Cañada College Fall 2015

Elementary Algebra Math 110 WLA CRN 93105 5.0 units

Instructor: Yvette Butterworth

Text: Elementary and Intermediate Algebra, J. Lehmann, 2nd Edition

Hours: 6:10 - 9 pm Tuesday in 17-207

Office Hours: Day Hrs. TBA & Tues. 9 pm in 17-207,

By Appt on Skype (profbutterworth)

E-Mail: <u>butterworthy@smccd.edu</u>

Website: http://profbutterworth.com

Phone: (408)888-6160 & texts are OK

YouTube: profbutterworth's channel

Course Description:

This course covers linear equations and inequalities in one and two variables, equations of a line, systems of linear equations in two variables, polynomial and rational expressions and equations. It introduces the concepts of function, domain and range, x and y intercepts. The course covers Chapters 1-8 and additional topics: rational expressions and equations; introduction to functions. It is recommended that students read the textbook regularly before solving homework problems and use all on-line resources available including my notes (found on my website) and YouTube videos (profbutterworth's channel) during study of the course questions. Students who have received credit Math-811 or appropriate score on District math placement test and others measures as appropriate. **This class must be added by Friday, August 28.**

Learning Outcomes:

Upon successful completion of the course students will be able to

- 1. Simplify numerical expressions involving exponents and fractions by applying properties of real numbers and order of operations;
- 2. Solve linear equations & inequalities in one variable
 - a) Check the solutions
 - b) Model using linear equations
 - i) Interpret solutions
- 3. Graph & Interpret Linear Equations in two variables
 - a) Interpret slope and y-intercept
 - b) Use 3 methods of graphing
 - i) Plug & chug, Intercept Method, Slope-Intercept Method
 - c) Model using slope & y-intercept

- i) Linear model w/ baseline & rate of change
 - ii) Using information to find baseline (y-int) & rate of change (slope)
- 4. Solve and graph systems of two linear equations & inequalities in two variables;
 - a) Solving using graphing, substitution & elimination
 - b) Model using systems
 - i) Interpret solution of model
- 5. Perform operations on polynomials
 - a) Add/Subtract/Multiply/Divide
 - b) Use formulas to expand a binomial squared & product of conjugates
- 6. Find rational roots of polynomials with integer coefficients using factoring.
- 7. Apply mathematical models to solve application problems

Required Materials:

Elementary and Intermediate Algebra, 2nd Edition, J. Lehmann; Scientific Calculator – TI 30X is a good buy; Pencils, Paper – lined and graph (for notes, graphing and homework), ruler – brought to each class meeting & access to My Math Lab. I also suggest that you purchase a 3-ring binder (minimum 2 inches) with 5-divider tab. I recommend that you store all notes, homework, quizzes and tests in this binder as well as starting a section for keeping track of your grade and keeping a list of definitions that you need to know!

Attendance:

Attendance is very important. You are expected to attend every class meeting. Class sessions will cover material from your book, but may also give a different perspective on the material in your book. Your attendance will be graded by homework and quizzes. A student who stops attending is not automatically dropped from class, although I reserve the right to drop a student who misses 3 class meetings. Please contact the instructor or the Admissions and Records Office if you can't continue. The last day to **drop and receive a partial refund** of fees is Fri., 8/28. The **last day to add** is Fri., 8/28. The **NRS** drop deadline is Mon., 9/7. The last day to drop with a "W" is Mon., 11/16.

My Math Lab/Course Compass:

You will be assigned homework and quizzes through the My Math Lab website. We will discuss this and I will show you how it works during the first week of class. You will need to buy access directly from http://www.coursecompass.com or use the access code that comes with your book. The Course ID you will need is: butterworth68185. This portion of your grade will be based upon completion of homework and scores on the quizzes in MML during the semester – 15% of your grade, 10% for quizzes and 5% for homework, will be earned in this manner. All work on My Math Lab must be completed by the date specified on the assignment so PAY ATTENTION! Typically quizzes testing the material on an upcoming test will be due by noon on the Sunday before the date of the in-class test. Homework will be due by the last day of class. There will be no exceptions.

Homework/Class Work (HW/CW):

Your 1st assignment will be a group assignment on the 1st day of class. You will be getting to know your fellow classmates and familiarizing yourself with the layout of my class.

The 2nd assignment will be to take a handout to the Learning Center, located on the second floor of building 9, and get entered into their system, having a "person in charge" sign off that you are officially enrolled in the system. This assignment is due, by Tuesday, September 9 regardless of your date of enrollment. The Learning Center's math lab is a great place to get help. You can get help there from other instructors, from the free tutors, or from each other. The Learning center is <u>typically</u> open Monday-Thursday 8 to 8, Friday 8 to 3.

Your 3rd & 4th assignment is to fill out a set of questions about yourself and your reasons for taking this class. On the back of this information sheet, which I call an **Informative Questionnaire** is a contract between you and I that indicates that you have read and understand my syllabus and agree to the requirements set forth in my class. Successful completion of both sides is required for credit. Successful completion by Tuesday, September 8 will give you 2 100% credits toward your HW/CW. This is the ONLY assignment that I will accept late. I really want this information and I am willing to accept a paper copy between September 9 and October 27 for 75% credit (if it is complete).

Every Tuesday when you arrive you will have homework due on paper. You will bring it to the front of the room and place it in a pile on my desk. Paper Homework can be turned in for only one week after its due date and will be given a maximum of 75% credit. Paper Homework is available on my website, I will show you where on Day 1 (if you miss day 1 it is your responsibility to ask if you can't find it). It is your responsibility to get the assignments and to turn them in without being asked. Not knowing where the homework can be found is not a valid excuse for not getting it. It is considered late after break (which is approximately 7:30 to 8pm). We will review the homework the following week.

For classwork you will be given a worksheet of problems relating to the material that you will be covering during the coming week. We will have a mini lecture relating to each problem and then you will work the problem and we will go over it. I will come around or collect classwork to make sure you were participating. As long as you were working on the problems I will give you credit. If you miss a class you can't make-up CW (I can give you a copy to practice for your own use if you ask). If you come in late you will not be given extra time to finish your CW, it is due when I collect/check everyone else's papers. You will need to have 10 CW credits for 100% toward 5 HW assignments. Homework credit for all 5 of those assignments will be assigned on a percentage scale based on how many you have of the 10 required.

Your average scores from all types of assignments will be used as 15% of your grade. If your test scores' average exceeds your HW/CW, I will replace your homework score with your test score. *Late work will not be accepted for any reason.*

Some final pointers about all work in my class: Remember, if you don't do your homework on your own and in a timely manner, you are hurting no one but yourself – homework is a very valuable learning tool, and tests will let me know how much work you are doing on your homework! Late assignments will not be accepted! Do not ask, there is no circumstance that will make me change my mind!!

Tests:

We will have 4 tests given on the dates specified below. Each will be recorded as a percentage. Your final test grades will be an averaged and account for 40% of your grade. For any test you miss I will use your final grade in its place. Tests can't be taken late for any reason. A low/missed exam will be replaced by your final score – there is no other option

You may bring a 5x8 note card to each exam. The card may contain steps for doing problems, partial definitions and portions of a problem where you know you always have difficulty, but it may never contain a complete problem. Failure to comply with these specifications can result in a zero, and is considered cheating. I will check and approve your note card prior to the test. You <u>must</u> staple the note card to the **back** of your test.

Policy Note: All materials including your backpack, personal belongings, electronics, etc. will be placed at the front of the classroom prior to an exam. You may have a pencil, eraser and note card on your desk. If you need extra paper I will provide it. If you are allowed the use of a calculator I will note to keep your calculator on your desk.

Calculator Note: It is <u>not a given</u> that you may use a calculator for an exam! I believe that by having the basics well in hand you are better prepared for later material, thus I want you to improve your basic math skills at the beginning of the course. These are just some of the reasons that I do not allow calculators to be used on many exams. I am very firm about this! Cell phones/pdas will not be allowed during a test and MAY NOT be used as a calculator.

Test Schedule

Test #1	Tuesday, September 8
Test #2	Tuesday, September 29
Test #3	Tuesday, October 27
Test #4	Tuesday, December 1

Final Exam:

Your final will count as 30% of your grade. The final will be given on **Tuesday**, **December 16**, **2014**. There will be more emphasis on the new material on this test than on the review material. This is a cumulative test given in two or three parts! For the final, I also will allow one **8.5x11** piece of paper with notes on both sides for each of the exams. The **same rules apply** as with the note cards that may be used for regular exams. If you don't take a final you will receive an F in the class.

Grades:

Course Compass	15%	Percentage Ranges for Letter Grades
HW/CW	15%	A: 91.45%↑ A-: 89.45%-91.44%
Tests	40%	B+: 86.45% - 89.44% B: 81.45% - 86.44% B-: 79.45% - 81.44%
Final Exam	30%	C+: 76.45 - 79.44% C: 69.45 - 76.44%
Total	= 100%	D: 59.45% - 69.44%
		F: 59.44%↓

Class Rules:

The rules of my classroom are pretty basic – Be respectful of others. This means that you should not interfere with anyone else's ability to learn. Ways in which you may interfere include talking during lecture, not participating in group activities, using electronic devices music/texting/gaming during class, making any kind of disruptive noise during class, coming to class late and not making an effort to be as unobtrusive as possible, wearing a hat in class, etc. I will follow the policies outlined in the college catalogue in dealing with violations of the class rules. **Note**: If I see your cell phone/pda out on a consistent basis and see you disrupting others through its use or if you are not focusing, I will give you a warning and the next time I will ask you place the device on my desk for the remainder of the period and if you refuse I will ask you to leave the class for the period.

Student Honesty:

When doing homework I encourage students to work together and help one another. Students are expected to do their own work on tests and quizzes. I allow students to bring a 5x8 note card filled with notes to each exam. Cheating will not be tolerated! Talking to anyone but me, helping another student during an tests/quizzes, bringing more notes than authorized, copying information from another person's test or quiz, using external sources of information for which you were not explicitly given permission to use (including any calculating device not explicitly stated as appropriate, phones and pda's included) is considered cheating. Students caught participating in such activities will receive a zero on a quiz, violations on an exam can also result in a drop from the course or a grade of an F in the course (regardless of class standing)! Cheating incidents will also be reported to the

VP of Student Services and further action could be taken in accordance with school policy. For more information visit: http://www.canadacollege.edu/inside/acad_integrity/

Student Grievances:

Please refer to the grievance policy in the college catalog if you have any questions.

Student Special Services:

Students requiring special services or arrangements because of hearing, visual, or other disabilities should contact their instructor, counselor, advisor, or Disabled Student Services Office by the end of their first week of instruction. I encourage all students with special needs to contact me after the first class meeting to arrange for any classroom assistance. Please contact Disabled Students Programs and Services: http://www.canadacollege.net/student/disabledservices.html

Additional Information:

I reserve the right to make changes or additions to my syllabus at any time during the semester. I will notify you via class discussion of any changes or additions. The college catalogue overrides my syllabus at any time.

Resources:

- The Learning Center: Cañada College has an excellent well-staffed Learning Center in the second floor of building 9. There are individual tutors and drop in tutors available for most of the day and some evenings. Computers are available to access MyMathLab and EXCEL.
- My website is a resource available to you. http://www.profbutterworth.com
- There are many fabulous resources available to help you in your studies. One that I highly recommend is: Khan Academy http://www.khanacademy.org
- Access to MyMathLab (butterworth68185), which is more than access to homework and an electronic form of the text. It provides lectures, builds study plans and provides guided support and feedback as you work through your assignments. http://www.coursecompass.com
- Video lectures, created by me, to assist you in learning the material presented in this course. These lectures are available on YouTube. You may access them by using the link on your page on my website http://www.profbutterworth.com or directly by following the link http://www.youtube.com/user/profbutterworth/feed?feature=context or by searching for profbutterworth's channel on YouTube. I have also linked them through My Math Lab as Homework assignments (they don't actually count toward your grade).

Welcome to Elementary Algebra:

Welcome to Math 110! I am excited about the coming semester! I am here to help you learn about the exciting world of math and if there is anything that you think will make your learning experience more rewarding, please let me know. To be a successful mathematician it does take practice. You should plan to spend at least 2 hours outside of class for every unit studying your notes (ie 10 + hours per week), reading your text, reviewing your notes, viewing on-line lectures and doing problems both on paper and on My Math Lab. Class participation and study groups are very important as well! We may have some class time for group study, but you should get the names and numbers of at least two fellow class members to call in case you miss a class or need to ask a quick question. Have a great fall semester at Cañada!

Please see the course calendar for schedule and important dates.