

Greg Langkamp - Seattle Central Community College
MATH 098 Intermediate Algebra
Course Syllabus Summer 2009
(Item #1302, section 12, TuTh 5:30-8:30 pm)

Contact Information

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Office: SAM 413

Office Hours: Before class in my office, 5-5:20pm, or by appointment

Prerequisites: Mat 085 with a 2.2 or better or one year of high school algebra and placement exam. Prerequisites are checked electronically during the first week of the quarter.

If you met the prerequisite for this course by passing a placement test, be aware that the accuracy of such tests is fairly low. It may be the case that you were placed correctly, but perhaps you were placed either too high or too low. If you suspect that you are in the wrong course, please contact me ASAP, and I'll try to help you get into the correct course.

Overload Policy: After taking attendance for 1 day, I will know how many seats are available for overload. Those students on the electronic overload list who attend the first 1 day will have highest priority for overloading the course. There is no guarantee that anyone will be overloaded into the course. To overload the course you will need proof of meeting the prerequisite (copy of your placement test score, or unofficial copy of your 085 grade.)

Course Materials:

a) (REQUIRED) **Textbook:** Intermediate Algebra, Everyday Explorations, 4th Edition, by Alice Kaseberg. Houghton Mifflin Publishers, 2008, ISBN-13: 987-0-618-91880-5, ISBN-10: 0-618-91880-9

b) (REQUIRED) **Supplies:** Pencil, eraser, lined paper, graph paper, and a small ruler. Work not graded if done in ink! See my [web site](#) for downloading graph paper.

c) (REQUIRED) **Graphing calculator** (TI-83 or TI-84 highly recommended) Classroom demos and textbook use the TI-83+/84+. The TI-82 is similar, but there are too many differences. If you opt to purchase a calculator, buy the TI-84+. Any other models will require your extra work to learn how to use them. Note: Some calculator models may not be allowed in this class because they are too powerful. Check with me!

d) (REQUIRED) **Course packet** : a collection of worksheets that we use in class, Available at the SCCC copy center in the main building (3rd floor – BE 3105A). Cost = 4.90 + tax

d) (OPTIONAL) Electronic Dictionary (for students whose native language is not English). An electronic dictionary can be used during class, including quizzes and exams.

e) (OPTIONAL) Student Solutions Manual, by Alice Kaseberg, ISBN-13: 9780618952151 or ISBN-10: 0618952152.

Renting Calculators: TI-83+ calculators are available to rent for **\$20/quarter**. You will need to pay \$20 to the school cashier (on the first floor of the main building). On the **1st and 2nd** days of the quarter, rental calculators will be checked out in class. Bring your receipt to class, fill out a contract, get the calculator.

Attendance: Attendance will be taken each day that class meets. Each day that you attend and participate you will earn 3 attendance credits. Students arriving late or leaving early will lose credits. Attendance will be worth about 30 points or 4% of your grade.

Internet Access: This course requires that you access the internet several times each week. A printer is not necessary, although may be useful. Students who do not have internet access at home will need to use computers in the SCCC computer labs, in a local library, etc.

If using SCCC computers, you will need a login name and password

** Go to <http://www.seattlecentral.edu/it-services/stuaccts.php> to look up your student account login name.

** The password is the last 6 digits of your Student ID number (or SID). Do not include hyphens or dashes.

Course Contents: The following is an approximate guide, subject to some revision:

Week	Topics	Book Chapters
1	Review material, problem solving, graphing calculators, WAMAP	Chapter 1
2-3	Functions, Linear functions	Chapter 2
2-3	Linear and other functions	Chapter 2
3	Exam #1 , Linear systems modeling.	Chapter 3
4-5	Quadratic Functions	Chapter 4
4-5	Quadratic Functions	Chapter 5
6	Exam #2 , Exponents and Radicals	Chapter 7
7	Exponential Functions / Log Functions	Chapter 8
8	Review and Final Exam	

Course Objectives and Goals : most of the following will be learned this quarter

A. Linear Functions: You should: be familiar with slope and its interpretation (units); know how to find the equation of a line given a graph, given 2 points, or given a point and some information to get slope; be able to work with concepts of "parallel" and "perpendicular"; be able to recognize linear data in a table and determine slope and vertical intercept; be able to recognize in words the description of a linear function and write out the equation; be able to accurately graph a line and label and scale the axes appropriately; be able to find the intersection point of two linear functions.

B. Functions/calculator skills: Definition of a function, function notation, interval notation, general skills in reading a graph, understand the connections between the 3 forms of a function: equation, graph, and table of values; domain and range, estimating solutions to equations by graphing or using the table features on a graphing calculator; other basic graphing calculator skills including setting up a simple graph window. Be familiar with many basic graphs, and how they might model real-world examples.

C. Quadratic Functions: You should: be able to recognize shape, find intercepts, vertex, and other points from the equation of a quadratic function; be able to solve quadratic equations via factoring, quadratic formula, completing the square or extraction of roots; solve quadratic inequalities; solve max/min problems and work with other applications that involve quadratics (projectile motion, areas and perimeters, etc.).

D. Exponents, Exponential Functions and Logarithms: Know basic skills in manipulating exponents and radicals; converting between forms, solving equations, etc. Know the difference between exact and approximate representation of numbers. You should: understand the essential ideas behind exponential growth and decay, be able to construct exponential models given an initial value and some information about growth or decay; be able to recognize exponential data; solve exponential equations exactly using rules of exponents, logarithms, or estimation; know basic manipulation and use of logarithms; work with applications involving exponential functions.

WAMAP: This course will make use of WAMAP, an online course-management program and assessment tool. One great feature in WAMAP is that it allows me to post class announcements and documents everyone to read. I plan to post the syllabus and other up-to-date course information, all of your grades for the quarter, handouts, and solutions to quizzes and tests. If you ever miss class, check the WAMAP site for the latest happenings! A second major feature of WAMAP is its internal email system. This system will allow me to send messages to the class. You will be able to message me and/or other students in the class as well. WAMAP messaging is for class use only – not for other personal correspondence! A third feature of WAMAP is that it houses an enormous number of online math problems to use for graded homework.

What to expect each week: You should expect to spend on average 12 hours per week for this course outside of class. This time will consist of reading your textbook and class notes, doing problems from the textbook and WAMAP, studying for quizzes and tests, working on group projects, and prepping for special class days.

Each week I will give you a list of topics for the week, as well as daily homework problems from the text. I will announce quizzes and tests in advance. Some days you will work on problems that will be handed in by the end of class for a grade—these in-class problems cannot be made up.

Textbook homework problems: Most days you will have homework problems from the text or worksheets. Keep all problems and assignments in order so that you can quickly consult them during class or at a later date. Most text problems have answers in the back of the text or in the student solutions manual. You can get additional homework help in class, at the math lab, or with tutors. On the first day of each week I will hand out the week's homework list (always subject to some change). Textbook problems will not be collected, although strong effort on these problems will pay off with better results on quizzes and tests.

WAMAP homework problems: Each week you will have several online homework assignments that will be count for a grade. You will typically be given 3-4 days to complete each assignment. It is imperative that you start looking at the WAMAP problems immediately, and try the first few assignments which are for practice only.

You must complete WAMAP assignments by the stated due date. In WAMAP you allowed two (2) "Late Passes." Each Late Pass will allow you to postpone the due date for any one assignment by 24 hours. Once the 24 hours is over, WAMAP will automatically grade your assignment.

Class handouts and problems: There are frequent handouts and problems that we work on during class. Sometimes these are collected, sometimes not. The only way to earn points is to attend class and find out!! No makeups whatsoever.

Group work: Modern educational theory suggests that students who actively engage in group discussions and problem solving sessions learn more than counterparts who do it alone. My observations from 20 years of teaching agree with this. Therefore, I have structured this course so that there will be many activities during and outside of class in which you will have the opportunity (or requirement) to work in groups. You will need to make some effort to be flexible and accommodating to work out times when you can get together with your group. I also suggest that you find a study partner (or two) to work on regular textbook and WAMAP assignments. Exchange phone numbers and email addresses!!

Class Etiquette: You will be working with other students during many of the class hours. Cordial and polite behavior is expected. Under no circumstances is abusive or derogatory language or behavior acceptable. When others are speaking, be quiet and respectful. Turn off all electronic devices before entering class.

Posted Solutions: I will post solutions for quizzes and tests, and many worksheets on WAMAP in PDF format.

Tutoring Help: You will find fabulous assistance at the MATH TUTORING LAB (Science and math building, main floor, room 100: offers "drop in" help, open daily) Also check out COLLEGE WIDE TUTORING (2nd floor in "old" building: offers scheduled 1-on-1 help): Both are free!!

Other Resources:

- 1) The SCCC library should have a text book and student solution manual on reserve. See the front desk.
- 2) The SCCC math faculty also has a web site with sample syllabi, course information, and cool math links <http://www.sccd.ctc.edu/~ccmath/>
- 3) See also [Student Math Help](#) at my web site.
- 4) Available online for extra practice: College of the Redwoods Intermediate Algebra text: <http://msenux.redwoods.edu/IntAlgText/>.

Grades (points subject to some change):

Activity	approximate total quarter points
Attendance	30 points
WAMAP Homework (drop lowest)	scaled to 100 points total
Textbook Homework	not graded
Class problems/worksheets (3-5 points each)	20 points
30-minute quizzes (3@30 pts each, drop lowest)	60 points
50-minute exams (2@ 100 points each)	200 points
Cumulative final exam (Final exam can be used to boost one of your earlier exam scores – more on this later)	150 points
Approximate total points	560 points

Grades will be computed as follows: **Grade = 0.073 times percentage correct – 2.96**
(This makes 95% correct = 4.0 , 89% = 3.5, 75% = 2.5, 61% = 1.5.)

Example: In the middle of the quarter, a student has quiz scores of 16, 18 , and 12; a test score of 85, and Graded Class Problems of 4 and 5. After dropping the lowest quiz score, the total is 128 out of a possible 150. The percentage correct is $(128/150) \times 100\% = 85.3\%$. The quarter grade is : $\text{grade} = 0.073(85.3) - 2.96 = 3.3$

Cheating

Cheating includes, but is not limited to, copying another's work on an in-class exam or quiz, or turning in another person's work as one's own for a homework or other hand-in assignment. Anyone caught cheating will get a 0 on that particular assignment. Depending on the circumstances, that person may also receive a 0.0 for the class, and/or be reported to the SCCC Dean of Students. **Do not risk your academic career by cheating!**

Policy on missing quizzes, tests, etc:

In general, by signing up for this course you are expected to attend every day and be present for quizzes, tests, and class problems. If you plan to be absent and notify me in advance, I will try to help you plan ahead so you may study on your own. This is not a promise -- it depends on the reasonableness of your request and the timing involved in consideration of the rest of the class.

Quizzes and tests are announced in advance. If you cannot attend class on the day of a quiz, you will get a zero for that quiz. (don't worry, you get to drop your lowest quiz score). BUT ... If you cannot attend class on the day of a test because of illness YOU MUST CALL OR EMAIL ME BEFORE THE TEST. I will try to arrange a make-up test, providing that you return to class in a reasonable amount of time after being absent. Failure to call or email beforehand will result in a grade of 0 for the test (special circumstances may be considered).

Special Accommodations: Students with documented disabilities who need course accommodations, have emergency medical information or require special arrangements for building evacuation should contact the instructor within the first two weeks of class.

Mat 098 FINAL EXAM (only at this time!)

Thursday August 20, 5:30-7:30 pm Room SAM103

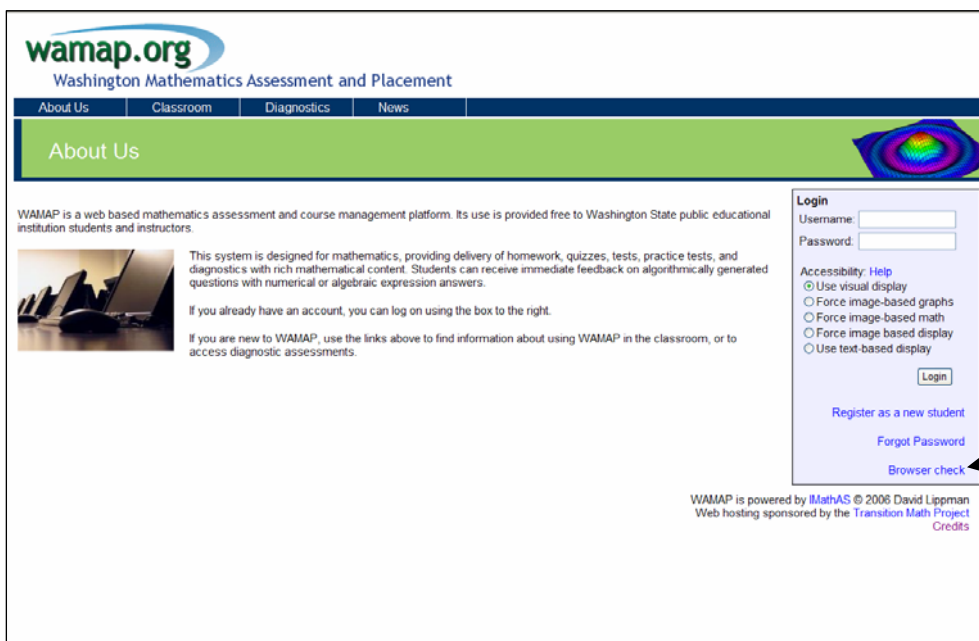
Final Note: Information in this syllabus may be modified during the quarter.

WAMAP – how to get started

1. Go to www.wamap.org.
2. See picture below. If you are using your own computer, click on “Browser Check”
3. See picture below. **Do not register as a new student!!** Once you are registered for MAT 098 (most of you are), I will registered you into WAMAP!! Once I have done this, you can login to WAMAP as follows:

Username: All 9 digits of your SCCC student id number.
Example, if your SID is 980-99-1212, then your Username is 980991212 (no dashes or hyphens)

Password: currently set to the last 4 digits of your SID. Example: 1212



4. Once you log into WAMAP, you will see a page similar to the one below.

