

Topics in Probability and Statistics with Algebra: Section numbers preceding topics refer to Brase & Brase (for probability and statistics) and McInerney (for elementary algebra).

(* indicates optional topics; leave some out as needed in order to do tests and review)

	PROBABILITY AND STATISTICS	ELEMENTARY ALGEBRA
Week 1	1.1 What is statistics?	1, 2, 3.1 Review: arithmetic of signed numbers, fractions, decimals, percent, rounding, and order of operations
	1.2 Random Samples	Calculators: Arithmetic and order of operations
Week 2	1.3 Introduction to Experimental Design	3.2, 3.3, 3.4 Evaluating algebraic expressions and translating algebraic expressions Supplement: Area of a rectangle
	2.1 Frequency Distributions, Histograms, and Related Topics	
Week 3	2.2 Bar Graphs, Circle Graphs, and Time-Series Graphs*	8.2 Radicals Calculators: Descriptive statistics
	2.3 Stem-and-Leaf Displays*	
	3.1 Measures of Central Tendency: Mode, Median, and Mean	
Week 4	3.2 Measures of Variation	6.2 Combining like terms, adding and subtracting polynomials
	3.3 Percentiles and Box-and-Whisker Plots*	4.1, 4.2, 4.3 Solving linear equations and applications to word problems
Week 5	4.1 Scatter Diagrams and Linear Correlation	5.1, 5.2 Co-ordinate system, graphs of linear equations, slope of a straight line, equation of a line
	4.2 Linear Regression and the Coefficient of Determination*	
Week 6	5.1 What is Probability?	4.3 Solving literal equations
	5.2 Some Probability Rules– Compound Events Midterm Review	
Week 7	Midterm	6.3 Exponents and properties 3.3 Functions and their graphs
	5.3 Trees and Counting Techniques*	
Week 8	6.1 Introduction to Random Variables and Probability Distributions	6.2 Binomial Probabilities 6.3 Additional Properties of the Binomial Distribution
	6.2 Binomial Probabilities	
Week 9	7.1 Graphs of Normal Probability Distribution	4.4 Inequalities and interval notation, graphing linear inequalities on a number line Supplement: Area under the graph of a function, basic properties of area
	7.2 Standard Units and Areas Under the Standard Normal Distribution	
Week 10	7.3 Areas Under any Normal Curve	7.5 The Central Limit Theorem 7.6 Normal Approximation to the Binomial Distribution
	7.4 Sampling Distributions	
Week 11	7.5 The Central Limit Theorem	8.1 Estimating μ when σ is Known 8.2 Estimating μ when σ is Unknown
	7.6 Normal Approximation to the Binomial Distribution	
Week 12	8.1 Estimating μ when σ is Known	4.4 Solving linear inequalities
	8.2 Estimating μ when σ is Unknown	
Week 13	8.3 Estimating p in the Binomial Distribution*	9.3, 9.4, 9.5 Solving quadratic equations by basic factoring and quadratic formula, with applications to more advanced word problems
	9.1 Introduction to Statistical Tests	
	9.2 Testing the Mean μ	
Week 14	9.3 Testing a Proportion p^*	Final Review
	Final Review	