ME374 System Dynamics Analysis and Design

Spring 2010

Instructors: Professor Per Reinhall
307 Mechanical Engineering Building
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543-5628
OH: 1:30-3:30 WF

TAs: Chuan Luo — luochuan@u.washington.edu
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Homework: Assigned together with the reading assignment. Due a week later at 5pm. Late homework by permission of TAs only. Homework solutions will be posted on the web two days after the due date. Graded homework will be returned approximately within one week.

Grading:

Two midterms	any 25% each
Final	35%
Homework	10%
Lab Report	5% (Need a passing grade on all reports to pass the course)

Lab Schedule: Weeks 3, 5, 7, and 9

Textbook: System Dynamics – An Introduction, Rowell and Wormley, Prentice Hall

Prerequisite: ME 373

Topics: We will cover Chapters 10 – 15.

Class Website: http://faculty.washington.edu/reinhall/ME374/ME374_home.htm

Course objective:

This is the second course in our system dynamic sequence on how to analyze complex dynamical systems. We will continue to develop a framework of analysis that will be the same no matter if the system consists of mechanical, electrical, hydraulic, and thermal components. The ultimate goal is to be able to analyze large system in which components or subsystems of different types interact. In this course we will focus on solving the differential equations that you learned how to formulate in ME373. The ability to obtain these solutions are of fundamental importance in the design and analysis of engineering systems