Math 1314 Lecture, Homework and Exams Schedule

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
1		
8/27	**Syllabus**	
8/29	**2.1 Graphs of Equations** ➢ **Plotting ordered pairs** ➢ **Solutions of Equations** ➢ **Graphs of Linear Equations** ➢ **Graping NonLinear Equations** **2.2 Functions and Graphs** ➢ **Identifying functions** ➢ **Finding function values**	**You must obtain 100% on HW0 before doing HW1** **HW1 due on 9/26 by 11:59pm**
2		
9/3	**Labor Day Holiday – No Class**	
9/5	**2.2 Functions and Graphs** ➢ **Graphs of Functions** ➢ **The vertical-line test** ➢ **Applications of functions and their graphs** **2.3 Finding Domain and Range** ➢ **Find the domain and range of a function**	**HW2 due on 9/26 by 11:59pm**
3		
9/10	**2.3 Finding Domain and Range (Cont.)** **2.4 The Algebra of Functions** ➢ **The sum, difference, product, or quotient of two functions**	**HW3 due on 9/26 by 11:59pm**

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
9/12	**2.4 The Algebra of Functions** ➢ **Find the domain of the sum, difference, product, or quotient of two functions** **2.5 Linear Functions: Graphs and Slope** ➢ **The constant b: the y-intercept** ➢ **The constant m: slope** ➢ **Applications**	**HW4 and HW5 due on 9/26 by 11:59pm**
4		
9/17	**2.6 More on Graphing Linear Equations** ➢ **Graphing using intercepts** ➢ **Graphing using the slope and the y-intercept** ➢ **Horizontal lines and vertical lines** ➢ **Parallel lines and perpendicular lines**	**HW6 due on 9/26 by 11:59pm**
9/19	**2.7 Finding Equations of Lines; Applications** ➢ **Finding an equation of a line when the slope and the y-intercept are given** ➢ **Finding an equation of a line when the slope and a point are given** ➢ **Finding an equation of a line when two points are given** ➢ **Finding an equation of a line parallel or perpendicular to a given line** ➢ **Applications of linear functions**	**HW7 due on 9/26 by 11:59pm**
5		
9/24	**Test 1 Review**	

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
9/26	**Test 1 Covers Chapter 2**	**All HW for Test 1 is due 11:59pm this day** **Extra Credit 1 is due at the beginning of class this day**
6		
10/1	**7.1 Symmetry** ➢ **Symmetry** ➢ **Even functions and odd functions** **7.2 Transformations** ➢ **Transformations of functions** ➢ **Vertical translations and horizontal translations**	**HW8 due on 10/24 by 11:59pm**
10/3	**7.2 Transformations** ➢ **Reflections** ➢ **Vertical and horizontal stretchings and shrinkings**	**HW9 due on 10/24 by 11:59pm**
7		
10/8	**7.4 Quadratic Equations, Functions, Zeros, and Models** ➢ **Quadratic Equations and quadratic functions** ➢ **Completing the square** ➢ **Using the quadratic formula** ➢ **The discriminant** ➢ **Equations reducible to quadratic** ➢ **Applications**	**HW10 due on 10/24 by 11:59pm**
10/10	**7.5 Analyzing Graphs of Quadratic Functions** ➢ **Graphing quadratic functions of the type $f(x) = a(x-h)^2+k$** ➢ **Graphing quadratic functions of the type $f(x) = ax^2 + bx + c$, $a \neq 0$** ➢ **Applications**	**HW11 due on 10/24 by 11:59pm**

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
8		
10/15	**8.1 Polynomial Functions and Models** &#10辋; **The leading-term test** ➢ **Finding zeros of polynomial functions** ➢ **Polynomial models** **8.2 Graphing Polynomials Functions** ➢ **Graphing polynomial functions**	**HW12 due on 10/24 by 11:59pm**
10/17	**8.2 Graphing Polynomials Functions** ➢ **Graphing polynomial functions** ➢ **The Intermediate Value Theorem**	**HW13 due on 10/24 by 11:59pm**
9		
10/22	**Test 2 Review**	
10/24	**Test 2 Covers Chapter 7 and Sections 8.1 and 8.2**	**All HW for Test 2 is due 11:59pm this day** **Extra Credit 2 is due at the beginning of class this day**
10		
10/29	**8.3 Polynomial Division; The Remainder Theorem and the Factor Theorem** ➢ **Division and Factors** ➢ **The Remainder Theorem and synthetic division** ➢ **Finding factors of polynomials**	**HW14 due on 11/28 by 11:59pm**

Week Number	LECTURE AND READING MATERIAL	HOMEWORK

10/31	**8.4 Theorems about Zeros of Polynomial Functions**
	  ➢ **The Fundamental Theorem of Algebra**
	  ➢ **Finding polynomials with given zeros**
	  ➢ **Zeros of polynomial functions with real coefficients**
	  ➢ **Rational Coefficients**
	  ➢ **Integer Coefficients and the Rational Zero Theorem**
		HW15 due on 11/28 by 11:59pm

11		

11/5	**8.5 Rational Functions**
	  ➢ **The domain of a rational function**
	  ➢ **Asymptotes**
	  ➢ **Applications**
		HW16 due on 11/28 by 11:59pm

11/7	**8.6 Polynomial Inequalities and Rational Inequalities**
	  ➢ **Polynomial inequalities**
	  ➢ **Rational inequalities**
		HW17 due on 11/28 by 11:59pm

12		

11/12
LAST DAY TO W
	9.1 The Composition of Functions
	  ➢ **The composition of functions**
	  ➢ **Decomposing a function as a composition**
	9.2 Inverse Functions
	  ➢ **Inverses**
	  ➢ **Inverses and One-to-One functions**
		HW18 due on 11/28 by 11:59pm

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
11/14	**9.2 Inverse Functions** ➢ **Finding formulas for inverses** ➢ **Inverse functions and composition** ➢ **Restricting a domain** **9.3 Exponential Functions and Graphs** ➢ **Graphing exponential functions** ➢ **Applications** ➢ **The number e** ➢ **Graphing of exponential functions, base e**	**HW19 and HW20due on 11/28 by 11:59pm**
13		
11/19	**9.4 Logarithmic Functions and Graphs** ➢ **Logarithmic functions** ➢ **Finding certain logarithms** ➢ **Converting between exponential equations and logarithmic equations** ➢ **Natural logarithms** ➢ **Changing logarithmic bases** ➢ **Graphs of logarithmic functions** ➢ **Applications**	**HW21 due on 11/28 by 11:59pm**
11/21	**Thanksgiving Holiday – No Class**	

Week Number	LECTURE AND READING MATERIAL	HOMEWORK
14		

11/26	**9.5 Properties of Logarithmic Functions**
	  ➢ **Logarithms of products**
	  ➢ **Logarithms of powers**
	  ➢ **Logarithms of quotients**
	  ➢ **Applying the properties**
	  ➢ **Simplifying logarithmic expressions**
	Brief Review of Test 3 if time allows
		HW22 due on 11/28 by 11:59pm

11/28	**Test 3 Covers Sections 8.3 through 8.6, and 9.1 through 9.5**	**All HW for Test 3 is due 11:59pm this day** **Extra Credit 3 is due at the beginning of class this day**
15		

12/3	**9.6 Solving Exponential Equations and Logarithmic Equations**
	  ➢ **Solving exponential equations**
	  ➢ **Solving logarithmic equations**
		HW23 due on 12/12 by 11:59pm

12/5	**Final Exam Review**	**HW24, 25, 26 due on 12/12 by 11:59pm**
16		

The final exam is COMPREHENSIVEand it is on December 12 from 11 to 12:50pm

HW23, 24, 25 and 26 due by 11:59pm this day. You will not be tested on the material of HW24, 25, 26 but you still need to do those HW

Extra Credit 4 is due at the beginning of class this day. You must complete all problems for HW23, 24, 25 and 26 to receive the extra credit