MATH 99 DE: Intermediate Algebra
Syllabus – Spring 2013

INSTRUCTOR:
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Skagit Valley Community College
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Mount Vernon, WA 98273-5899

Phone/Voice Mail: (360) 416-7917
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Web: faculty.skagit.edu/gretakocol

COURSE TEXT/MATERIALS:
1.) Access Code for MyMathLab (can be purchased online) - REQUIRED
2.) A graphing calculator is also required. TI-82, TI-83, TI-84, TI-86, TI-89 will work fine.
3.) A TI-Connectivity Kit (computer/calculator silver link cable that may have been included with your
   calculator) is required. You can use the TI-Connect and link cables in the Math Center if you would
   rather not purchase one.
4.) Beginning and Intermediate Algebra, 3rd or 4th edition, K. Elayn Martin-Gay - OPTIONAL

NOTE: You may purchase the Access Code for MyMathLab and just use the online text. A hardcopy
of the book is not necessary. If you prefer to have a paper copy you can purchase older editions for less
online. Calculators are available to rent for $20 per quarter. See Beth Oshiro in A-222 if interested, or
you may find a good deal at a pawn shop.

COURSE DESCRIPTION:
A course designed to prepare students for entry into college-level mathematics courses. Topics include:
systems of equations, linear and absolute value inequalities, rational exponents and radicals, complex
numbers, solving and graphing quadratic equations, composite and inverse functions, logarithmic and
exponential functions.

COURSE PREREQUISITE:
Beginning Algebra II (Math 98) with a grade of “C” or better, or equivalent math placement score.

GRADING:

35% - Exams (4 - online)
25% - Final Exam (In person – 50% needed to pass the course)
20% - Projects
20% - MyMathLab Online Homework

I will follow the scale below for points accumulated and will use + and - grades as well.

•A: 90 - 100%,  •B: 80 - 89%,  •C: 70 - 79%,  •D: 60 - 69%,  •E: 0 - 59%
E-LEARNING REQUIREMENTS:
Taking a class via distance education puts a tremendous responsibility on the student. In addition to academic considerations, you should also consider your learning style, strengths, and preferences before enrolling in an online class. This course will be appropriate for you if you are self-motivated, goal-oriented and work well independently. Please seriously consider the following in regard to your success in this course:

- Do you have a compelling reason or goal to complete the course?
- Are you self-disciplined?
- Are you comfortable following written instructions?
- Do you have a good Internet connection from home?
- Are you comfortable using email and sending email attachments?
- Are you a strong computer user?

If you do not meet the above recommendations or are unsure about your willingness to devote at least THREE HOURS PER DAY then I suggest you wait until you can take the class in the traditional lecture format. This online format may save time commuting but requires at least as much time as attending class in reading and working text examples to help you understand the material.

COURSE DETAILS:

Projects
Four projects will be done this quarter. One project with each unit of study. The information for the projects can be found in the “Course Documents” section of the MyMathLab site. Each project will require you to use your graphing calculator to input and plot data. These projects will be word processed with appropriate mathematical graphics inserted. These graphics can be downloaded from your calculator using the TI Connect software. Most of the projects will also require graphing by hand and therefore you will need to scan and attach your resulting graphs. You may choose to come to campus to collect data for each of the projects. It will be more meaningful if you do so. A data collection station will be set up in my office in F211 and I can also make arrangements to have one in the Math Center F212 if you plan to be on campus when I am not available. These projects are individual assignments and must be your own work.

- Match It: Using linear equations to model movement.
- Pendulum Project: Collecting and analyzing pendulum data.
- Bouncing Ball Project: Collecting and modeling bouncing ball data using quadratic functions.
- Population Growth: Fitting and analyzing population data with linear and exponential models.

Exams
Four online exams using MyMathLab will need to be taken by the appropriate deadlines. Even though you will be allowed to use your calculator, notes, and textbook on these exams you SHOULD NOT be relying on them. You should be prepared well enough to take them without. There will be a 90 minute time limit for each exam so plan accordingly. Exams should be taken AFTER the homework has been completed and AFTER completing a practice exam. If you are unhappy with the score you receive on your first exam you may take the exam a second time and the average of the two attempts will be the exam grade. No make-up exams are allowed so be sure to complete the exams well BEFORE the due
date on the class calendar.
Please keep your paper work for the exam in case you want to discuss the exam questions later or challenge a question for partial credit. I suggest you number your paper and finish each exam problem completely before submitting the answer electronically.

Daily Homework
Daily homework is EXTREMELY important in mathematics. The number of problems will vary between individuals. Some of you will find that you need to do many more problems than what I assign on MyMathLab in order to give you enough practice to master the skills and concepts. Your homework assignments will be done online using the MyMathLab online software. Homework problems can be repeated until done successfully. Click the “Similar Exercise” button at the bottom of any missed problems to get a new one you can solve correctly. Homework has WEEKLY DEADLINES every Friday. Be sure to complete assignments by their appropriate deadlines. No excuses will be accepted for late homework, you can always work ahead of schedule to give yourself more flexibility.

HOMEWORK MUST BE DONE REGULARLY TO BE SUCCESSFUL IN THIS COURSE! A good place to find extra practice problems is in the Study Plan found in the Chapter Contents section after you click on the section you want to practice.

Final Exam
The final exam for this class will be held at the Mt. Vernon campus of Skagit Valley College on either Monday, June 17 or Wednesday, June 19. You must earn at least 50% on the final exam to receive a passing grade for the course. The final exam will be administered between 9:30AM and 12:20PM on Monday and between 11:30AM and 2:20PM on Tuesday. You will have 2 hours to finish the exam. You will NOT be allowed any notes for the final and it will include a NO calculator allowed portion. Therefore, it is extremely important for you to master the subject matter in this course to a high level of proficiency. You should be careful to learn the concepts and not rely on your calculator to compute values and do problems that are designed for you to complete without one.

If you cannot take the exam at the scheduled time then you will have to set up an appropriate proctor and have all the contact information for the proctor to me by May 17th. If the information is not submitted to me by the deadline you will have to take the final on campus as scheduled.

Study Groups and Extra Help
During my office hours (10:30 Daily) I am available to help you with your mathematics. Appointments can be made to see me as well. If my office door is open feel free to drop in, if it’s closed I need some uninterrupted time to work. Extra math help is also available in the Math Center in F212 and the tutoring center in L-20. Please make use of the help available and consider forming study groups. Your fellow classmates are a valuable resource. I will set up a discussion board for online posting of homework and project questions. I will only be available to respond to student questions via email during the M-F work week from 8:30-4:00PM so using the discussion board to get help from other students may be an alternate resource over the weekends and in the evenings.

Pencasts
During the quarter I will be posting various pencasts to the course site. These short presentations can be viewed using Adobe Acrobat Reader v 10. When students have questions regarding various topics I will create pencasts to help explain problems and model examples. These worked examples show the
process and also include audio commentary. Check the library of pencasts when you encounter a topic you need some help with or email me a request for a pencast on a topic you need some help. I’m excited about trying this technology this quarter and look forward to your feedback. Don’t be bashful about making a request.

EXPECTATIONS:

- Check your electronic mail and MyMathLab announcements page regularly! You are responsible for all the information I communicate to you via these two methods. If you change your email address it is your responsibility to update that information through the MyMathLab program.

- Please include your full name on all communications to me. Please make sure all attachments are named using your full name also.

- In order to create a positive learning atmosphere, students are expected to make themselves familiar with the Skagit Valley College Code of Student Conduct which is available online at [http://www.skagit.edu/conduct](http://www.skagit.edu/conduct). Students who fail to conduct themselves appropriately may be expelled from class.

- Please be respectful of other student’s learning.

- Cheating and plagiarism will not be tolerated and will result in the failure of the assignment or exam and the student will be reported to the Dean of Students. Cheating includes (among other things) copying another individual’s work or allowing someone to copy your work, using unauthorized references on a test or exam, or allowing another individual to take a test or assignment for you.

  All students of Skagit Valley College are responsible for knowing and adhering to the Academic Honor Code of this institution found at [http://www.skagit.edu/honorcode](http://www.skagit.edu/honorcode). Violations of this code include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct are reported to the student conduct officer. Students found to be in violation of the Academic Honor Code are subject to academic consequences up to and including failure of the course. Students may also be subject to college disciplinary sanctions up to and including expulsion from the College.

- Last day to drop the class and receive a “W” without restriction is June 14.

- **ABSOLUTELY No late work will be accepted!!** You must complete the homework, exams, and projects by the deadlines posted. Please make **PRIOR** arrangement with the instructor if emergencies or other issues occur.

- It is SVC policy that “discrimination and harassment of any form will not be tolerated”.

- If you are a student with a disability and require academic adjustments or accommodation, please contact the Counseling office (360-416-7654) to arrange an appointment with the DSS office.
## COURSE CALENDAR:

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<thead>
<tr>
<th>Unit of Study</th>
<th>Assignments</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Linear functions, domain &amp; range, functions, Chapter 9: Inequalities</td>
<td>Homework: 8.1, 3.6, Appendix C, 9.1-9.4</td>
<td>Friday, April 26 11:55PM (no exceptions!)</td>
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<tr>
<td>Calculator Use: Scatter plots, graphing lines, linear regression</td>
<td>Match It Project</td>
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<td>Exam 1</td>
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<tr>
<td>Chapter 10: Radical equations and functions, applications, Pythagorean Theorem. Calculator Use: Checking answers using sto&gt; button, last entry feature, rational exponents, graphing radical functions, power regression.</td>
<td>Homework: 10.1-10.7 Pendulum Project Exam 2</td>
<td>Friday, May 10 11:55PM (no exceptions!)</td>
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<tr>
<td>Chapter 11: Quadratic functions and applications. Calculator Use: Using matrices to solve systems, graphing quadratic functions, calculating max/min, zoom box, tracing plots</td>
<td>Homework: 11.1-11.6, 4.4, Appendix E. Bouncing Ball Project Exam 3</td>
<td>Friday, May 31 11:55PM (no exceptions!)</td>
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<tr>
<td>Chapter 12: Exponential and logarithmic functions Calculator Use: Graphing exponential and logarithmic functions, approximating logarithms.</td>
<td>Homework 12.1-12.7 Population Project Exam 4</td>
<td>Friday, June 14 11:55PM (no exceptions!)</td>
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<tr>
<td>Final Exam <strong>IN PERSON</strong> with identification. No notes!</td>
<td>Mt. Vernon Campus</td>
<td>June 17, 9:30AM June 19, 11:30AM</td>
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### STARTUP INFO FOR MYMATHLAB:


Product support: http://www.mymathlab.com/contactus_stu.html

In order to use MyMathLab you will need a good Internet connection, preferably high-speed, and an up-to-date browser. To access the MyMathLab site for this course you will need to login at http://www.mymathlab.com/. You will need your Student Access Code, this individual, course-specific 6-word code is needed for registration as a Course Compass student. You can purchase this code online.
during the registration process or your Student Access Code is packaged in a Student Access Kit with
your textbook. The kit includes a card with a pullback strip that reveals the code. This code can be
redeemed only once---at the moment of registration.
A valid email address is necessary to register. This will be the email with which I communicate to you
for the course so use one that you will check regularly.
The course ID number is kocol16636 (NOTE: the ID number is my last name followed by 5 digits... the first digit is one).
Note: If you have already used this text with Mymathlab you do not need a NEW access code. Login to
your account and look carefully for the “Enroll in a Course” button. Click on this button and follow the
instructions.

After logging into the site use the installation wizard to configure your machine and download the
necessary plugins required for MyMathLab.

**MYMATHLAB ONLINE SYSTEM:**
For this class we will be using the online system called MyMathLab. MyMathLab is a series of text-
specific online courses that accompany Pearson textbooks in Mathematics and Statistics. Over one
million students have improved their mathematics skills with MyMathLab’s dependable and easy-to-use
online homework, guided solutions, multimedia, tests, and e-books.

**COURSE OBJECTIVES:**

1. Solve quadratic equations and inequalities.
2. Solve linear, compound, absolute-value, and quadratic inequalities.
3. State solutions to linear, compound, absolute-value and quadratic inequalities using set-builder and
   interval notations.
4. Graph solutions to linear, compound, absolute-value and quadratic inequalities.
5. Solve quadratic equations using factoring, completing the square, and the quadratic formula.
6. Identify components of rational exponents.
7. Convert between rational exponent and radical notations.
8. Solve equations utilizing rational exponents.
9. Solve equations with radical notation.
10. Graph quadratic functions.
11. Perform computations with complex numbers.
12. Determine composite functions.
13. Determine inverse functions.
14. Graph exponential and logarithmic functions.
15. Apply properties of logarithms.
17. Solve applications related to exponential and logarithmic functions.
18. Solve applications relevant to course content.
19. Have a broader understanding of the history of mathematics and its contributors.
20. Apply alternative mathematical techniques, from a historical perspective, where appropriate.
21. Understand how mathematics is used in other fields and occupations.
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<th>Date</th>
<th>Monday</th>
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<tr>
<td>8-Apr</td>
<td>Read Syllabus</td>
<td>8.1</td>
<td>3.6</td>
<td>Match It</td>
<td>9.1</td>
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<td>Who Are You?</td>
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<td>Project</td>
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<td>15-Apr</td>
<td>9.2</td>
<td>9.3</td>
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<td>Pendulum</td>
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<td>Appendix D</td>
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<td>Memorial</td>
<td>12.1</td>
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<tr>
<td>3-Jun</td>
<td>Population</td>
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<td>12.4</td>
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