

CSCI 570 Spring 2011 Syllabus

Course Logistics

	Instructor	Teaching Assistant
	Aaron Cote	TBA
Email	aaroncot@usc.edu	TBA
Office	SAL 216	TBA
Office Hours	TTh 3:30-4:30pm	TBA

Lecture 1: TTh 11:00am-12:20pm, ZHS352

Lecture 2: TTh 2:00-3:20pm, SSL150

Textbook (required): Algorithm Design by Jon Kleinberg and Eva Tardos.

Supplemental Textbook (optional): Introduction to Algorithms by Cormen, Leiserson, Rivest, and Stein.

Course Website: <https://blackboard.usc.edu>

Grading

Artifact	Weight
Problem Sets	50%
Fundamentals Test	5%
Midterm	15%
Final	30%

Homework Collaboration

You are allowed, and indeed encouraged, to discuss the problem sets with other students. However, you must write up your solutions independently. To satisfy these two requirements, we ask that you take no written notes away from your discussions with other students, and to wait at least 30 minutes after said discussion before committing thoughts to paper. You may not use any source other than the course materials when coming up with solutions.

Late Policy

Homework is due at the beginning of class on the due date. You may turn it in until 15 minutes after the beginning of class at no penalty. You are allowed three late days over the course of the semester. Saturday and Sunday do not count towards late days. If a homework assignment was due Thursday, and you turn it in Monday, you will use up two of your late days. Homework will not be accepted beyond the allowed grace period. Regardless of remaining number of late days, homeworks will never be accepted after solutions have been posted: solution post times will always be announced well in advance.

Exams

You will be provided with paper on which to take the exam. Exams will be individual effort, closed-book and closed-notes. You will be allowed a single 8.5x11inch handwritten notes sheet (front & back) on the exams.

Your homework score will be capped at 30% + your exam score. If your exam score is 50%, your homework score will be capped at 80%. That is, you must show that you have learned the material that your homework score indicates.

Projected Schedule

Week	Day	Topic	Reading (Kleinberg & Tardos)
1	1/11	Introduction	2.1,2.2,2.4,5.1,5.2, CLRS 4.3
	1/13	Proofs & Algorithm Analysis	
2	1/18	Proofs & Algorithm Analysis	
	1/20	Proofs & Algorithm Analysis	
3	1/25	Data Structures & Graphs	2.5,3.1-3.6,4.4-4.6
	1/27	Data Structures & Graphs	
4	2/1	Data Structures & Graphs	
	2/3	Data Structures & Graphs	
5	2/8	Fundamentals Test	4.1-4.3,4.7,4.8
	2/10	Greedy Algorithms	
6	2/15	Greedy Algorithms	
	2/17	Greedy Algorithms	
7	2/22	Divide and Conquer	5.3-5.5
	2/24	Divide and Conquer	
8	3/1	Dynamic Programming	6.1,6.2,6.4-6.8,6.10
	3/3	Dynamic Programming	
9	3/8	Dynamic Programming	
	3/10	Dynamic Programming	
	3/15-3/17	No Class	
10	3/22	Network Flow	7.1-7.3,7.5,7.7,7.8,7.11,7.12
	3/24	Network Flow	
11	3/29	Network Flow	
	3/31	Midterm	
12	4/5	Network Flow	8.1-8.8,8.10
	4/7	NP-Completeness	
13	4/12	NP-Completeness	
	4/14	NP-Completeness	
14	4/19	NP-Completeness	11.3,11.4,11.8,13.4-13.6
	4/21	Extra Topics	
15	4/26	Extra Topics	
	4/28	Extra Topics	