Common Core Content Standards Alignment to Prentice Hall Math Series 2009

Algebra I:

Common Core Standards can be found in the following sections of the book:
- Chapter 1, sections 5 and 6
- Chapter 2, sections 1, 2, 4, 6, and 7
- Chapter 3, sections 1-3, 5-7 and 9
- Chapter 4, whole chapter
- Chapter 5, sections 2, 3, 4, and 6
- Chapter 6, sections 1, 5-8
- Chapter 7, whole chapter
- Chapter 8, sections 2-7
- Chapter 9, whole chapter
- Chapter 10, sections 2, 3, 5, and 8
- Chapter 11, section 5
- Chapter 12, sections 1, 2, 4, 7, and 8

Extra information to cover in Algebra I:

- Activity Transforming Equations on pages 140-141
- Skills Handbook on pages 769-776

Recommended Course Sequence:

- ***Cover all of Chapter 1-12 except you can omit 3-8, 5-7, 11-5, 11-6 (both covered in Algebra II).***

Algebra II:

Common Core Standards can be found in the following sections of the book:
- Chapter 1, sections 2-4 and 6
- Chapter 2, sections 1, 2, 4, 5, and 6
- Chapter 3, sections 1, 2, 4, and 5
- Chapter 4, sections 1-3 and 5-7
- Chapter 5, sections 1, 2, 3, 7, and 8
- Chapter 6, sections 1, 3, and 5-8
- Chapter 7, sections 4, and 6-8
- Chapter 8, sections 1-3 and 5
- Chapter 9, sections 3, 4, and 7
- Chapter 10, sections 2- 5
- Chapter 11, sections 1-3 and 6
- Chapter 12, sections 1, 2, and 4-7
- Chapter 13, sections 1-6
- Chapter 14, sections 1 and 7

Extra information to cover in Algebra II:

- Activity Lab on page 244
- End Behavior extension on page 312
- Activity Lab on page 438

- Activity Lab on page 699
- Extra activity is needed to cover standards:

S-IC.5. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant
S-IC.6. Evaluate reports based on data.

Recommended Course Sequence:

- ***Cover all of Chapter 1-13.6 and 14.1 except you can omit 3-6, 5-6, and 10-6***

Geometry:

Common Core Standards can be found in the following sections of the book:

- Chapter 1, sections 2-5
- Chapter 2, section 5
- Chapter 3, sections 1 and 3
- Chapter 4, sections 1
- Chapter 5, sections 1-3
- Chapter 6, sections 2-4, 6, and 7
- Chapter 7, sections 1-7
- Chapter 8, sections 1-6
- Chapter 9, sections 1-5
- Chapter 10, sections 2-8
- Chapter 11, sections 2 and 3
- Chapter 12, sections 1-5 and 7

Recommended Course Sequence:

- ***Cover all of Chapter 1-12 except you can omit 7-8, 11-6, and 12-6***

Precalculus (Lial, Hornsby, and Schneider; Pearson, 2005):

Common Core Standards can be found in the following sections of the book:

- Chapter 2, sections 1-7
- Chapter 3, sections 1-5
- Chapter 4, sections 1-6
- Chapter 5, section 4
- Chapter 6, sections 1-5
- Chapter 7, sections 1, 3, 5, and 7
- Chapter 8, sections 1-6
- Chapter 9, sections 1, 2, 5, 7, and 8
- Chapter 10, sections 1-3
- Chapter 11, sections 1-4, 6 and 7

Recommended Course Sequence:

- ***Cover all of Chapter 2-11 except you can omit 3-6, 8-7, 8-8, 9-4, 9-6, and 11-5. Include 8-7, 8-8, and 9-4 as time permits.***

Optional Concepts beyond Algebra and Geometry not currently covered in Precalculus:

A-APR.7. (+) Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.

S-MD.1. (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.

S-MD.2. (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.

S-MD.5. (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.

a. Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fast-food restaurant.

b. Evaluate and compare strategies on the basis of expected values. For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident.