

University of Dayton
Dept. Electrical and Computer Engineering

ECE 447 Digital Control Systems – Spring 2009

Instructor: Prof. Raúl Ordóñez, KL341-E, raul.ordonez@notes.udayton.edu

Office Hours: You can come almost any time I am there, but please try to make an appointment. Official office hours are T, Th 1-3 p.m.

Text: *Modern Control Systems*, R. C. Dorf, R. H. Bishop, 10th edition, Prentice Hall, 2005.

Objective: To provide an introduction to digital control systems. To develop, within a practical framework, the methodology employed in the design of modern control systems. To provide experience in various aspects of linear control system design including performance assessment and specification, control system design procedures, design evaluation and digital implementation.

In addition, this class will help students practice team work abilities, and written and oral presentation skills.

Grading:	Homework	15%
(Tentative)	Quizzes (two or three)	15%
	Projects	70%

Course homepage: <http://homepages.udayton.edu/~ordonez/courses.html>

Click on 447 for the syllabus and 'quickplace' for a link to the quickplace page, where additional course material will be located. You can access the page using the '447student' account. If you would like to add content to this page (e.g., to upload documents, simulations, start discussions, etc., send me an email.)

Notes

- This class will heavily emphasize computer and implementation projects of control systems.
- Lectures will take places on an as-needed basis, but all students are expected to attend class during the scheduled time and work on their assignments even when no lecture takes place.
- Students will work on teams of two throughout the semester. Teams are not necessarily fixed, and may be rotated if there is a need or desire to do so.
- Each project will be graded on its own merits. However, for each project, students will compete for a bonus that only one team will get.
- For some projects that require an implementation, students may be asked to purchase some minor components. The core of the implementation will be a USB I/O device that the instructor will provide to each group.