CSCI 170 Fall 2015 Syllabus

Course Logistics

Instructor	Email	Office	Office Hours
Michael Shindler	shindler@usc.edu	SAL 204	Tu 2:30 - 4:00 PM
			W 4:00 - 5:30 PM
			and by appointment

TA	Anthony Shao	Bailan Li	Ho Yee Cheung
Email	ashao@smad.com	bailanli@usc.edu	hoyeeche@usc.edu

Lec	Time		Room
1	Tu Th	9:30 - 10:50 AM	VKC 156
2	MW	10:00 - 11:20 AM	VPD 105
3	MW	2:00 - 3:20pm	SOS B46

Dis		Time	Room
1	Fri	12 - 1:50 PM	ZHS 252
2	Fri	2 - 3:50 PM	ZHS 352
3	Fri	4 - 5:50 PM	SLH 102

Textbook: Discrete Mathematics and its Applications, by Kenneth H. Rosen.

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

Forums: https://piazza.com

Grading

Artifact	Weight	Date		
Exam 1	15%	Thursday,	October 1	5:00 - 6:50 PM
Exam 2	15%	Thursday,	November 5	5:00 - 6:50 PM
Final	30%	Wednesday,	December 16	2:00 - 4:00 PM
Problem Sets	40%	Various		

Homework Collaboration (aka: The Hearthstone Rule)

You are encouraged to discuss the problem sets with other students. However, you must write up your solutions independently. The "Hearthstone" rule is as follows: you may discuss homework problems with other students, but you may not take written notes, and you should engage in 30 minutes of entertainment after the discussion (such as playing a few games of Hearthstone) before committing thoughts to paper. You may not use outside sources when coming up with solutions.

Exams

You will be provided with paper on which to take the exam. Both midterms will be held in the common exam room on Thursdays from 5-6:50pm. Exams will be individual effort, closed-book and closed-notes. You will be allowed two 8.5x11inch handwritten note sheets (front & back) on the exams. These are not "cheat sheets" – please do not label them as such.

Students requiring alternate exam arrangements must make such requests within the first two weeks of the term, or as soon as possible after knowing of the conflict or requirement.

Late Policy

You may submit homework in class or in the dropbox by the time it is due. If you miss the collection time, your homework is late. **Always** submit late homework to the dropbox. 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 (by the collection time), 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.

Tentative Schedule

Week	Mon	Topic	Reading	Other	
1	8/24	Introduction			
		Sets, Functions, Sequences	Ch. 2.1-2.4	HW 1 Out	
2	8/31	Runtime Analysis			
		Runtime Analysis	Ch. 3	HW 1 In	
3	9/7	No Class $9/7$ or $9/10$			
		Logic		HW 2 Out	
4	9/14	First-Order Logic	Ch. 1.1-1.5		
		Logic and Proofs		HW2 In	
5	9/21	Proofs	Ch. 1.6-1.8	HW3 Out	
		Proofs			
6	9/28	Induction	Ch. 5.1	HW3 In	
		Program Correctness		Exam 1: 10/1	
7	10/5	Strong Induction		HW4 Out	
		Advanced Induction	Ch. 5.4-5.5		
8	10/12	Intro to Graph Theory	Ch. 10.1-10.4	HW4 In	
		Connectivity and Circuits		HW5 Out	
9	10/19	Trees	Ch. 11		
		Graph Algorithms	Ch. 10.5-10.8	HW5 In	
10	10/26	More Graph Applications		HW6 Out	
		Spanning Trees			
11	11/2	Counting	Ch. 6.1	HW6 In	
		Pigeonhole Principle	Ch. 6.2	Exam 2: 11/5	
12	11/9	Discrete Probability	Ch. 7.1-7.2	HW7 Out	
		Conditional Probability			
13	11/16	Bayes Theorem	Ch. 7.3	HW7 In, HW8 Out	
		Expectation and Variance	Ch. 7.4		
14	11/23	Number Theory	Ch. 4	HW8 In, HW9 Out	
		No class $11/25$ and $11/26$			
15	11/30	Number Theory	Ch. 4		
		Number Theory		HW 9 In	