

Fall 2018 Intermediate Algebra MAT* K137, Section-T2, CRN-31525

Class Hours:	Tuesday & Thursday from 2:00 – 3:15 pm	
Class Location:	D126	
Class Textbook:	Elementary and Intermediate Algebra, 5th Edition by Baratto & Bergman	
Instructor:	Name: Office:	Mark Vesligaj C128
	Office Hours:	Monday from $5:00 - 6:00 \text{ pm}$ Tuesday from $11:40 - 12:40 \text{ pm}$
		Wednesday from $4:15 - 5:15$ pm
		or by appointment. Please set appointments in advance.
	Phone:	860 215 9442 (office)
	Email:	mvesligaj@trcc.commnet.edu (preferred contact method)

Course Description:

A review of the fundamental operations of algebra and an extensive study of relations, functions, exponents, radicals, quadratic equations and inequalities, systems of linear equations and inequalities in two and three variables, and absolute value equations and inequalities. This course is recommended for students who have some knowledge of elementary algebra but require improved skills as a prerequisite to further study in mathematics and science.

Special Needs:

Any student in the class who may have special needs should feel free to contact me. I am interested in any situation which may impact your ability to be successful in this course. If you are a student with a disability and you believe you will need accommodations for this class, it is your responsibility to please contact one of the college's Disability Service Providers (DSP) as soon as possible. Please note that accommodations cannot be provided until you provide written authorization from a DSP.

For more information, contact Advising and Counseling Center at 860-215-9017

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.
Class Cancellation :	In case of inclement weather, check the college website for class
	cancellations or call 860-215-9000 for recorded message.
MyCommNet Alert:	<i>MyCommNet</i> 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 <i>MyCommNet</i> Alert. A tutorial is available on
	the Educational Technology and Distance Learning Students page of the web
	site
	http://www.tree.commnet.edu/div_it/educationaltechnology/Tutorials/mvCo
	mtp.// www.tree.commet.cou/drv_fr/cducationalteenhology/Tutonals/myeo
	mminetAlert/NIK3.ntml

BOARD OF REGENTS FOR HIGHTER EDUCATION AND CONNECTICUT STATE COLLEGES AND UNIVERSITIES POLICY REGARDING SEXUAL MISCONDUCT REPORTING, SUPPORT SERVICES AND PROCESSES POLICY

Statement of Policy for Public Act No. 14-11: An Act Concerning Sexual Assault, Stalking and Intimate Partner Violence on Campus:

"The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of sexual misconduct, intimate partner violence and stalking. It is the intent of the BOR and each of its colleges or universities to provide safety, privacy and support to victims of sexual misconduct and intimate partner violence."

United States Department of Education and Office of Civil Rights Title IX Statement of Policy:

"Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX.

Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX – regardless of their sex, sexual orientation, gender identity, part-or full-time status, disability, race, or national origin-in all aspects of a recipient's educational programs and activities."

If any student experiences sexual misconduct or harassment, and/or racial or ethnic discrimination on Three Rivers Community College Campus, or fears for their safety from a threat while on campus, please contact:

Maria Krug, Title IX Coordinator OR Ken Saad, Equity & Diversity Officer Three Rivers Community College 574 New London Turnpike, Norwich CT 06360 (860) 215-9208, MKrug@trcc.commet.edu

OR

(860) 215-9319, KSaad@trcc.commet.edu

Academic Integrity:	Academic integrity is essential to a useful education. Failure to act with academic integrity severely limits a person's ability to success 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.
Withdrawal:	A student who finds it necessary to discontinue a course must complete a "Withdrawal Request Form" available in the Registrar's office within the time limits of the semester calendar. <u>Students who do not withdraw, but stop attending will be assigned an "UF" which may impact their financial aid status</u> . The last day to withdraw from classes can be found on the Academic Calendar the college website.
Homework:	There will be regular homework assignments for this course. However, the homework will not be collected and graded. It is up to the student to keep up with the assignments and ask questions regarding the homework at the beginning of the following class.
Grading:	Your final grade in this course will be comprised of the following components:

- Quizzes: There will be short quizzes throughout the semester (approximately one quiz per week). Quizzes will be administered at the beginning of class (or will be a take-home quiz from the homework set). Those students arriving late or who miss that class will not be allowed extra time to complete the quiz or make the quiz up.
- Exams: There will be three scheduled exams.

Final Exam: There will be a cumulative final exam.

Your final grade in this course is determined by weighting the above three components in the following manner:

Quizzes:	20%
Exams (3):	60%
Final Exam:	20%
TOTAL:	100%

<u>Grading Equivalents:</u> A: 93 – 100, A-: 90 – 93

B+: 87 -89, B: 83 - 86, B-: 80 - 82 C+: 77 - 79, C: 73 - 76, C-: 70 - 72 D+: 67 - 69, D: 63 - 66, D-: 60 - 62 F below 60 N if the student completed less than 60% of work

<u>Attendance:</u> It is very important that you attend **ALL** classes. Your attendance in the classroom, participation in classroom work /projects and preparation for each class is required and is essential to your success in the course.

<u>Support Services:</u> Tutorial services.

Course Objectives and Outcomes:

At the completion of MAT*137, the student will be able to do the following:

Linear Functions

- 1) Provide multiple representations (e.g., words, symbols, graphs, tables) of linear functions by hand and/or using technology
- 2) Determine identifying characteristics of linear functions
- 3) Model and solve real world applications with linear functions (e.g., car depreciation) and systems of linear equations

Quadratic Functions and/or Expressions

- 1) Provide multiple representations of quadratic functions or expressions by hand and/or using technology
- 2) Determine identifying characteristics of quadratic functions or expressions (e.g., factors)
- 3) Evaluate, simplify, and perform operations on quadratic functions or expressions
- 4) Solve quadratic equations algebraically (e.g., factoring, completing the square, and quadratic formula with rational solutions) and/or graphically
- 5) Solve real world applications involving quadratic equations and functions

Exponential Functions and/or Expressions

- 1) Provide multiple representations (e.g., tables, graphs, symbols) of exponential functions or expressions by hand and/or using technology
- 2) Determine identifying characteristics of exponential functions or expressions
- 3) Evaluate, simplify, and perform operations on exponential functions or expressions
- 4) Identify real world applications involving exponential functions and/or solve graphically

Rational Functions and/or Expressions

- 1) Provide multiple representations of simple rational functions or expressions by hand and/or using technology
- 2) Determine identifying characteristics of rational functions or expressions
- 3) Evaluate, simplify, and perform operations on simple rational functions or expressions
- 4) Solve simple rational equations algebraically and/or graphically
- 5) Solve real world applications involving rational functions

Radical Functions and/or Expressions

- 1) Provide multiple representations of simple radical functions or expressions by hand and/or using technology, with primary emphasis on square root
- 2) Determine identifying characteristics of radical functions or expressions
- 3) Evaluate, simplify, and perform operations on simple radical functions or expressions
- 4) Solve simple radical equations algebraically and/or graphically
- 5) Solve real world applications involving radical functions
- 6) Identify imaginary numbers

Mathematical Practices

- 1) Make sense of problems and persevere in solving them.
- 2) Reason abstractly and quantitatively.

- 3) Construct viable arguments and critique the reasoning of others.
- 4) Model with mathematics.
- 5) Use appropriate tools strategically.6) Attend to precision.
- 7) Look for and make use of structure.
- 8) Look for and express regularity in repeated reasoning

Chap/Sect	Topic Exercises			
61	An Introduction to factoring: n486/9 13 31 39 43 59 67 71 79 82			
62	Factoring special products: $p/490/9$, 13, 31, 39, 43, 59, 67, 71, 79, 82			
6.3	Factoring: Trial and Error: $n507-508/17$ 22 43 53 54 57			
6.4	Factoring: The ac method: p507-500/17, 22, 45, 55, 54, 57 Factoring: The ac method: p517-518/2, 15, 21, 31, 32, 38, 40, 59, 60, 78, 82			
6.5	Factoring strategies: p524-525/1. 17. 23. 31. 43. 44. 53. 59. 77. 81			
6.6	Factoring and problem-solving: p537-539/5, 10, 21, 35, 45, 53, 58, 72, 90			
	Exam #1			
Ch. 7				
7.1	Roots and radicals: p560 & 570/1, 9, 14, 38, 49, 50, 57, 58, 69, 72			
7.2	Simplifying radical expressions: p573/1, 2, 10, 26, 27, 41, 49, 71, 72			
7.3	Operations on radicals: p584-587/1, 6, 11, 20, 33, 58, 61, 67, 75, 89			
7.4	Solving radical equations: p593-594/4, 8, 9, 16, 26, 27, 40, 48			
7.5	Rational exponents: p603-604/1, 5, 6, 15, 23, 33, 46, 53, 65, 69			
7.6	Complex numbers: p611-612/1, 5, 11, 15, 27, 36, 40, 51, 55			
	Exam #2			
Ch. 8				
8.1	Solving quadratic equations: p633-635/1, 8, 11, 22, 34, 35, 46, 55, 63, 83			
8.2	The quadratic formula: p651-653/2, 5, 8, 21, 29, 46, 55, 72, 73			
8.3	An introduction to parabolas: p665-667/1, 2, 3, 9, 14, 21, 25, 35, 45			
8.4	Quadratic equations and problem solving: p678-679/1, 3, 6, 23, 31, 35, 37			
Ch. 9				
9.1	Simplifying rational expressions: p699-700/2, 10, 18, 25, 36, 48, 67, 74, 79			
9.2	Multiplying & dividing rational expressions: p710-711/2, 6, 11, 17, 28, 34, 37, 44			
9.3	Adding & subtracting rational expressions: p721-723/1, 11, 23, 33, 36, 43, 55, 60			
9.6	Rational equations and problem solving: p762-765/2, 3, 18, 25, 51, 61, 67, 81			
	Exam #3			
Ch.10				
10.4	Exponential functions: p819-821/1, 2, 3, 10, 25, 37, 51, 59			
<u>10.7</u>	Logarithmic and exponential equations: p859-861/1, 2, 14, 21, 31, 39, 47, 53, 57			
	FINAL EXAM			

Pacing Calendar, HW Assignments, and Exam Schedule - subject to change