

EE 6331 - Linear Systems and Signals - Spring 2005

INSTRUCTOR: L. R. Hunt

OFFICE: EC 4.224

OFFICE HOURS: 4:30 pm - 5:30 pm, TR, or by appointment

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COURSE OBJECTIVE: To use simple and efficient methods to develop results and design procedures for linear systems.

TEXT: Linear System Theory and Design, Chi-Tsong Chen, Third Edition, Oxford University Press

SOFTWARE TOOLS: MATLAB

COURSE OUTLINE: (subject to variations as needed)

Chapter 1: Introduction

Chapter 2: Mathematical Descriptions of Systems

Chapter 3: Linear Algebra

Chapter 4: State Space Solutions and Realizations

Chapter 5: Stability

Chapter 6: Controllability and Observability

Chapter 8: State Feedback and State Estimators

Chapter 7: Minimum Realizations and Coprime Factors

Chapter 9: Pole Placement and Model Matching

GRADING:

First hour exam, Thursday, February 17 - 25% of grade

Second hour exam, Thursday, March 31 - 25% of grade

Final exam at 5:00 pm on Thursday, April 28 - 40% of grade

Homework - 10% of grade - there will be no late homeworks: the three lowest homework grades will be dropped. Homework will be handed in at the first of class. Homework will be sample graded by the Teaching Assistant.

REMARK: The Teaching Assistant will create a web page for homework assignments, etc.

REMARK: Missed examinations can only be made up in the case of extenuating circumstances (proof will be required) such as a medical emergency, pressing work travel that cannot be rescheduled, etc.

REMARK: Students are reminded to look at the class schedule and catalog for information on withdrawals, incompletes, and academic dishonesty.