

ECE451/551

Control Systems Design I

Instructor: R. Tymerski, FAB 160-18. (503) 725-5424
Office Hours: MW 4:00 – 5:00
Web site: www.ece.pdx.edu/~tymerski

Course Learning Objectives:

- 1) To apply modern control theory principles to the design of control systems.
- 2) Demonstrate proficiency with software (Matlab/Simulink) that aids in the design process.

Text: “Design of Feedback Control Systems”, by Stefani, Savant, Shahian and Hostetter, Oxford University Press, Fourth Edition

Grading: Quizzes (3): 75%
Projects: 25%

Quizzes: Quiz #1 (20%): Week 4 (Thursday)
Quiz #2 (25%): Week 7 (Thursday)
Quiz #3 (30%): Week 11 (Monday)

No make-up exams will be given. All quizzes are comprehensive.

Content: This course introduces modern control theory for the feedback design of continuous time systems. A working knowledge of classical control (as seen in ECE311, for example) will be assumed.

Notes:

- 1) A set of notes will be made progressively available at the course website: www.ece.pdx.edu/~tymerski
- 2) Recommended exercise problems will be given which students are expected to do, *as a minimum*. The solutions to all problems in the form of the solutions’ manual for the text is available at the ECE451/551 section of the instructors web site.