

Intermediate Algebra

Math 120 AE

CRN 92992

5.0 units

Instructor: Yvette Butterworth**Text:** *Elementary and Intermediate Algebra*, J. Lehmann, 2nd Edition**Hours:** 12:10 – 2:35 pm Monday & Wednesday in 22-116**Office Hours:** Day Hrs. TBA

By Appt on Skype (profbutterworth)

E-Mail: butterworthy@smccd.edu**Phone:** (408)888-6160 & texts are OK**Website:** <http://profbutterworth.com>**YouTube:** profbutterworth's channel**Course Description:**

This course is a continuation of Math 110 and emphasizes absolute value, linear functions and graphs, rational exponents, radical exponents, quadratic equations, exponential and logarithmic functions. Content will include: Graphing of quadratics (review factoring, sq. rt. prop, completing sq., quadratic formula), exponential, logarithmic (via definition and inverse, via properties including expand/condense), rational (including finding the domain) and radical functions; Solving quadratic, systems of linear equations in 2 or more variables, rational, radical and absolute equations and inequalities; Modeling using quadratics, exponential, and logarithmic functions (including natural logarithms); Forms of quadratics; Simplifying radical, logarithmic, rational, radical (including rationalizing) expressions and complex numbers; Variation & Proportions (including similar triangles).

PREREQ: Math 110 or Math 112 completed at the grade "C" or higher, or appropriate score on District math placement test. **This class must be added by Friday, August 28.**

Learning Outcomes:

Upon successful completion of the course students will be able to

1. Write and solve linear, quadratic, exponential, and logarithmic equations and inequalities that model a given application.
2. Analyze and solve quadratic, exponential and logarithmic equations.
3. Graph and analyze linear, quadratic, exponential and logarithmic functions.

Required Materials:

(Elementary and) Intermediate Algebra, 2nd Edition, J. Lehmann; Scientific Calculator – TI 83/84; Pencils, Paper – lined and graph (for notes, graphing and homework), ruler – brought to each class meeting. Access to My Math Lab is required. 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, class participation 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!

MML (MyMathLab) is where you will receive additional homework and have quizzes, links to helpful videos, supplementary material and the ability to get immediate feedback and custom designed study plans based on incorrectly answered problems. The ACCESS CODE will come with your book or can be purchased directly from MML on-line. There is an 14-day free trial for all users, so there is no excuse for not beginning on DAY 1! You should already have received an email from me and be able to access the material. To begin you need: the access code/use free trial/credit card if purchasing, an email address and my course ID: [butterworth64144](#).

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 book material. Your attendance will be graded by homework and class participation. 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.

Quizzes:

There will be On-Line MML Quizzes. 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. MML Quizzes are on-line and are due the Sunday (by 11:59pm Pacific Time Zone; even on holiday weekends so plan accordingly) prior to the exam on which the material is covered. They are worth 20% of your grade. The quizzes on-line are available from the beginning of class and are open until the week following coverage of the material. You will have 2 attempts to take each quiz. I will re-open 5 quizzes if you miss deadlines, but not to make a higher score. A reopened quiz will still have 2 attempts and you will have until December, 14 to complete the quiz. The penalty is a 15% reduction in your quiz score. You must sign-up in class to re-open for reduced potential credit.

MML Homework:

You will be assigned homework through the My Math Lab website. This portion of your grade will be based upon completion of homework and scores on the quizzes in MML during the semester – 5% of your grade will be earned in this manner. My Math Lab Homework must be completed by the Sunday before our final, Sunday, December 13 at 11:59pm. There will be no exceptions.

Paper Homework & Class Work:

In addition to on-line MML Homework, you will have weekly Paper Homework that is due Wednesday of every week (except Thanksgiving week when it will be due on Monday). Paper Homework can be turned in late for only one week after its due date and will be given a maximum of 75% credit. Paper Homework is due mainly on Wednesdays and is considered late after the first 20 minutes of class. It is your responsibility to get the assignments and to turn them in without being asked. Paper Homework will account for 10% of your grade.

The 1st 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 Wednesday, September 9 regardless of your date of enrollment. The Learning Center 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 typically open Monday-Thursday 8 to 8, Friday 8 to 3.

Your 2nd & 3rd 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 Wednesday, September 9 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 10 and October 28 for 75% credit (if it is complete).

Every Wednesday 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 12:30pm. It is your responsibility to review returned homework with classmates, tutors or with me after class.

For classwork you will be given “Group Quizzes” relating to the material we covered during the last class. I will assign random groups for you to take the quiz. I will collect Group Quizzes and grade them “lightly”. You will receive $\frac{4}{5}$ for each question that is answered using valid methods but has an incorrect answer, $\frac{3}{5}$ for some correct work but some “nonsense” and $\frac{2}{5}$ for some work but meandering and incomplete and 0 for blank problems. You will not be given an unlimited time to complete these assignments so beware. If you miss a class you can't make-up Group Quizzes (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 Group Quiz and may be asked to complete the assignment alone or with other late students, 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 homework: All problems must show the original problem, work and final answer to be considered complete. An answer only is never considered complete. 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!

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 or early for any reason.*

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 must 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 not a given 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.

Proposed Test Schedule

Test #1	Wednesday, September 9
Test #2	Wednesday, October 14
Test #3	Wednesday, November 11
Test #4	Wednesday, December 2

Final Exam:

The final will be worth 30% of your grade. The final will be given on **Monday, December 14, 2015 between 11:10 and 1:40**. This is a cumulative test given in multiple parts! If you do not take a final, you will receive an F, regardless of your standing in the class at the time of the final.

For the final, I also will allow one **8.5x11** piece of paper with notes on both sides. The **same rules apply** as with the note cards that may be used for regular exams.

Grades:

HW	15%	<u>Percentage Ranges for Letter Grades</u>
Quizzes	20%	A: 91.45%↑ A-: 89.45%-91.44%
Tests (ave. %)	40%	B+: 86.45% - 89.44% B: 81.45% - 86.44% B-: 79.45% - 81.44%
Final Exam (ave. %)	30%	C+: 76.45 - 79.44% C: 69.45 - 76.44%
Total	= 100%	D: 59.45% - 69.44%
		F: 59.44% and below

Notes on Grades: Keep in mind that if you receive a D or lower it is not considered satisfactory completion of this course. That means that it will not satisfy the prerequisite requirements for other courses. Also bear in mind that after final grades are assigned, I will only change a grade due to a clerical error.

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 test, violations on a test 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 (butterworth64144). Besides being a required portion of your class it provides lectures, builds study plans and provides guided support and feedback as you work through your assignments. <http://www.coursecompass.com>

Welcome to Intermediate Algebra:

Welcome to Math 120! 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.