

## Chapter 9 Study Guide

Prior to lecture:

1. Read Ch. 9 in the textbook
2. Write down the conditions for equilibrium as stated in the text. Rewrite these in your own words.
3. Read the “Problem-Solving Strategies: Static Equilibrium Situations” on pages 302-303. Rewrite the procedure in your own words.
4. On a sheet of paper, complete the “Take-Home Experiments” on pages 302. Answer all questions.
5. On a sheet of paper, work through example 9.5 on page 311.
6. Answer conceptual questions 1, 3, 7, and 9 on page 314 of the text.
7. Define the following terms:
  - a. Statics
  - b. Dynamics
  - c. Static Equilibrium
  - d. Center of gravity
  - e. Torque
  - f. Perpendicular lever arm
  - g. Stable equilibrium
  - h. Unstable equilibrium
  - i. Neutral equilibrium

After lecture:

1. Review notes from lecture
2. Redo all example problems from lecture
3. Reread text
4. Work through examples 9.1, 9.2, and 9.4 in the text.
5. Redo all recitation worksheet problems
6. Answer conceptual questions 2, 5, 8, 11, 12, 15, and 17 on pages 314-315 of the text.
7. Complete homework for chapter 9
8. For extra practice, try the following problems from chapter 9 of the textbook: 2, 6, 10, 11, 14, 16, 17, 21, 24, 27, 28, 29, 32, 34, 37