Center (860 885-2311) located in room C-117. Peers and peer study groups are also good resources. Meeting with me by appointment is another option available.

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.

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; clearly document the sources of the material you use from others; and act at all times with honor. Please see the Three Rivers Community College catalog for the college's Academic Integrity Policy.

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
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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.

Withdrawal Policy: Students may withdraw, in writing at the Registrar's Office, for any reason up through **May 12, 2014**. No withdrawals will be accepted after **May 12, 2014**.

Cellular Phones and beepers: Cellular phones and beepers **must be turned off** during class. Phones are not to be answered in class and texting in class will result in loss of class points that day. Please see me if extenuating circumstances should arise. PLEASE – NO TEXTING IN CLASS! Please feel free to get up and take your calls outside the classroom.

YOUR GRADES

[illegible]

MAT137 Course Outcomes

1. Factor an algebraic expression using a combination of greatest common factor, difference of two squares, sum or difference of two cubes, and/or trinomial factoring .
2. Use factoring procedures to solve equations and problems.
3. Solve compound linear inequalities of the form $C < ax + b < d$. Express answer algebraically, graphically, and using interval notation.
4. Isolate a particular variable in a literal equation.
5. Use quadratic formula to find exact values of a quadratic equation with irrational or imaginary solutions. Approximate the irrational solutions.
6. Solve basic exponential and logarithmic equations.
7. Evaluate basic logarithmic expressions, and convert between logarithmic and exponential form.
8. Solve an exponential equation that requires the use of logarithms.
9. Graph a quadratic function by finding the vertex, x- and y-intercepts.
10. Relate the discriminant in the quadratic formula to the graph of a parabola.
11. Graph a basic exponential or logarithmic function.
12. Know the graphical relationship between exponential and logarithmic functions.
13. Express the slope as a rate of change using appropriate units.
14. Write the equation of a linear function given data. Use functional notation in the answer.
15. Write the equation of an exponential function given data. Use functional notation in the answer.
16. Solve a 2×2 and 3×3 system of equations.
17. State the domain of linear, quadratic, exponential and logarithmic functions.
18. Evaluate functions using numerical and algebraic values.
19. Identify domain (inputs) and range (outputs) graphically for basic functions.
20. Interpret functional notation in a variety of application problems.
21. Determine if a relation is a function by looking at a graph, table, or equation.
22. Solve a rational equation and check for extraneous solutions.
23. Solve a radical equation that produces a second-degree equation. Check for extraneous solutions.
24. Know and apply the rules of integer and fractional exponents
25. Add, subtract, multiply, divide rational expressions. Reduce the answers.
26. Simplify a complex fraction.
27. Know the meaning of rational exponents and their relationship to radical form.
28. Simplify radical expressions with emphasis on cube roots and lower.
29. Rewrite radical expressions by rationalizing numerator or denominator.
30. Add, subtract, multiply, and divide radical expressions.
31. Solve application problems involving the Pythagorean Theorem.
32. Given a quadratic model, find and interpret the maximum or minimum values, and the intercepts.
33. Solve an application problem involving quadratic equations.
34. Solve an application problem that involves rational expressions.
35. Solve an application problem involving a given exponential or logarithmic model.
36. Solve applications involving linear systems.
37. Find the six trigonometric values of an acute angle
38. Solve triangles using right triangle trig, distinguish between the angle of depression and elevation.
39. Solve applied problems using right triangle trigonometry

COURSE SCHEDULE

WEEK	DATE	TOPICS	HW SETS	TEST OPENS (Subject to change)	OPTIONAL CORRECTIONS DUE
1	1/29	Course Intro Pearson Math Lab Demo / Overview Review Ch. 5 Polynomials Ch 6.1 – 6.4 Polynomial Factorizations	Ch. 5 HW Ch. 6 HW # 1-5		
2	2/5 SNOW CLOSE	Ch 6.5 - 6.7 Polynomial Factorizations & Equations	Ch. 6 HW #6 - 12		
3	2/12	Trig Functions	Worksheet Packet	Quiz # 1 – Ch 6	
4	2/19	Ch 7.1 – 7.4 Rational Expressions, Equations			Quiz # 1 – Ch 6
5	2/26	Ch 7.5 – 7.8 Rational Expressions, Equations, and Functions		Quiz #2 Trig Functions	
6	3/5	Ch 8 Inequalities			Quiz #2 Trig Functions
7	3/12	Ch 9.1 & 9.2 Systems of Equations in 3 variables		Quiz #3 (Ch 7) Midterm Exam (Ch 6, 7, 8, 9)	
	3/19	SPRING BREAK – NO CLASS			
8	3/26	Ch 10 Exponents & Radical Functions		Quiz #4 – Ch 8 & 9	Quiz #3 (Ch 7)
9	4/2	Ch 11 Quadratic Functions & Equations			Quiz #4 – Ch 8 & 9
10	4/9	Ch 11 Quadratic Functions & Equations		Quiz #5 (Ch 10)	Midterm Exam (Ch 6, 7, 8, 9)
	4/16	NO CLASS			
11	4/23	Ch 12 Exponential & Logarithmic Functions		Quiz #6 – Ch. 11	Quiz #5 (Ch 10)
12	4/30	Ch 12 Exponential & Logarithmic Functions			Quiz #6 – Ch. 11
13	5/7	REVIEW			

14	5/14	FINAL EXAM		FINAL EXAM (50% - Ch 10, 11, & 12 50% Ch 6 -9)	
	5/21	FLEX DAY IF NEEDED			