

Syllabus (Fall 2019)
MAT 137 – Intermediate Algebra
MW, 8:00 am - 9:15 am, D215

Course Information

- **Instructor Information**

Name: Kathryn Dowden
Office: Adjunct Office – TBD

Office Hours: By appointment
Email: kdowden@trcc.commnet.edu

- **Course Description**

Prerequisite: MAT* K095 or MAT* K095I with a “B-#” grade or better or appropriate placement through multiple-measures assessment process.

This course cultivates understanding and different representations of functions. Topics covered include linear, quadratic, exponential, rational, radical functions, equations, and expressions with emphasis on modeling and solving real world problems. A graphing calculator is required.

- **Required Materials**

Text: *Elementary and Intermediate Algebra*, 5th ed. by Baratto & Bergman.

Graphing calculator is needed.

No TI-Inspire or equivalent calculators with computer algebra systems will be permitted. Cell phones are not permitted as calculators.

- **Learning Outcomes**

Upon successful completion of this class a student should be able to:

FACTORING

- 1) Factor monomials
- 2) Factor polynomials by grouping
- 3) Factor perfect square trinomials, difference of squares, sum/difference of cubes
- 4) Factor quadratics

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

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

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

Mathematical Practices

- 1) Make sense of problems and persevere in solving them.
- 2) Reason abstractly and quantitatively.
- 2) Construct viable arguments and critique the reasoning of others.
- 3) Model with mathematics.
- 4) Use appropriate tools strategically.
- 5) Attend to precision.

- 6) Look for and make use of structure.
- 7) Look for and express regularity in repeated reasoning

Grading

- **Methods of Evaluation**

Homework/Quizzes/In-class assignments	20%
Test 1	20%
Test 2	20%
Test 3	20%
Comprehensive Final Exam	20%

- **Grading Policies**

- ♦ **Late Work:** will not be accepted
- ♦ **Missed Work Make-Up Policy:** No make-ups on tests without prior arrangement with the instructor. No make-ups for quizzes (both in-class and take-home) or in-class assignments.
- ♦ **Extra Credit:** No extra credit assignments

- **Letter Grade Equivalents**

A 93 – 100	B 83 – 86	C 73 – 76	D 63 – 66
A- 90 – 92	B- 80 – 82	C- 70 – 72	D- 60 – 62
B+ 87 – 89	C+ 77 – 79	D+ 67 – 69	F 59 or less

Classroom Policies

- **Attendance:** Students are expected to attend class.
- **Communication:** All communication will occur by email. Please make sure that you check your TRCC email or set it up to forward to another account. Check your email regularly to be informed of any changes in schedule.
- **Class Cancellation:**
If school is cancelled, notification of cancellation due to inclement weather will be available by telephone by 6:00 am for daytime classes and by 2:30 pm for evening classes by calling the College's main telephone at (860) 215-9000, pressing 1, and listening to the taped announcement. The College's website will also have

announcements available by accessing the www.threerivers.edu home page. The myCommnet Alert Notification System will also be used to deliver important information regarding weather-related class cancellations, via both email messages and text messages, to registered individuals. To register, log on to your myCommnet account at <http://my.commmnet.edu/> and follow the link to myCommnet Alert.

If class is cancelled by the instructor, a notice will be placed on the classroom door. If time permits, students may be notified by a message via email.

- **Withdrawal Policy:** You may withdraw from this class any time up to and including November 5 and you will receive a W grade on your transcript. However, you must complete a withdrawal form in the Registrar's Office at the time of withdrawal; *if you merely stop attending classes you will be assigned a grade of F*. Any eligibility for refund of tuition is based on the date that the registrar receives the withdrawal.
- **Academic Integrity:** The effective operation of any organization is dependent on the honesty and goodwill of its members. In an organization devoted to the pursuit of knowledge, acting with integrity is essential to effective teaching and learning. Furthermore, academic dishonesty erodes the legitimacy of every degree awarded by the College. To emphasize the importance of academic integrity, Three Rivers Community College adheres to the Student Code of Conduct and Discipline Policy, as provided by the Connecticut State Colleges and Universities (CSCU) - Board of Regents for Higher Education. (Please refer to BlackBoard for the complete statement.)

Some of the behaviors that will be considered cheating are:

- Communicating with another student during a quiz or exam
- Copying material from another student during a quiz or exam or from any assignment being graded
- Allowing another student to copy from your quiz, exam, or any assignment being graded
- Use of unauthorized assistance on any assignment being graded
- Use of unauthorized notes or books during a quiz or exam
- Providing or receiving a copy of a quiz or exam used in the course
- Use of a cell phone or pager to transmit information during a quiz or exam

Students caught cheating will receive a zero for the assignment/test and will not be given a make-up.

Tentative Schedule

This is the **tentative** schedule – instructor reserves the right to change dates throughout the semester. It is your responsibility to attend class to learn of any changes in schedule.

Dates	Section	Assignments
Week 1	Chapter 5 Review	Will be given in class and posted on Blackboard
Week 2	6.1	
Week 3	6.2 – 6.4	
Week 4	6.5 – 6.6	
Week 5	Review and Test	
Week 6	7.1 – 7.2	
Week 7	7.3 – 7.4	
Week 8	7.5 – 7.6	
Week 9	Review and Test	
Week 10	8.1 – 8.2	
Week 11	8.3 – 8.4	
Week 12	Review and Test	
Week 13	9.1 – 9.3	
Week 14	9.6, 10.4	
Week 15	Review and Final Exam	

School Policies

Please refer to BlackBoard or the TRCC website for a link to the entire policy.

- **Digication:** All students are required to maintain an electronic portfolio using the College template within Digication. Digication can be accessed at <https://threerivers.digication.com>.
- **Disability:** Three Rivers Community College (TRCC) is committed to the goal of achieving equal educational opportunity and full participation for individuals with disabilities. To this end, TRCC seeks to ensure that no qualified person is excluded from participation in, is denied the benefit of, or otherwise is subjected to discrimination in any of its programs, services, or activities.
- **Non-discrimination:** Three Rivers Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression, or genetic information in its programs and activities.
- **Sexual Misconduct:** The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to ensuring 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.