## **Math 130 Intermediate Algebra for Precalculus**

## Textbook: Blizer, Intermediate Algebra for College Students, 7<sup>th</sup> edition

The following sections should be covered in whatever order the instructor desires:

Section	Title	Notes
_	Percentages and Proportions	Although this material is not directly covered in the textbook it is required for this course. You can refer to the College of the Redwoods Prealgebra textbook (Ch. 6 and 7) available on the math resource page.
1.1	Algebraic Expressions, Real Numbers and Interval Notation	Review as needed.
1.2	Operations with Real Numbers and Simplifying Algebraic Expressions	Review as needed.
1.3	Graphing Equations	Review as needed.
1.4	Solving Linear Equations	Review as needed.
1.6	Properties of Integral Exponents	
2.1	Introduction to Functions	
2.2	Graphs of Functions	
2.4	Linear Functions and Slope	Applications involving unit analysis are required. The standard form of a line is optional.
2.5	The Point-Slope form of the Equation of a Line	
3.1	Systems of Linear Equations in Two Variables	
3.2	Problem Solving and Business Applications Using Systems of Equations	Select desired applications
4.1	Solving Linear Inequalities	Solutions in interval notation are required.
5.2	Multiplication of Polynomials	Review as needed.
5.3	Greatest Common Factors and Factoring by Grouping	Only quadratic polynomials in one variable are required.
5.4	Factoring Trinomials	Only quadratic polynomials in one variable are required.
5.5	Factoring Special Forms	Difference of squares only
5.7	Polynomial Equations and Their Applications	Only quadratic polynomials in one variable are required.
6.1	Rational Expressions and Functions: Multiplying and Dividing	
6.2	Adding and Subtracting Rational Expressions	
7.1	Radical Expressions and Functions	
7.2	Rational Exponents	
7.3	Multiplying and Simplifying Radical Expressions	
7.4	Adding, Subtracting and Dividing Radical	

	Expressions	
7.5	Multiplying with More Than One Term and	
	Rationalizing Denominators	
8.1	The Square Root Property and Completing the	Optional
	Square	
8.2	The Quadratic Formula	Only real solutions are required.
8.3	Quadratic Functions and Their Graphs.	Vertex form is optional.
9.1	Exponential Functions	
9.2	Composite and Inverse Functions	Inverse functions are optional.
9.3	Logarithmic Functions	
9.4	Properties of Logarithms	
9.5	Exponential and Logarithmic Equations	Only exponential equations are
		required.
9.6	Exponential Growth and Decay; Modeling Data	Select desired applications