

MW 2-4 146 Robbins Hall

<u>Instructors</u>	<u>Office</u>	<u>Office Hours</u>
<u>Instructor:</u> Jay Lund	3109 EU III	MW 1-2, by appt., & usually when in, jrlund@ucdavis.edu
<u>TA:</u> Stacy Tanaka	3019 EU III	W 12-1, R 1-2, by appt., sktanaka@ucdavis.edu
<u>TA:</u> Mien Yip	3027 EU III	M 11-12, T 11-12, by appt., mayip@ucdavis.edu

<u>Date</u>	<u>Topic</u>	<u>Reading/Assignment</u>
Jan. 6	Systems Analysis/Problem Formulation	Liebman 1989
8	Objectives, Constraints, & Calculus	Chapters 1, 2
13	Lagrange Multipliers	Appendix 3 & Section 13.6
15	Lagrange Multipliers & Math. Programming	Appendix 2, HW 1 due
20	HOLIDAY	
22	Linear Programming (LP)	Chapter 3
24	Simplex Method	HW 2 due
27	Simplex Method	Chapters 4, 5
29	Sensitivity Analysis	HW 3 due
Feb. 3	LP Derivation/Duality	Chapter 6
5	Sensitivity Analysis & LP Applications	Chapters 8, 9, Project 1 due
10	LP Applications	
12	LP Enhancements & Applications	Section 13.8, Project 2 due
17	HOLIDAY	
19	Integer Programming & Applications	Chapter 12, HW 4 due
24	MID-TERM (on material thru 16 Feb.)	
26	Dynamic Programming (DP)	Chapter 10 (6 th ed) or 11(7 th ed)
Mar. 3	Dynamic Programming	
5	Non-Linear Programming	Chapter 13, Project 3 due
10	Genetic Algorithms	
12	Slack and Review	Project 4 due

Grading, approximately:	Homework: 15%	Mid-Term: 20%
	Projects: 30%	Final: 35%

The final exam is scheduled for Wednesday, March 19, 1:30-3:30pm.

Text: Hillier & Lieberman's *Introduction to Operations Research*, 6th or 7th edition, both are on reserve in Shields Library.

Course web site: <http://cee.engr.ucdavis.edu/faculty/lund/Classes/ECI153/ECI153.html>