

SySc 545/645 ECE 563/663: INFORMATION THEORY
Syllabus

Time: Tue. and Thur. 2:00 to 3:50 CH 400A, Fall '04.

Instructor: Andy Fraser, Harder House. at PSU, room 3, Office hours: Wednesday 1:00 PM - 2:00 PM, tel. 5-4989, e-mail andy@sysc.pdx.edu.

Text: *Elements of Information Theory*, by Cover and Thomas.

Web Site: <http://www.ece.pdx.edu/~andy/info1>

Grading:

Homework	1/3
Midterm	1/3
Final	1/3

Tues. 9/28 Introductory comments: Chap. 1. Assign HW 1.

Thurs. 9/30 Begin Entropy and Mutual Information: Chap. 2.

Tues. 10/5 Entropy and Mutual Information. Assign HW 2.

Thurs. 10/7 Entropy and Mutual Information.

Tues. 10/12 Asymptotic Equipartion Property: Chap. 3. Assign HW 3.

Thurs. 10/14 Entropy Rate: Chap. 4.

Tues. 10/19 Begin Data Compression: Chap. 5. Assign HW 4.

Thurs. 10/21 Data Compression.

Tues. 10/26 Data Compression. Mid-term preview and assign HW 5.

Thurs. 10/28 Data Compression.

Tues. 11/2 Mid-Term Exam

Thurs. 11/4 Review Mid-Term, begin Chap. 8, and assign HW 6.

Tues. 11/9 Channel Capacity Assign HW 7.

Thurs. 11/11 Veteran's day

Tues. 11/16 Channel Capacity.

Thurs. 11/18 Channel Capacity. Assign HW 8.

Tues. 11/23 Advanced topics (Chapter 9, 10, 12, or 13)

Thurs. 11/25 Thanksgiving - University closed.

Tues. 11/30 Advanced topics cont. Final preview.

Thurs. 12/2 Review.

Week of 12/6 Final Exam. (check <http://www.ess.pdx.edu/adm/sched/index.cfm>)

HW #1 Chap. 2 problems 2, 3, 10, 15, 16 (except part *f*), 17, 19