

ASEN 5007 Introduction to Finite Element Methods Fall 2013

Homework Assignment #2 (Chapters 4-5 of Notes)

Due Thursday Sep 12, 2013 on-campus students; Sep 19, 2013 for CAETE students

*Please do not forget to attach this cover sheet to your returned homework
and write the group names on it*

Four exercises:

4.5 (requires some programming, see note below)

5.1 (short)

5.2

5.3 or 5.4 (pick one)

Grading weights: listed at the start of each exercise.

Homework presentation guidelines are posted on web site; also on the back of HW#1 assignment. For presentation of computer work please see those guidelines.

The *Mathematica* Notebook file ExampleTruss.nb is available on the web. [Go to index of Chapter 4 and click on the link for downloading the source. If you experience trouble with that file (some browsers are sensitive to file extensions) click on the link with file extension .txt]

Ex 5.4 uses the notion of direction cosines. If rusty in that topic, reread any Calculus book that defines those quantities in 3D.