

Math 130 Precalculus Departmental Syllabus

Spring 2012

Math 130 section _____, days/times/locations _____

Instructor: _____

Office/Phone: _____

Email: _____

Webpage: _____

Office Hours: _____

Course Description: Review of algebraic, logarithmic, exponential, and trigonometric functions for students who satisfy the course prerequisites for 141 or 151, but whose Act test scores indicate additional preparation is necessary. Students who have earned a grade of C or better in 141 or 151 may not subsequently receive credit for 130. Math 130 does not satisfy the Quantitative Reasoning requirement. 4 credit hours. A, B, C, NC grading.

Text: *Precalculus WebAssign Edition, Sixth Edition*, by Stewart, Redlin & Watson, Brooks/Cole Publishing Company. ISBN: 9780840068071

WebAssign: A new text, purchased at the campus bookstore, is packaged with a printed access card for WebAssign - a new online homework and tutorial system. WebAssign offers instant feedback for homework problems, additional practice problems, online tutoring, problem solving videos, and links to pdf pages of the text. If a used text is purchased, the student may purchase an access code to WebAssign either at the bookstore or online through their course blackboard site at <http://online.utk.edu> (check with your instructor to see if WebAssign will be required). The student will access WebAssign through their course blackboard site. Students will have two weeks to use the site before they must enter their access code.

Math 130 website: <http://www.math.utk.edu/Courses/Math130/>. Links to old common finals, the textbook companion site, and other helpful links for students can be found here.

Calculator: A graphing calculator is no longer used in this course. A scientific calculator is all that should be used. Use of cell phones and calculators with advanced Alpha Numeric capabilities, such as the TI-89, are forbidden in this course. Calculators will not be allowed on the final.

Grades: Grades will be determined using the grading scale below. Your letter grade is a measure of your mastery of course material and your fulfillment of course objectives. Letter grades are not assigned on the basis of a curve or the class average. There will be four equally weighted midterm exams.

Course letter-grades are dependant upon BOTH your course average AND your common departmental final exam score as follows:

Average of 4 Exams	55%
Homework/Other	15%
<u>Departmental Final Exam</u>	<u>30%</u>
Total possible	100%

Letter grade Table		Final exam score			
		80-100	70-79	60-69	0-59
Course average including final exam	90 – 100	A	B+	C+	NC
	87 – 89	A-	B+	C+	NC
	83 – 87	B+	B+	C+	NC
	80 – 82	B	B	C+	NC
	77 – 79	B-	B-	C+	NC
	73 – 76	C+	C+	C+	NC
	70 - 72	C	C	C	NC
	0 – 69	NC	NC	NC	NC

Homework/Other: _____

Attendance & Make-up Policy: _____

Disability Services: If you need course adaptations or accommodations because of a documented disability or if you have emergency information to share, please contact the Office of Disability Services at 2227 Dunford Hall at 974-6087.

Math Tutorial Center: The Math Tutorial Center is in Ayres Hall G012. It provides **free tutoring**. Hours of operation are posted at <http://www.math.utk.edu/MTC/> . Please make use of this free service.

Supplemental Instruction (SI): SI is FREE, out of class, study sessions lead by a student who has successfully completed this course. Attendance is voluntary, but by attending regularly you'll develop a better understanding of the material and more effective ways of studying. For more information see the web page: <http://studentsuccess.utk.edu/si.html>

Important Dates:	
Add/drop without W deadline	January 20
Drop with W deadline	April 3
Final Exam	May 1

Classroom Etiquette: Please be considerate of the instructor and those around you. Come to class on time and stay the entire period. Turn off and put away cell phones, laptops, iPods and beepers during class. Do not talk to classmates at inappropriate times. Refrain from reading newspapers or working on other coursework during class.

Academic Standards of Conduct: All students are expected to abide by the University **Honor Statement**. In mathematics classes, violations of the honor statement include copying another person's work on any graded assignment or test, collaborating on a graded assignment without the instructor's approval, using unauthorized "cheat sheets" or technical devices such as calculators, cell phones or computers for graded tests or assignments, or other infractions listed in "*Hilltopics*". These violations are serious offenses, subject to disciplinary action that may include failure in a course and/or dismissal from the University. The instructor has full authority to suspend a student from his/her class, to assign an "F" in an exercise or examination, or to assign an "F" in the course. See "*Hilltopics*" for more complete information. A report of all offenses will be sent to appropriate deans and the Office of Student Judicial Affairs for possible further action.

The Honor Statement

An essential feature of the University of Tennessee is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the University, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.

Section	days	Topic	Exercises
1.1	1	Real Numbers	1-4 all, 7, 13, 17, 22, 25-30 all, 41, 43, 47, 49, 51, 54, 59, 63-70 all, 83
1.2	2-3	Exponents & Radicals	1-6 all, 7-79 odd, 89, 91, 101
1.3	4-5	Algebraic Expressions	1-6 all, 17-121 odd, 125, 127
1.4	6-7	Rational Expressions	1-4 all, 5-77 odd, 81, 89, 101
1.5	8-9	Equations	1-6 all, 11-29 odd, 32, 37, 39, 43-77 odd, 85-99 odd, 105-109 all, 111
1.7	10-11	Inequalities	1-4 all, 11-79 odd, 95, 97, 99, 107, 117
1.8	12-13	Coordinate Geometry	1-6 all, 13, 15, 23, 31, 32, 33, 51, 57-103 odd, 107, 109
1.10	14-15	Lines	1-4 all, 5-55 odd, 61, 66, 72, 75
Exam 1	16	Chapter 1	
2.1	17	What is a Function?	1-4 all, 15-35 odd, 36, 38, 41, 42, 44, 49, 55, 57, 71, 77
2.2	18-19	Graphs of Functions	1-4 all, 5-27 odd, 33-45 odd, 49-67 odd
2.3	20	Information from Graphs	1, 2, 5-17 odd
2.5	21	Transformations of Functions	1-4 all, 5-65 odd, 75-81 odd
2.6	22-23	Combining Functions	1-4 all, 5-15 odd, 21-55 odd, 64
2.7	24-25	One-to-one and Inverses	1-4 all, 11-63 odd, 75-81 odd, 85
3.2	26	Polynomial Functions	1-4 all, 7-39 odd
3.3	27	Dividing Polynomials	1, 2, 3-27 odd, 31, 37, 57-67 odd
3.7	28-29	Rational Functions	1-6 all, 7, 11-15 odd, 21-31 odd, 43-59 odd, 69, 70, 91
Exam 2	30	Chapters 2 & 3	
4.1	31	Exponential Functions	1, 2, 9-37 odd, 40
4.2	31	Natural Exponential Functions	1, 2, 7-13 odd, 21, 23, 35
4.3	32	Logarithmic Functions	1-4 all, 5, 11, 12, 13, 19-35 odd, 45-67 odd
4.4	33	Laws of Logarithms	1-6 all, 7-53 odd, 67, 69, 72
4.5	34-35	Exponential and Logarithmic Equations	1, 2, 3-55 odd, 81, 83
5.1	36	Unit Circle	1, 2, 15-55 odd
5.2	37-38	Trigonometric Functions of Real Numbers	1, 2, 3-69 odd
5.3	39-40	Trigonometric Graphs	1, 2, 3-37 odd, 43-49 odd, 77, 79
5.4	41	More Trigonometric Graphs	1, 2, 3-37 odd
5.5	42-43	Inverse Trig Functions	1, 2, 3-9 odd, 23-43 odd
Exam 3	44	Chapters 4 & 5	
6.1	45	Angle Measure	1, 2, 3-61 odd, 69, 75
6.2	46	Trig of Right Triangles	1, 2, 3-37 odd, 49, 51
6.3	47	Trig Functions of Angles	1, 2, 3-51 odd
7.1	48-49	Trigonometric Identities	1, 2, 3-95 every other odd
7.2	50	Add and Subtract Formulas	1, 2, 3-39 odd
7.3	51	Double- & Half-Angle	1, 2, 3-11 odd, 37, 73-79 odd, 83
7.4,7.5	52-53	Trigonometric Equations, More Trig. Eq.	1-4 all, 5, 7, 13, 17, 19, 25, 27, 33, 37, 39, 41, 42, 45, 49, 53; 1-3, 9, 11, 17, 21, 23, 24, 31
Exam 4	54	Chapters 6 & 7	