

Pre-Calculus I

Math 48A

CRN#20507

5.0 units

**Instructor:** Yvette Butterworth**Text:** *Math 48A/B/C: Precalculus I, II and II: Custom Edition for Foothill*, by Wilson, Adamson, Cox, et al.**Hours:** TThF (Tues, Thurs., Fri) 12:00-1:25 in 5609**Office Hours:** Friday 11:20-11:50 in 4125/6 & 15 min following class Tuesday & Thursday**Phone:** (408) 888-6160 (text messages are OK)**E-Mail:** [butterworthyvette@fhda.edu](mailto:butterworthyvette@fhda.edu) or [statsprofbutterworth@gmail.com](mailto:statsprofbutterworth@gmail.com)**Website:** <http://profbutterworth.com>**Course Description & Outcomes:**

Math 48A is a 5-unit course. It is an intensive study of linear, quadratic, polynomial, rational, logarithmic, exponential, and other functions and their related applications. Additional topics include functional notation, transformation of functions, families of functions, and inverse functions.

The expected outcomes for this class are:

A successful student will be able to model real-life phenomenon using polynomial, power & root functions, use the model to make predictions, and interpret solutions within the context of the real-life phenomenon.

A successful student will be able to graph, analyze and transform polynomial, power, and root functions.

Completion of Math 105 (Intermediate Algebra) with a C or better or a satisfactory score on the math placement exam is required for entrance into this class. Eligibility for Engl 1A or ESLL 26 is advised. **This class must be added by Friday, Oct 4.**

**Required Materials:**

*Math 48A/B/C: Precalculus I, II and II: Custom Edition for Foothill*, by Wilson, Adamson, Cox, et al. WebAssign is optional; Graphing Calculator TI-83/84 (A TI-89/92 or similar calculators are not allowed); Pencils, Paper – lined and graph (for notes & graphing), ruler and a 3 ring binder minimum of 2 inches to keep all work associated with this class in a neat orderly manner.

**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 class participation, 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 5 class meetings. Please contact the instructor or the Admissions and Records Office if you can't continue. *Students on the final grade roster who have not dropped, and who do not show up for the final exam, automatically receive an F in the course – it is your responsibility to drop yourself from the class if you don't wish to continue.* The **add deadline** is Fri., 10/4, the **refund deadline** is Sat., 10/5. The **NRS deadline** is Sat., 10/5. The **W deadline** is Fri., 11/14.

**Quizzes:**

I will give a quiz after approximately every 3<sup>rd</sup> section, which I will grade and return with brief comments. We will review them in class where you will fully correct them. I will grade each problem a 4 for complete with correct answer. A 3 for complete with correct methods and minor math errors. A 2 for concept errors or many math errors. A 1 for a little conceptual understanding but not really “getting it.” A 0 for leaving it blank or trying to really not exhibiting any understanding of the concepts needed to do a problem. You can't make quizzes up, but I can use your test score on the material to replace a single quiz score. These quizzes will account for 20% of your grade. If your tests have a higher average at the end of the quarter, I will replace the quiz grade with the test grade.

## Homework/Collaborative Exercises/Class Work:

Your first 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 assignment should be nearly complete by the time you leave class on the first day and then you will be required to take the handout to the PSME on your own time and have it signed by a faculty or staff member. This assignment will be due on Friday, October 3.

Your second & third 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. It is due by Friday, October 10 as well. You may turn the completed assignment late until Friday, November 11 for up to 75% credit. This is the only assignment that I will accept late!

I will assign problems to be worked for the next class during each session. These problems will be from the book, from handouts. You must be in class to get the exact homework (although you may find it posted on the Google Calendar for your class on your class webpage). These homework assignments will be collected by me, checked off for completeness and returned to you for self-check. Work is late after I have checked it off in class. Homework is not accepted late for ANY reason. After its return we will try to go over most problems. If your test average is higher than the homework score I will use it to replace your homework score. *Late homework **will not** be accepted for any reason.*

In addition, we will have group work and other assignments that will be deemed part of class work. There will be no make-up work on any of these assignment, so you must be in class to receive the credit. Grading will be very lenient and primarily based upon completion, participation and effort.

The highest 80% of your homework scores will be used for computing 10% of your final grade.

Some final pointers about homework: All work will be labeled with section and assignment and will be stapled in the upper left corner in sequential order and your name and date in the upper right. 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! **No late assignments will be accepted!** Do not ask, there is no circumstance that will make me change my mind!!

## Tests:

We will have three tests. See the calendar below for planned dates. The plan for the date of each of those exams is included in the course calendar but may differ due to pace so be sure to pay attention to test announcements in class and on the Google Calendar. Each will be recorded as a percentage and the average percentage will count as 40% of your grade. *Tests **can't** be taken late for any reason (if you miss a test your final will be counted as the missed test).*

For the 1<sup>st</sup> test & the final you will be required to bring a valid form of ID and show it to receive your exam and again when you complete the exam. A valid form of ID is a state issued driver's license or ID card, or a passport. A student body card (OWL card) is not a valid form of ID!

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 **NO examples**. 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.

**Note:** You are required to have a TI graphing calculator for this class. **The Foothill College Math Dept. does not currently allow students to use any calculators that are capable of symbolic algebra or calculus during examinations; one such example is the TI 89/92.** Use of different calculator in examinations requires permission from the instructor.

## Final Exam:

The final will be worth 30% of your total grade. The final will be given **Tuesday, December 9, 2014 from 12:30-2:30pm**. This test is cumulative putting approximately half the emphasis on material since the last midterm and half on review material.

## If you do not take the final you will receive an F in the class!

You may bring an **8.5x11 note card** to the final. The card may contain steps for doing problems, partial definitions and portions of a problem where you know you always have difficulty, but **NO examples**. You **must** staple the note card to the back of your test.

## Grades:

HW/CW/Participation	10%	<u>Percentage Ranges for Letter Grades</u>	
Quizzes	20%	<b>A:</b> 91.45%↑	<b>A-:</b> 89.45%-91.44%
Tests (ave. %)	40%	<b>B+:</b> 86.45% - 89.44%	<b>B:</b> 81.45% - 86.44%
<u>Final Exam (ave. %)</u>	<u>30%</u>	<b>B-:</b> 79.45% - 81.44%	<b>C+:</b> 76.45 - 79.44%
<b>Total</b>	<b>= 100%</b>	<b>C:</b> 69.45 - 76.44%	<b>D:</b> 59.45% - 69.44%
		<b>F:</b> 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 for 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 out on a consistent basis and see you disrupting others through its use or if you are not focusing, you will be warned and following a warning asked to leave the classroom! Cell phones are not allowed out during test and midterms! Having a phone out for any reason, without expression consent will be considered cheating (see below)! I know there are unexpected emergencies as well as times when we are expecting an important phone call, so I if the need arises, please use your phone discreetly. Discreet phone use includes keeping it on silent mode and preferably in your pocket. Discreet use also means waiting to answer the phone until you've stepped outside, or if it can't be put off, answering with a quick whispered, "Hello, hold on for a second." Just so you know in advance, my cell phone is always on my desk because I use it as a time keeping device for breaks and end of class, and you can be assured that I will not be answering it unless it is an emergency – and I do have children, so those can arise!

## 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 midterms. 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/midterm, bringing more notes than authorized, copying information from another person's test or midterm, 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 an midterm 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 Dean of Students and further action could be taken in accordance with school policy.

## 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 in Room 5997 (in the portables near entrance to lot 5) as early as possible in the quarter. To obtain disability-related accommodations you may also contact DRC at [adaptivelearningdrc@foothill.edu](mailto:adaptivelearningdrc@foothill.edu) or by calling (650) 949-7102 asking to speak with Akosua Grant the Accommodations Coordinator. I encourage all students with special needs to contact me as early as possible to arrange for any classroom assistance and to discuss your needs. You must contact me at least 2 weeks prior to the first exam to make arrangements and 1 week prior to EVERY exam to secure accommodations for your needs.

### Additional Information:

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

You may find that you need additional help outside of class. I strongly urge every student to begin getting extra support from the beginning. Some additional resources include, tutoring offered in the PSME (Math) Center in Rm 4213, Tutorial Center, private tutors and of course my help (during office hours; see above) and your class mates' help.

### Welcome to Pre-Calculus I:

Welcome to Math 48A! I am excited about the coming quarter! I am here to help you learn about the exciting world of advanced math and if there is anything that you think will make your learning experience more rewarding, please let me know (this is not an invitation for you to tell me how to run my class, but an open line of communication). To be a successful mathematician it does take practice. You should plan to spend at least 2 hours outside of class for every hour in class studying your notes (ie 10 + hours per week), reading your text, reviewing your notes and doing problems. 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 quarter at Foothill!

### A Brief Look at The Quarter:

Monday	Tuesday	Wednesday	Thursday	Friday
22	23 Introduction Class Work on §1.1	24	25 Review §1.1 CW §1.2	26 Review §1.2 CW §1.3
29	30 Review §1.3 CW §1.4	Oct 1	2 Review §1.4 CW §1.5	3 Practice Quiz §1.1-1.3 Review §1.5 Last Day to Add Oct. 4 Last Day to Drop w/o "W" Oct. 5 Last Day for Refund Oct. 5
6	7 Review P. Quiz CW §1.6	8	9 Review §1.6 CW app §2.7	10 Review app §2.7 CW app §2.1 Questionnaire Due Last Day to Drop w/ NRS
13	14 Review §2.1 CW §2.2	15	16 Test #1 Ch. 1 & app §2.7	17 Review §2.2 CW app §2.3
20	21 Review §2.3 CW §3.1	22	23 Review §3.2 CW §3.3	24 Practice Quiz §2.1-2.3 Review §3.3
27	28 Review P. Quiz CW §3.4	29	30 Review §3.4 CW §3.5	31 Practice Quiz §3.1-3.3 Review §3.5
Nov 3	4 Review P. Quiz CW §4.1	5	6 Test #2 Ch. 2 & 3	7 Review §4.1 CW §4.2
10 Campus Closed Veteran's Day Observed	11 Review §4.2 CW §4.3	12	13 Review §4.3 CW §5.1	14 Practice Quiz §4.1-4.3 Review §5.1 Last Day For "W"
17	18 Review P. Quiz CW §5.2	19	20 Test #3 Ch. 4	21 Review §5.2 CW §3.6
24	25 Review §3.6 CW App 3.6	26	27 Holiday	28 Holiday
Dec 1	2 Review App. 3.6	3	4 Practice Quiz §5.1-5.2 & 3.6 Review App 3.6	5 Review P. Quiz
8	9 Final 12:30-2:30	10	11	12