ENGR 335

KEY WORDS AND STUDY QUESTIONS FOR CH 8

dimensional analysis   Reynolds number
Buckingham Pi theorem   Froude number
                                        Mach number
similitude   pressure coefficient
geometric similitude
dynamic similitude   approximate similitude at high Reynolds numbers
                                        step-by-step method

1. Explain why dimensional analysis a useful modeling tool in engineering. Use an example in your explanation.

2. What is the most difficult but most important step of dimensional analysis?

3. You are performing model testing of a spillway. Give the three requirements for similitude.

Exam 2 will be held as scheduled on Friday, October 20 (for on-campus students). This exam will be an open book, open notes exam. Bring calculator. The exam will cover selected material from chapters 5, 6, 7, and 8. There will be a review session as scheduled during class time on Wednesday, October 18. I will start the review session with about ten minutes of my comments. The remainder of the session will be devoted to answer your questions and to work problems of your choice.