Syllabus for Fall 2010 Three Rivers Community College

Intermediate Algebra Mat 137/CRN 30180 MWF 10 to 10:50 a.m., Room D203

Adjunct Instructor: Sue Butler

Email: sueqbutler@yahoo.com

Office Hours: by appointment, MWF after class.

Required Materials:

- Intermediate Algebra: Functions & Authentic Applications, 4th edition, by Jay Lehmann. You can purchase a hardcover book with the MyMathLab access kit or just the electronic access kit.
- Notebook or binder
- Scientific Calculator or any TI-83 Plus, TI-84, TI-89 (see Appendix B)

Grading Policy:

Throughout the semester there will be four 100-point exams, including the final exam.

Homework will be assigned at each regular class session, excluding exam days. Homework will be collected and recorded for effort, not accuracy. Up to 20 homework points will be added to the total number of points earned for the semester, based on the percentage of completed assignments and according to the following guidelines:

- 1. Clearly label homework assignments with your name, date, and chapter section(s).
- 2. Copy each original homework problem. (exception: word problems)
- 3. Show all work. "Answer lists" will not be accepted.
- 4. Clearly label your answer(s).
- 5. Compare your answers to the answer keys or solutions manual. <u>Mark your answers</u> as correct (c) or incorrect (x). Check **each problem** *one* at a time as you work through an assignment. This will prevent repeating the same mistakes and alert you to where you may need help and what questions need to be reviewed during class.
- 6. Optional: Notes for the instructor, such as "Help!" or "I don't understand!" or "This is fun!"

Grade Equivalents:

A	93 - 100	372 points or higher
A-	90 - 92	358 - 371 points
B+	87 - 89	346 - 357 points
В	83 - 86	330 - 345 points
B-	80 - 82	318 - 329 points
C+	77 –79	306 - 317 points
C	73 - 76	290 - 305 points
C-	70 - 72	278 - 289 points
D+	67 - 69	266 – 277 points
D	63 - 66	250 - 265 points
D-	60 –62	238 - 249 points
F	59 or lower	237 or lower
I	incomplete (see below)	

Absence:

If you are <u>absent</u> on the day of an exam you will have until the *next regularly scheduled class session* to contact me and make arrangements to take your exam.

With instructor approval, exactly ONE missed test or low test grade may be replaced by a corresponding online exam via MyMathLab (see MML description below) at the end of the semester. Approval will be granted to students with at least 75% homework completion average and extenuating circumstances that may have contributed to missing an exam or a poor test result.

Resources:

- TASC (Tutoring Center) is located in room C-117. TASC provides free one-toone tutoring. Also, TASC's portion of the school's website has many links to other online resources; go to the TASC homepage at htt;://www.trcc.comment.edu/ed_resources/task/index.htm and follow thelink to "online Resources."
- **Each other**: exchange contact information with classmate(s).

Classroom Policy:

I respect you and expect respect from you. Being a mature college student entails responsibility. This means you are responsible for yourself, your education, your assignments, your behavior, your attitude, your timeliness, and your contributions to the classroom atmosphere. I expect all students to be prompt, attentive, prepared, supportive of their classmates, and contribute to a positive classroom atmosphere.

Cell phone Use: Please turn off the ringer before the start of each class.

Course Outline:

We will cover the following sections of the text:

Chapter 1. Linear Equations and Linear Functions

1.6 Functions

Chapter 2. Modeling with Linear Functions

- 2.1 Using Lines to Model Data
- 2.2 Finding Equation of Linear Models
- 2.3 Function Notation and Making Predictions

Trigonometry – (On the TRCC website, click Academics, scroll down and click Math Dept. and under the "News" heading you will find a link to the pdf)

Exam #1, approx. Sept. 20th

Chapter 3. Systems of Linear Equations

- 3.2 Using Substitution and Elimination to Solve Systems
- 3.3 Using Systems to Model Data

Chapter 4 Exponential Functions

- 4.1 Properties of Exponents
- 4.2 Rational Exponents
- 4.3 Graphing Exponential Functions
- 4.4 Finding Equation of Exponential Functions
- 4.5 Using Exponential Functions to Model Data

Exam #2, approx. Oct. 8

Chapter 5. Logarithmic Functions

- 5.2 Logarithmic Functions
- 5.3 Properties of Logarithms
- 5.4 Using the Power Property with Exponential Models to Make Predictions
- 5.5 More Properties of Logarithms
- 5.6 Natural Logarithms

Chapter 6 Polynomial Functions

- 6.1 Adding and Subtracting Polynomial Expressions and Functions
- 6.2 Multiplying Polynomial Expressions and Functions
- 6.3 Factoring Trinomials of the Form $x^2 + bx + c$
- 6.4 Factoring Polymonials
- 6.5 Factoring Special Binomials
- 6.6 Using Factoring to Solve Polynomial Equations

Exam #3, approx. Nov. 8

Chapter 7. Quadratic Functions

- 7.1 Graphing Quadratic Functions in Vertex Form
- 7.2 Graphing Quadratic Functions in Standard Form
- 7.3 Using the Square Root Property
- 7.5 Using the Quadratic Formula
- 7.6 Solving Systems of Linear Equations in Three Variables
- 7.7 Finding Quadratic Models

Chapter 8 Rational Functions

- 8.1 Finding the Domains of Rational Functions
- 8.2 Multiplying and Dividing Rational Expressions
- 8.3 Adding and Subtracting Rational Expressions
- 8.5 Solving Rational Equations
- 8.6 Modeling with Rational Functions

Chapter 9. Radical Functions

- 9.1 Simplifying Radical Expressions
- 9.2 Adding, Subtracting, Multiplying Radical Expressions
- 9.5 Solving Radical Equations

Exam #4 Dec. 15, snow day: Dec. 17.

This course has been set up as a **MyMathLab-based course**.

MyMathLab is a website that is available to you 24/7, whereas our total class time each week is less than 3 hours.

MyMathLab is an incredibly powerful tool to help you master the concepts in this course.

MyMathLab is not required to successfully complete this course; however it is *strongly recommended* that you take advantage of the opportunities available to you only through MyMathLab.

<u>Homework posted on MyMathLab</u> will roughly match the textbook assignments. Successful completion of MyMathLab homework will earn bonus points towards each exam, up to 20%.

<u>Practice exams will be posted on MyMathLab</u>. Makeup Exams will be posted on MyMathLab at the end of the semester, as cited in the grading policy.

MyMathLab contains an online version of your textbook, links to video clips, practice exercises, animations, and unlimited tutorial exercises.

It will be your responsibility to use MyMathLab to familiarize yourself with the material covered each week, and to keep up with the course schedule in case of absences, class cancellations due to inclement weather or H1N1 (!), instructor absence, or your own absence(s).

MyMathLab Registration instructions:

The codes you need to register online with MyMathLab are provided in **new** textbooks in the student registration packet, **OR** for a separate fee of approximately \$70 (subject to change) using a credit card.

You will be prompted to enter the code that comes with the packet. <u>Please record your choices for your username and password</u>. You will need them each time you log into MyMathLab. Your home computer may need to install "installation wizard", and "allow pop-ups on this site only". The zip code for Norwich is 06360.

Our Course Code is: butler66469

Please be sure to log in to the correct course.

"Incomplete": College policy states: "An incomplete (I) is a temporary grade assigned to a student who does not complete the requirements of a course in the time allowed and who received a written time extension from the instructor. The incomplete (I) must be resolved by the end of the 10th week of the next academic semester or it automatically converts to an F."

Any student who wishes to pursue an incomplete must meet with me before the last week of class for approval. If approval is granted I will provide the incomplete agreement to sign and file with the Academic Dean.

Withdrawal Policy: A "drop or withdrawal" from the course will be accepted through the 10th week of classes in accordance with the designated withdrawal deadlines. Students need to fill out the special withdrawal form available at the registrar's office: Withdrawals are processed only through the Registrar's Office at (860) 892-5756 or the Subase at (860) 445-5575. Students who do not withdraw, but stop attending will be assigned an "F".

Disabilities Statement: If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact the disabilities Counseling Services at 383-3240. To avoid any delay in the receipt of accommodations, you should contact the counselor as soon as possible. Please note that I cannot provide accommodations based upon disability until I have received an accommodation letter from the disabilities counselor.

Calculator: The TI-83 or TI-84 is required. You may want to use the TI-89 if you are taking math courses beyond intermediate algebra. Any standard calculator will work also.

<u>Attend all class periods</u> Please be prompt. Excessive tardiness is disruptive. Make sure your work hours do not conflict with the course schedule. Have a back up plan for emergencies: car trouble, illness, child care.

<u>Come to class prepared</u>: bring a notebook, pencil or pen, and textbook to every class.

Do your homework, "practice makes perfect", especially algebra!

<u>Check your work.</u> Do one problem at a time and check your answer before proceeding to the next problem. If you have made a mistake try to figure out what went wrong. Then correct your mistake. Rework the problem from the beginning. Click on "do a similar exercise" on MyMathLab as many times as needed to master a skill.

<u>Learn from your mistakes</u>. <u>Don't skip steps</u>. DO NOT try to do it all 'in your head'. Skipping steps will ultimately waste your time from making simple errors.

<u>Ask questions</u>! My experience tells me that if you have a question, then at least 5 other classmates have the same question. There is no such thing as a stupid question.

<u>Take notes</u>. Jot down notes as you go through the MyMathLab instruction segments, take notes from the board, do your homework assignments *neatly*; use your notebook to work out the online assignments and tutorials.

<u>Use class time wisely</u>. Visiting other websites or conducting personal business during class time is prohibited.

"I hear and I forget, I see and I understand, I do and I learn."-Confucius

Translation: You have to **do** the math to **learn** the math!

Best wishes for your success in mathematics!

Math 137 Readiness Check:

Appendix A, p. 626 - 634, answers p. 692

Try A4, A5, and A6 on your calculator to test your calculator skills.

In class review: A10, p. 632 A11, p. 633

Appendix B, Using a TI-83 or TI-84 Graphing Calculator, p. 635

Chapter One homework

Complete each section ONLY IF it has been covered in class.

Reminder: follow homework guidelines.

1.6 p. 48 (1, 5, 7 - 14, 15, 19, 21, 26, 31, 35, 39, 41)

Ch. 1 Review p. 54 (38, 39 – 43)

Ch. 1 Test p. 55 (21, 22)

Chapter Two homework

2.1 p. 63 (1, 3)

2.2 p. 71 (pick one: 3, 5, or 7), do 17.

2.3 P. 84 (1, 7, 11, 15, 21, 25, 29, 33, 40, 43-51 odd, 57, 58, 79, 83 abc)

Trigonometry

Packets available on TRCC website,
Email me for additional materials, and I will send them to you in an attachment.

Chapter Three homework

3.2 p. 123 (3, 9, 17, 23, 37, 41, 45) 3.3 p. 129 (13, 15)

Chapter Four homework

4.1 p. 173 (1-91) every third odd

4.2 p. 182 (1-69) every other odd

to be continued.... ©