

Homework assignment #7  
Due on Thursday 04/14/2016

**Make sure to read all the instructions listed on this document!**

Learning objectives

Please study your class notes and the corresponding sections of the textbook before completing the assignment. After completing this assignment, you should be able to:

- Continuous system: apply formulae for the natural frequencies of strings
- Continuous system: use modal analysis to determine the free vibration response of strings
- Determine the mode shapes of a 1D continuous system

Solve the following problems of the textbook:

- Problem 8.3
- Problem 8.8
- Problem 8.16

For each problem, you need to show your work and circle your final answer. Please staple your homework.