

CE 4010/6010

Homework #17

Assigned: Thursday, March 27, 2014;
Due: Thursday, April 3, 2014; end of class

Homework must be done neatly in pencil, on 8 ½" x 11" paper, stapled together. Each step must be easily followed; diagrams are useful. State your assumptions. Homework that is not neat and legible may be rejected. Staple the question sheet to the front of your homework.

Make Sure To Include The Cover Page!

Problem 1: (100 points) This assignment is a group project and each group must submit one report including the followings:

- A literature review discussion about the material properties to be used on the stadium SAP model citing the relevant literature (material specifications, journal articles and etc.).
 - This section should be titled as ‘A Discussion on Material Properties.’
- A discussion about the dead and live loads that must be considered during the analysis of the stadium (specifically considering the loads when the stadium is fully loaded during a football game).
 - This section should be titled as ‘A Discussion on Anticipated Loads.’
- Preliminary results obtained by assigning material properties and load to the SAP model.
 - This section should include static analysis results (shear diagram, moment diagram and deflected shape). Sufficient number of images must be provided to make sure the diagrams and deflect shapes are easy to understand in your report (side view, front view, 3D view and etc.).