CIVL 1112 – Assignment #1

Name: _____

Part 1. Develop a mathematical model to predict the number of Ping-Pong balls that would completely fill ES 311 when our class is in session (including 30 people and all the furniture).

You *must* hand in a copy of the assignment cover sheet and your solutions to Part 1 on engineering paper. There are no Canvas submissions for this assignment.

Follow the homework format and include the following sections:

1. State the problem.
2. Present your mathematical formula for predicting the number of Ping-Pong balls that will fit into ERIC 205 during class.
3. Define all the symbols associated with your model (including units).
4. List the strengths and weaknesses of your model.
5. Present estimates for variables and parameters in your model (include any assumptions).
6. Give a numerical prediction for the number of Ping-Pong balls that would completely fill ES 311 (during class time).
7. Comment on the sensitivity of your prediction to the values of the variables and the parameters

Part 2. Read the Chapters 1 - 2 in "*A Mind for Numbers*" by Barbara Oakley.