Intermediate Algebra Syllabus

MAT 137 TG4   CRN 31261 Fall 2017   Three Rivers Community College   Norwich, CT 06360
Max Wentworth, Instructor   Email: mwentworth@trcc.commnet.edu Phone # (860) 456-1804
Tuesday/Thursday 9:30-10:45AM Room E221
 Office Hours: Tuesday/Thursday 11:15-12:15 Room: D205-E

Course Description

Through lecture, discussion of material, and practice, this course continues the development of algebraic concepts and skills. Questions during lecture can be very helpful and are encouraged.

Objectives

To give the student an understanding of and the ability to utilize the following: modeling, linear equations, functions and graphs, trigonometric functions, systems of linear equations, inequalities, rational expressions and equations, operations on radicals and rational exponents, quadratic equations, exponential and logarithmic functions.

Method of Evaluation

1) Quizzes
2) Take Home Assignments
3) Tests
4) Final Exam

Quizzes will be unannounced at the beginning of class.

Home Assignments will be due one week after they are assigned. Students are encouraged to work together on take home assignments, but each student is responsible for understanding the material. Late assignments will be accepted one class after they are due with 5 points taken off. A zero will assigned for any take home which is not handed in before or during the grace period.

Tests will be announced one week in advance. If you are going to be absent the day of a test, you must let me know, by email or phone before or on that day. Failure to do so will result in a zero for that test.

The **final** is comprehensive on December 14, 2017.

Academic Integrity

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; and act at all times with honor.

Procedure

There will be discussion of homework and new material will be presented each class. Questions are encouraged. Students may be asked to share their knowledge of a topic with the class.

Attendance

Attendance is strongly encouraged. One class participation point will be awarded for each class you attend and more points may be gained during class.

Required Text

Intermediate Algebra; Jay Lehmann: Upper Saddle River, NJ; Pearson Prentice Hall; 2011; 4th edition.
Note: Student will also need a graphing calculator and graph paper.

ALL CELL PHONE WILL BE SHUT OFF AND PUT AWAY DURING CLASS

Course Evaluation

Tests will constitute 60% of the course grade, take home assignments are worth 10%, quizzes are worth 10% and the final exam is 20% of the course grade.

Grades	Equivalent	Quality Points	Grades	Equivalent	Quality Points
A	93-100	4.0	C	73-76	2.0
A-	90-92	3.7	C-	70-72	1.7
B+	87-89	3.3	D+	67-69	1.3
B	83-86	3.0	D	63-66	1.0
B-	80-82	2.7	D-	60-62	0.7
C+	77-79	2.3	F	Below 60	0.0

Disabilities Statement

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

College Withdrawal Policy

Students may withdraw, at the Registrar's Office, for any reason on or before December 11, 2017.

Resources

Free tutoring is available at the Tutoring and Academic Success Center (TASC).
Please use the service as needed. Also, students may see me during office hours for extra help.

ALL CELL PHONE WILL BE SHUT OFF AND PUT AWAY DURING CLASS

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

Section	Page	Problems
6.1	486	5, 9, 13, 23 – 47 every other odd, 63, 67, 71 – 83 every other odd, 95, 97
6.2	497	1 – 67 every other odd, 85
6.3	507	17, 25, 33, 41, 49, 53 – 71 every other odd, 83, 85
6.4	517	11, 19, 21, 25, 31, 39, 47, 55, 63, 87, 95, 103, 121
6.5	524	1, 9, 17, 25, 31 – 79 every other odd
6.6	537	1, 9, 17, 25, 33, 41, 49, 57, 59, 61, 71, 73, 77, 83, 89, 93, 109, 113
7.1	560	1 – 13 odd, 25, 27, 29, 33, 39, 41, 49, 53, 55, 57, 59 – 63 odd, 79, 81, 115
7.2	573	1, 5, 17, 25, 29, 33, 41, 85
7.3	584	1, 3, 7, 9, 13, 15, 17, 19, 21, 35, 39, 41, 45, 47, 49, 53, 57, 59, 61, 91
7.4	593	1, 5, 9, 11, 15, 19, 33, 35, 55, 59, 63
7.5	603	1, 7, 13, 23, 31, 33, 37, 41, 49, 57, 65, 73, 79, 85, 87, 99
7.6	611	1 – 9 odd
8.1	633	1, 5, 9, 13, 15, 17, 19, 33, 35, 39, 57, 59, 61, 67
8.2	652	21 – 51 odd, 57, 59, 61, 63, 67, 69, 71, 73, 79, 81
8.3	665	3, 5, 19, 21, 25 – 47 odd, 55
8.4	678	1, 5, 7, 9, 13, 15, 25, 29, 41, 43
9.1	698	1 – 7 odd, 9, 11, 13, 17, 19, 33, 35, 37, 41, 43, 49, 67, 69, 79, 81
9.2	710	1, 7, 13, 15, 17, 19, 27, 29, 37, 39, 43
9.3	721	1, 7, 11, 13 – 35 odd, 47, 55, 57
9.6	762	9, 11 – 29 odd, 35, 41, 43, 55, 59, 63, 65, 69, 73, 75, 79, 81, 83, 85, 89, 91, 93, 97, 101
10.4	819	1, 5, 7, 11, 15, 19, 23, 25, 27, 29, 35, 39 – 57 odd, 63, 75

Board of Regents for Higher Education and Connecticut State Colleges and Universities Policy Regarding Sexual Misconduct Reporting, Support Services and Processes Policy:

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."

Title IX Statement of Policy:

"Title IX of the Education Amendments Act of 1972 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 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 educational programs and activities."

Please Report Student Incidents to: Edward A. Derr, Student Diversity and Title IX Coordinator

Admissions Welcome Center * Office A116

574 New London Turnpike, Norwich CT 06360

860.215.9255 * EDerr@trcc.commnet.edu