**Fall 2019**

**MAT K137S Intermediate Algebra Embedded 32507**

**Suzanne Edwards**

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| **Class Schedule:** | Lecture: M, W 6:00 pm – 7:15pm, room E204Lab: W 7:30 pm – 8:20 pm, room D219 |
| **Office Hours:** | By appointment **By email –** Please put **TRCC Fall 2019** in Subject line:**suzanne.edwards@ct.gov****sedwards@qvcc.commnet.edu****By phone –** Please leave a message between 7AM and 3PM with your name , number and message **860-892-2171** |
| **Pre-requisite:** | Elementary Algebra Foundations MAT K095 or Elementary Algebra Intensive College Readiness MAT K095I with a “C-“ or higher, or appropriate placement  through multiple measures assessment process. |
| **Course Description:**  | **4 CREDIT HOURS INTERMEDIATE ALGEBRA EMBEDDED**This course represents the Intermediate Algebra instruction with embedded developmental support. The course cultivates understanding and different representations of functions. The course covers linear, quadratic, exponential, rational, radical functions, equations and expressions and operations on them with emphasis on modeling and solving real world problems.  |
| **Materials:** | * **Text:** **(Optional)** Elementary and Intermediate Algebra 5th, Baratto, Bergman – Ch. 6 – 10 Publisher: McGraw Hill. I will be handing out copies of the problems from the book each class.
* **ALEKS Program: ABSOLUTLY REQUIRED**
* **Calculator:** Required for each class and each exam. Cell phones may not be used as calculators.
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| **ALEKS Online Component:** | **ABSOLUTELY Required,** will be used weekly for HW and may be used for Assessments.Your **Course Code** is: **FLTCN-9KQCU**Your **Financial Aid Access Code** is: **04E67-9A512-523E3-A66A0****The Financial Aid Access Code does not add an additional two weeks to your account.** **NOTE:** This code gives you temporary access to ALEKS for a two-week period. Once the code expires, you will be locked out of your ALEKS account until you purchase a regular Student Access Code. **It is highly recommended that you purchase the Student Access Code BEFORE the two weeks expire** to prevent interruptions with your ALEKS account. 1. To log into ALEKS using the Financial Aid Access Code, go to: http://www.aleks.com. 2. Click on the "**SIGN UP NOW!**" link located under the login box on the left of the page. 3. Enter your **Course Code** in the box labeled "**Using ALEKS with a Class?**" and click on "**Continue.**" 4. Verify that you are registering for the correct course and click on "**Continue.**" Enter the 20-character Financial Aid Access Code. 5. Continue with the registration process until your account has been set up successfully. 6. After you complete your account set up you will be logged into ALEKS and can immediately begin working in the course. 7.You can extend your ALEKS account at any time by clicking on "extend your account" and entering a purchased Student Access Code. If your temporary access expires before you purchase a Student Access Code, simply log in to ALEKS and you will be directed on how to extend your current account. You will then be able to continue your course where you left off before the temporary access expired. **You do NOT need to create a new ALEKS account to continue your course.**  |
| **Grading:** | **Grades are calculated using a point system**ALEKS Online Program – 25 points per goal – 100 points totalAssignments – 10 points each – 200 points totalMid-chapter quizzes – 50 points each – 100 points totalChapter Tests – 100 points each – 400 points totalFinal Exam – 200 points Final grade is calculated by dividing total points earned by total possible points (1000).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, N if the student completed less than 60% of work.  |
| **Attendance:** | 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. Make-ups for tests will be given only in extreme circumstances and if arrangements are made prior to the missed exam. Any make-up must be completed prior to the next class meeting day. **No calls/no shows will receive a grade of zero on any test.** |
| **Expectations:** | Our 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 4 “academic” hours per week, therefore you should expect to spend ***at least* 8 - 12 hours per week** on this class, outside of class meetings, every week! |
| **Support Services:** | Tutorial services, peers, or meeting with me for extra help. |
| **Class Cancellation**: | In case of inclement weather, check the college website for class cancellations or call 860-215-9000 for recorded message. If class needs to be cancelled due to other reasons, an email will be sent out. |
| **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. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site. [http://www.trcc.commnet.edu/div\_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html](https://www.mail.commnet.edu/owa/redir.aspx?C=a90b94c325424acebc5fc69a405eb4e5&URL=http%3a%2f%2fwww.trcc.commnet.edu%2fdiv_it%2feducationaltechnology%2fTutorials%2fmyCommNetAlert%2fMIR3.html)   |
| **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 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. |
| **Sexual Misconduct:** | **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.” |
| **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. Please note that accommodations cannot be provided until you provide written authorization from a DSP. |
| **Title IX:** | **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 Vicki Baker, the Diversity Officer and Title IX Coordinator: 860-215-9208 (vbaker@trcc.commnet.edu) |
| **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 |
| **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. |
| **Disclaimer:** | The instructor has the right to change/modify this syllabus at any time with proper notification to the class. |

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| **A FEW IMPORTANT DATES** | **FALL YEAR** |
| Labor Day – No class  | September 2nd  |
| Last Day to Drop Classes for a Partial Tuition Refund  | September 9th  |
| Last Day to Select Audit Option | September 24th  |
| Thanksgiving Break | November 27th  |
| Last Day to Select Pass/Fail Option | November 5th  |
| Last Day for Withdraw from Classes | November 5th  |
| Last day of class | December 15th  |

**Course Outcomes:**

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

**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 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) and 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 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 graphically

5)      Solve real world applications involving radical functions

6)      Identify imaginary numbers

**Rational Functions and/or Expressions**

1)      Provide multiple representations of simple rational functions or expressions by hand and 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 graphically

5)      Solve real world applications involving rational functions

**Exponential Functions and/or Expressions**

1)      Provide multiple representations (e.g., tables, graphs, symbols) of exponential functions or expressions by hand and 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

**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.

**ALEKS Course Content:**

Prerequisites (25 topics)

Ch.6-Factoring (36 topics) – Due 9/25

*Section 6.1* (9 topics)

*Section 6.2* (9 topics)

*Section 6.3* (7 topics\*)

*Section 6.4* (13 topics\*)

*Section 6.5* (22 topics\*)

*Section 6.6* (7 topics)

Ch.7-Radicals and Exponents (60 tps) Due 10/21

*Section 7.1* (11 topics)

*Section 7.2* (15 topics\*)

*Section 7.3* (15 topics\*)

*Section 7.4* (8 topics)

*Section 7.5* (7 topics)

*Section 7.6* (6 topics)

Ch.8-Quadratic Functions (24 topics) – Due 11/6

*Section 8.1* (6 topics)

*Section 8.2* (5 topics)

*Section 8.3* (7 topics)

*Section 8.4* (3 topics)

 *Supplementary* (3 topics)

Ch.9-Rational Expressions (42 topics) –Due 12/2

*Section 9.1* (7 topics)

*Section 9.2* (7 topics)

*Section 9.3* (8 topics)

*Section 9.6* (20 topics)

Ch.10-Exponential and Logarithmic Functions (5 topics)

*Section 10.4* (5 topics)

(\*) Some topics in some sections are also covered in a previous section of this Objective.

Topics are only counted once towards the total number of topics for this Objective.

# Course Outline (This is a guide only. Schedules may vary).

Each goal within the ALEKS program is due prior to the chapter test. Each assignment is due prior to the next class.

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| **Week 1:****8/28** | Course Introduction and quick review of course syllabusReview of Elementary AlgebraALEKS set-up | **Week 10:****10/21 & 10/23** | **Chapter 7 Test** Chapter 8 Section 8.1  |
| **Week 2:****9/4** | Chapter 6 Section 6.1  | **Week 11:****10/28 & 10/30** | Chapter 8 Section 8.2 Chapter 8 Section 8.3  |
| **Week 3:****9/9 & 9/11** | Chapter 6 Section 6.4 Chapter 6 Section 6.2**Quiz 6.1 & 6.4** | **Week 12:****11/4 & 11/6** | Chapter 8 Section 8.4 **Chapter 8 Test** |
| **Week 4:****9/16 & 9/18** | Chapter 6 Section 6.5Chapter 6 Section 6.6 | **Week 13:****11/11 & 11/13** | Chapter 9 Section 9.1Chapter 9 Section 9.2Chapter 9 Section 9.3  |
| **Week 5:****9/23 & 9/25** | 6.6 Applications**Chapter 6 Test** | **Week 14:****11/18 & 11/20** |  |
| **Week 6:****9/30 & 10/2** | Chapter 7 Section 7.1Chapter 7 Section 7.2  | **Week 15:****11/25**  | Chapter 9 Section 9.6 |
| **Week 8:****10/7 & 10/9** | Chapter 7 Section 7.3**Quiz 7.1 – 7.3**Chapter 7 Section 7.4 | **Week 16:****12/2 & 12/4** | **Chapter 9 Test**Chapter 10 Section 10.4 |
| **Week 9:****10/14 & 10/16** | Chapter 7 Section 7.5 Chapter 7 Section 7.6 | **Week 17:****12/9 & 12/11** | Review for Final Final Exam |