

Community College of Philadelphia

Mathematics 161, Fall, 2008
Section 008, CRN 41774
Tuesdays and Thursdays, 5:15-6:35
Room C3-29

Instructor: Dr. Joanne Darken

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Office hours:
Tuesday: 3:15-5:15, 6:45-7:15
Thursday: 6:45-7:15

I will also be teaching at the West and Northwest campuses this semester, and have office hours there as well:

Wednesdays at the West Regional Center, in a cubby 5-6:20
Fridays at the Northwest Regional Center, Room 222: 11:10-12,
3:15-3:35

You do not have to make an appointment to see me during office hours; just come—it's first come, first served. If you need to see me and cannot get to an office hour, catch me before or after class or make an appointment for another time.

The course: This course is primarily intended as a preparation for calculus, though it has intellectual importance in its own right. Its central theme is the concept of function. After introducing this concept we consider various types of functions and different ways of representing them—most prominently, graphing them. We also review some algebra as we go along. To the extent that time permits, we will study conic sections.

Prerequisite: Math 118 with a grade of C or better, or placement into the course from the placement test. This course uses considerable algebra, and some students may want to do extra review.

Text: *Precalculus: A Prelude to Calculus* (Preliminary Edition), by Sheldon Axler, published by Wiley, 2007 \$47.85 at the CCP bookstore

Supplies you will need

- 1) a graphing calculator (such as a TI-83) The instructor has a few to lend.
- 2) a three-ring binder for your text, notes and materials
- 3) three-ring loose-leaf paper
- 4) a ruler
- 5) graph paper

Grading

There will be almost daily quizzes, two tests, and a final exam at the end. Homework will be graded.

- Your quiz average will count 10% of your grade. The lowest four quiz grades will be dropped. A missed quiz counts as a dropped quiz (unless more than 4 are missed, in which case a missed quiz counts as a zero). Quizzes will be short, and given right at the beginning of class, so be sure to be on time.
- Each of the two tests will count 25% of your grade. The tests will be given October 2 and November 6. Each test will be preceded by a review. It is important to take tests on time. A student who misses a test must make it up exam week or the week before, but loses 10% from the grade for the lateness, unless/he can prove s/he was very ill or in court. It is not likely that the test dates will be changed, but it is possible. Any change will be announced in class at least one week in advance of the old or new test date, whichever comes first. Should you chance to miss class, be sure to check with the instructor or another student to be certain of the date.
- The final exam will be given Thursday, December 11 or Tuesday, December 16th, in a two-hour time slot at about the same time as the class time. The exact date and time will be announced a few weeks before the exam. The final exam counts 30% of the grade.
- Homework will count 10% of your grade. The text has web support, and most homework will be posted there. The procedures and rules governing web homework will be explained in class. (Contact the instructor if you have any problem with web access.)

Grading: 90-100%, A; 80-89%, B; 70-79%, C; 60-69%, D; below 60%, F.

It is important that every student do his or her own work, for the student's own sake and that of others. The penalty for cheating is a grade of zero the first time, and more serious disciplinary action if it happens again. This applies to all work that is graded.

Homework, attendance and classroom behavior

Web homework is due (on the web) three hours before the next class after it was assigned. This is to give the instructor time to look at the results (on the web) before class. Other homework is due at the beginning of class. Up to 3 homework assignments will be accepted late for half credit. It is important to do your homework on time, since we usually build on what we've just done.

Students are expected to be in class for the full class time. In recent years there have been increasing problems with a few students chronically being late or leaving during class. This of course distracts everyone else in the room. Anyone may have a last-minute emergency or delay, but to maintain an orderly classroom atmosphere it has become necessary to impose a penalty for such incidents. Being late has an automatic penalty in that the student misses or has inadequate time for the quiz. Leaving during class (to return or not) will be penalized as a half hour of absence per occurrence after the first time.

A student absent for six hours or more may be dropped from the course, according to College policy. (A student in this situation has probably been absent too much to do well in the course, or has been disrupting the class by frequent untimely departures.) If you have special, documentable reasons for absence and there's reason to think you could catch up, contact me, the instructor, promptly to discuss the matter.

If you can't make it to class for some reason, get the homework assignment from the Wiley web page and check with the instructor or another student in case there is non-web homework. Also, if you are absent or for some exceptional reason have to leave early, let the instructor know in advance if possible and in the latter case sit near the door to minimize disruption.

If you must withdraw from the course, be sure to do so officially, and before 5 p.m. Monday, November 20. Do not assume the instructor will withdraw you.

Class time is a time to focus on mathematics. Occasionally you may need to relax briefly from the intensity of your labors, but standard classroom etiquette and behavior are expected. Nothing that interferes with these, such as talking or moving about while the instructor or anyone else is making a presentation, is permitted, and much as we encourage the use of technology, you are not to use earphones in class, and if you bring a cell phone or beeper it should be turned off. The noise is distracting. If an emergency at home demands that you have your cell phone on, put it on vibrate mode, tell the instructor in advance, and sit near the door so you can leave the room to answer it. Don't text message.

Help

If you have questions about the work we are doing, you have several sources of help:

- 1) You can catch the instructor before or after class or in office hours (listed above)
- 2) You can see a tutor in Room B2-36. You need to make an appointment at least a week in advance, but sometimes someone misses
- 4) The Wiley web site, www.wileyplus.com, has problems you can practice with. Also, there are solutions in the text for many of the exercises there.
- 5) For review of algebra, try your old text if you have it still, or one of the websites below. (These were recommended by colleagues for Math 017 students, but you may find they have what you want. I would appreciate feedback about them.)

<http://ccpmathlibrarian.wetpaint.com/page/Math+017+-+Beginning+Algebra>
A list of sites on various topics, with explanations and practice problems (rec. by J. Warren)

<http://go.hrw.com/gopages/ma-al.html> The Holt Publishers site for math. Includes practice with algebra and some math games (rec. by C. Carr)

Timetable

This timetable may be subject to slight change.

Week 1	Sept. 2, 4	Chapter 0: The real numbers
Week 2	Sept. 9, 11	Review Chapter 0, Start Ch. 1, Sec. 1: Functions
Week 3	Sept. 16, 18	Finish Ch. 0, Ch.1 Sec. 1, 2: More on functions, the coordinate
Week 4	Sept. 23, 25	Ch. 1, Sec. 2, 3: Transformations, graphs
Week 5	Sept. 30, Oct. 2	Ch. 1, Sec. 4: Composition of functions, Test 1
Week 6	Oct. 7, 9	Ch. 1, Sec. 5, 6: Inverse functions
Week 7	Oct. 14, 16	Ch. 1, Sec 6: More on inverse functions; Ch. 2, Sec 1: Linear
Week 8	Oct. 21, 23	Ch. 2, Sec. 1, 2: Quadratic functions
Week 9	Oct. 28, 30	Ch. 2, Sec. 2: More on quadratic functions
Week 10	Nov. 4, 6	Ch. 2, Sec. 3: Exponents, Test 2
Week 11	Nov. 11, 13	Ch. 2, Sec.4: Polynomials
Week 12	Nov. 18, 20	Ch. 2, Sec. 5 Rational functions
Week 13	Nov. 25	Conics (from a handout)
Week 14	Dec. 2, 4	Conics, review
Week 15	Dec. 9 or 11	Final exam Tues. or Thurs