

Instructor: Chuck Stevens**Office:** L-201V**email:** chuck.stevens@skagit.edu**Office Hours:** 10:45 – 12:00 Mon - Thur**Phone:** 416-7803**Website:** google: "svcmath"

Course Description This course covers fundamental topics of algebra, including: polynomials, exponential and logarithmic functions, and their graphs; system of equations; inequalities; and curve sketching. Prerequisite: Math 099 with a grade of C or higher, or appropriate math placement score.

Text: [Precalculus, Mathematics for Calculus, 5th Ed.](#) Stewart/Redlin/Watson, ISBN: 0-495-55750-1

Math 141 covers content from selected sections from chapters 1, 2, 3, 4, and 9

Calculator: A graphing calculator will be useful throughout the course. I recommend the TI-84. Calculators may be rented through the math department for \$20 per quarter. See me if interested in renting a calculator.

Note: Any calculator with CAS is not allowed on exams. This includes the TI-89, TI-Nspires, HP-50, HP Prime, etc.

Course Objectives After completing the course you will be able to:

1. Define a function including domain and range.
2. Graph quadratic, polynomial, rational, exponential and logarithmic functions.
3. Recognize and apply transformations of functions.
4. Use distance and slope formulas.
5. Find composite and inverse functions.
6. Find the equation of a line; find the equation of a circle.
7. Use synthetic division.
8. Find real and complex zeros of a polynomial.
9. Solve equations involving logarithmic and exponential functions.
10. Solve systems of non-linear equations.

Coursework

Attendance Although regular classroom attendance will not figure into your grade in a tangible way, I strongly encourage your regular attendance in this class. It should be obvious that attending all classes is extremely beneficial to your level of learning and understanding. Seeing the material presented in class is extremely helpful as the presentation will often be different than the text in order to clarify and enhance the text. Having questions answered in class (as well as hearing other students' questions) is also a benefit. If a class is missed, it is your responsibility to obtain notes, assignments, worksheets, etc., or any other information given in class.

Homework is the most important part of any math course and is the course component where you actually learn the material presented in class. Everything else is simply an assessment on what you've learned. Doing homework regularly, and even twice a day, will pay off come test time. Homework is generally not collected. However, we will spend the first 5-10 minutes going over the previous days exercise set.

Worksheets There will be several take-home worksheets throughout the quarter worth 15 points each. These are due at the beginning of class on the due dates and are not accepted late. Only your five highest worksheet scores count toward your final grade. A missed worksheet will automatically be one that is dropped. Worksheets account for 20% of the overall grade.

Chapter Exams There are four 50-point end-of-chapter exams. Exams must be taken on the scheduled day (see calendar). Make-up Exams are NOT given except for exceptional circumstances. Please contact me a week prior to a test if an alternative testing time is needed. *Anyone found cheating on an exam will receive a 0 for that exam. Caught a second time will result in failing the course.* The chapter exams account for approximately 50% of the overall grade.

Final Exam There is a comprehensive final exam worth 100 points covering material from the entire course as well as material from Chapter 9. Refer to the daily calendar for the scheduled date of the Final Exam. The final accounts for approximately 30% of your overall grade. You must receive at least a 60% on the final to pass the course.

Grading Scale Letter grades are determined by the following scale:

	B+ 87%	C+ 77%	D+ 63%
A 93%	B 83%	C 70%	D 60%
A- 90%	B- 80%	C- 67%	E < 60%

Other Information

- Arrive to class on time. Arriving consistently late is an inconsiderate disruption to the entire class.
- Turn off AND put away all cell phones. You should be able to concentrate for 50 minutes without glancing at text messages.
- Please do not eat meals in class. Drinks are okay.
- Take advantage of math tutors the Math Center, room L-221.
- Don't get behind!!!! Come see me immediately if you are struggling with material. Don't wait until the day before a test to tell me you're lost.
- Keep up on your homework DAILY. Math is exactly like music, sports, cooking, learning a foreign language, etc.; to be good you need to practice, practice, practice.
- Be sure to use my office hours if you have questions, and email me if you get stuck at home.
- If you are a student with a disability and need academic accommodations, please contact Disability Access Services in the Counseling and Career Services center or call 360-416-7654.

Daily Schedule (Tentative)

Monday	Tuesday	Wednesday	Thursday	Friday
4/2	4/3 Intro	4/4 1.2	4/5 1.3	4/6 1.4
4/9 1.5	4/10 1.5/1.6	4/11 1.6	4/12 1.7	4/13 1.7/1.8
4/16 1.8	4/17	4/18 Exam 1	4/19 2.1	4/20 2.2
4/23 2.3	4/24 2.4	4/25 2.4	4/26 2.5	4/27 2.6
3/30 2.7	5/1 2.8	5/2 2.8	5/3	5/4 Exam 2
5/7 3.1	5/8 3.2	5/9 3.3	5/10 3.3	5/11 3.5
5/14 3.6	5/15 3.6	5/17	5/18 Exam 3	5/19 No Class
5/21 4.1	5/22 4.2	5/23 4.3	5/24 4.4	5/25 4.5
5/28 Memorial Day	5/29	5/30 Test 4	6/1 Linearizing Data	6/2 LD
6/4 9.1	6/5 9.3	6/6 9.8	6/8	6/9
6/11	6/12	6/13 Final Exam 8:30	6/14	6/15

Recommended Homework (Tentative)

It is recommended you do as many of the problems in each section as possible. The following is a minimum that should be done daily. Also, be sure to read the text and work through the examples before doing these.

1.2	Exponents and Radicals	Page 21	9-81 odd, 96, 97
1.3	Algebraic Expressions	Page 31	7-65 eoo, 67 - 99 odd, 101, 103, 107
1.4	Rational Expressions	Page 41	1-29 odd, 35, 43, 47, 51, 55, 57, 61, 63, 65, 67, 69, 71
1.5	Solving Equations	Page 55	17,19,25,27,41,45,49,63,71,75,81,89,91,105
1.6	Modeling with Equations	Page 68	15, 23, 29, 31, 33, 37, 41, 44, 47, 49, 53, 63, 69, 75, 77, 81
1.7	Solving Inequalities	Page 84	7-59 eoo, 67, 72, 83, 85, 87, 104, 105
1.8	Coordinate Geometry	Page 97	5,9,13,23,25,33, 45,49,61-69 odd,77,79,81,84,89,91,97
2.1	What is a Function	Page 155	115, 21, 23, 27, 29, 33 - 57 odd, 61, 67, 69
2.2	Graphs of Functions	Page 167	6, 9, 11, 13, 17, 21, 23, 25, 31, 33, 35, 37, 39, 45, 48, 49, 53, 55
2.3	Properties of Functions	Page 179	1 - 29 odd, 35, 37
2.4	Transformations	Page 190	1 - 47 odd, 53, 57, 61 - 67 odd
2.5	Quadratic Functions	Page 200	1, 3, 7, 11, 15, 21, 23, 25, 31, 35, 39, 43, 45, 49, 53, 55, 59, 60, 65, 69
2.6	Modeling with Functions	Page 210	3, 5,10, 11, 12, 13, 15, 17, 19, 23, 25, 27, 29, 31, 32, 33, 35
2.7	Combining Functions	Page 219	1 - 27 odd, 33, 37, 43, 47, 53, 57, 58
2.8	One-to-One Functions and Their Inverses	Page 230	1 - 67 eoo, 72, 73, 75, 78
3.1	Polynomial Functions	Page 262	11 - 41 odd, 45, 46, 53 - 71 odd, 75
3.2	Dividing Polynomials	Page 270	1, 3, 5, 7, 9, 11, 15, 17, 19, 21, 25, 33, 37, 39, 43, 47, 51, 53, 57, 59
3.3	Real Zeros of Polynomials	Page 279	1 - 9, 11 - 87 eoo, 89
3.5	Complex Zeros	Page 298	1 - 39 odd, 41 - 65 eoo
3.6a	Properties of Rational Functions	Page 313	5, 7, 13, 15-31 odd, 35, 39, 49, 55, 59, 63, 65, 67, 73, 77, 78, 79
3.6b	Properties of Rational Functions	Page 313	
4.1	Exponential Functions	Page 336	3 - 45 odd, 51, 55, 60, 67, 69, 72
4.2	Logarithmic Functions	Page 349	3 - 39 odd, 41 - 46, 57 - 75 eoo
4.3	Laws of Logarithms	Page 356	1-59 odd, 63, 65
4.4	Solving Exp. and Log. Equations	Page 366	1 - 53 odd, 57, 69, 77, 80
4.5	Modeling with Log. and Exp. Functions	Page 379	7, 9, 11, 13, 15, 19, 21, 23, 24, 25, 27, 29, 33, 37
	Linearizing Data	Page 393	3, 5, 6, 9, 11
9.1	Systems of Equations	Page 642	1 - 41 odd
9.3	Systems of Linear Equations	Page 673	7, 9, 15, 17, 19, 21, 23, 27, 29, 39, 43, 47, 49, 52
9.8	Partial Fractions	Page 720	9 - 41 eeo