PREREQUISITE: MAT* K137 or MAT* K137S with a "C" grade or better or appropriate placement

through multiple-measures assessment process.

TEXT: PRECALCULUS: Graphs and Models, Coburn and Herdlick

ALEKS 360 Code (Code: 9AXMJ-99WHD) Also required: TI-83 or TI-84 calculator

COURSE

DESCRIPTION: This course is a thorough and rigorous algebra course that strengthens the

understanding of functions, their properties, multiple representations, and operations with functions. The function families studied include: polynomial, exponential, logarithmic, rational, and radical functions. Students will also learn linear and quadratic inequalities, absolute value equations and inequalities, linear

and nonlinear systems.

Office Hours: Mondays 2:00 – 3:00 pm

Tuesdays 11:00 – 12:00 noon Wednesdays 2:00 – 3:00 pm Thursdays 11:00 – 12:00 noon or by appointment in C206

Email eallenn@trcc.commnet.edu, Phone (860) 215-9452

Attendance:

Your attendance in the classroom during class time, participation in classroom work/projects and preparation for each class is required and is essential to success in the course. If you are unable to attend, you must email me prior to a missed class. An absence is excused only for valid reasons (to be determined by the instructor) and if notification is given prior to a missed class via email or phone message. (If a phone message is left it must be followed up with an email to count as an excused absence.) All students start the semester with 50 "bonus" Attendance/Participation points. Points will be deducted for unexcused absences, late arrivals, early departures, cell phone, tablet or computer use during class time. Makeups for tests will be given only for EXTREME circumstances and if arrangements are made prior to the missed exam (documentation will be required at the instructor's discretion). Any makeup must be completed before the next class period starts and will be completed in the testing center. If you are not in class on these days or do not complete them in time then you will receive a 0. All written assignments are due at the beginning of class on the due date. If you do not hand in an assignment this way you will receive a 0.

Please note that this class begins at 9:30 am and ends at 10:45 am. You are expected to be in class the entire time or you will lose points for attendance/participation.

Course Setup:

This course will be a "flipped course." What that means is that you will read the chapter and PowerPoints and take notes in advance of class. Then you will take a brief quiz on the material from the reading at the beginning of the next class. These are just to make sure you did the reading and took notes. If you are late for class, you will not be permitted to take the quiz and you will not be permitted to make it up. Then we will review concepts and go over examples in class.

MEASUREMENTS:	3 tests	100 points each	300
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Quizzes	see below	100
ALEKS	see below	100
Assignments	see below	100
Final exam	100 points	100

Final grade = (total points earned/700) *100

Grade equivalents: 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, UF if the student completed less than 60% of work.

ALEKS:

In this course, students will use an online educational program titled ALEKS 360 (Assessment and LEarning in Knowledge Spaces). This program can be used on any computer with Internet access. An access code for ALEKS 360 is required and may be purchased at the bookstore or online at www.aleks.com. In ALEKS students are expected to complete four (4) Intermediate Objectives. Completion of each Intermediate Objective by its specified due date is worth a total of 100 points (20 points per Intermediate Objective and 20 for overall mastery). Check the calendar in ALEKS for all Intermediate Objective due dates.

Cell Phone Policy:

All cell phones must be turned OFF or MUTED before entering the classroom and properly placed in a bag or pocket (not left on a desk). Cell phones may not be used for calculators in class. A visible cell phone during an exam will result in a 0 for that exam.

Class Cancellation: In case of inclement weather, check the college website for class cancellations or call 860-215-9000 for recorded message on the college phone. If for some reason, I need to cancel class I will post an announcement in Blackboard. You should set up your school email so that it will forward to your personal email so you can receive these notifications in a timely manner.

MyCommNet Alert: MyCommNet 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.

Plagiarism and Academic

Honesty:

Academic integrity is essential in all aspects of college coursework and learning. I have zero tolerance for academic dishonesty. It is expected that YOU complete all your assigned ALEKS work. Communication or collaboration of ANY sort is ABSOLUTEY PROHIBITED during any exam. Academic Misconduct is punishable in a number of ways, including a score of a zero on the assignment where the cheating took place, a grade of an F in the course and/or possible censure on your permanent record. All cases of academic dishonesty will be referred to the Academic Dean. Do not let yourself come under the suspicion of academic dishonesty.)

Disabilities:

Students with learning disabilities should contact the Learning Specialist, Matt Liscum, at 860-215-9265 or via email at mliscum@trcc.commnet.edu as soon as possible to ensure timely accommodations. Students with physical disabilities should contact Elizabeth Willcox at 860-215-9289 or via email at ewillcox@trcc.commnet.edu to facilitate accommodations. All testing accommodations MUST be discussed with the instructor in a timely manner, that is, at least one to two class meetings **prior** to any scheduled test for which accommodations are needed.

Support Services: Tutorial services, peers, or meeting with me for extra help during office hours.

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.

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:

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 Vicki Baker, the

Diversity Officer and Title IX Coordinator: 860-215-9208

(vbaker@trcc.commnet.edu)

Acceptance Policy: After reading this syllabus, choosing to stay registered for this course exemplifies your acceptance of the syllabus and all policies and consequences outlined in the syllabus. If you do not agree with any of the terms in the syllabus, you are free to withdraw.

Class Expectations: The expectation is that you are spending 2-3 hours of reading and doing homework for this class for every "academic" hour we meet in class. We meet 3 "academic" hours per week, therefore you should expect to spend at least 6 - 9 hours per week on this class, outside of class meetings, every week!

Disclaimer:

The instructor has the right to change/modify this syllabus at any time with proper notification to the class.

Course Outcomes

At the completion of MAT 172, the student will be able to do the following:

- 1) Define absolute value, find distances on the number line and the coordinate plane.
- 2) Simplify expressions with rational exponents, write them in radical form, simplify, combine and rationalize radical expressions.
- 3) Solver 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 even and odd functions, graph piece-wise functions, find composition of functions, inverse and transforms of functions.
- 7) Find the characteristics of polynomial functions, solve polynomial equations, find zeros (roots) and x-intercepts of polynomials, apply the Fundamental Theorem of Algebra, The Remainder Theorem, The Factor Theorem, analyze end behavior.
- 8) Graph rational functions, find vertical, horizontal and slant asymptotes.
- 9) Graph exponential and logarithmic functions, use properties of exponents and logarithms, solve exponential and logarithmic equations.
- 10) Solve systems of linear equations in several variables

Text: Precalculus, 1st Edition. Coburn & Herdlick. McGraw Hill 2012. ISBN #9780073519531