CSCI 170 Fall 2016 Syllabus

Course Logistics

Instructor	Email	Office	Office Hours
Michael Shindler	shindler@usc.edu	SAL 204	M 11:45am - 1:15pm
			T 1:15pm - 2:45pm
			W 4:30pm - 6:00pm

TA		
Email		

Lec	Time		Room
1	Tu Th	11:00 - 12:20 PM	GFS 116
2	Tu Th	9:30 - 10:50 AM	SOS B46
3	M W	10:00 - 11:20 AM	SSL 150

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

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,	September 29	7:00 - 8:50 PM
Exam 2	15%	Thursday,	November 3	7:00 - 8:50 PM
Final	30%	Wednesday,	December 14	2:00 - 4:00 PM
Problem Sets	40%	Various		

Homework Collaboration (aka: The Kenny Loggins Rule)

You may discuss high-level ideas, and give hints to other students regarding how to solve homework problems. Any time you seek help on, or discuss with someone else, a homework assignment or question that you have yet to solve, do not keep any written record of the discussion. Afterwards, take a 30-minute break and do something unrelated to the course (watching a 30-minute episode of your favorite cartoon show, for example). You may now return to your assignment. For more details, see the full academic honesty guideline.

Exams

You will be provided with paper on which to take the exam. Both midterms will be held in a common exam room on Thursdays from 7-8:50pm. 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	8/22	Introduction	duction		
		Sets, Functions, Sequences Ch. 2.1-2		HW 1 Out	
2	8/29	Runtime Analysis			
		Runtime Analysis	Ch. 3	HW 1 In	
3	9/5	No Class $9/5$ and $9/8$			
		Logic		HW 2 Out	
4	9/12	First-Order Logic	Ch. 1.1-1.5		
		Logic and Proofs		HW2 In	
5	9/19	Proofs	Ch. 1.6-1.8	HW3 Out	
		Proofs			
6	9/26	Induction	Ch. 5.1	HW3 In	
		Program Correctness		Exam 1: 9/29	
7	10/3	Strong Induction			
		Advanced Induction	Ch. 5.4-5.5	HW4 Out	
8	10/10	Intro to Graph Theory	Ch. 10.1-10.4		
		Connectivity and Circuits		HW4 In	
9	10/17	Trees	Ch. 11	HW5 Out	
		Graph Algorithms	Ch. 10.5-10.8		
10	10/24	More Graph Applications		HW5 In, HW6 Out	
		Spanning Trees and Grey Codes			
11	10/31	Counting	Ch. 6.1	HW6 In	
		Pigeonhole Principle	Ch. 6.2	Exam 2: 11/3	
12	11/7	Discrete Probability	Ch. 7.1-7.2		
		Conditional Probability		HW7 Out	
13	11/14	Bayes Theorem	Ch. 7.3		
		Expectation and Variance	Ch. 7.4	HW7 In, HW8 Out	
14	11/21	Number Theory	Ch. 4 HW8 In, HW9 Out		
		No class 11/23 and 11/24			
15	11/28	Number Theory	Ch. 4		
		Number Theory		HW 9 In	

Homework due dates are always the associated Tuesday or Thursday with the listed "in" date.

CSCI 170 Fall 2016: Academic Honesty Guide

It is important to be able to seek out helpful information and collaborate, but it is clearly wrong to pass off work by others as your own. Navigating these two principles can be tricky, as it is possible to enter the danger zone between them unintentionally.

To help guide you, follow this principle:

The "Kenny Loggins" Rule:

You may discuss high-level ideas, and give hints to other students regarding how to solve homework problems. Any time you seek help on, or discuss with someone else, a homework assignment or question that you have yet to solve, do not keep any written record of the discussion. Afterwards, take a 30-minute break and do something unrelated to the course (watching a 30-minute episode of your favorite cartoon show, for example). You may now return to your assignment.

This Rule is less an ironclad rule as a guideline. It is a guideline to help you determine what is and is not appropriate collaboration and to avoid trouble from the "danger zone." Flouting the spirit of the Rule while following its letter does not excuse cases of cheating which arise. For example, it is clearly **not** ok to study and memorize your friend's solution, watch a cartoon for half an hour, and then write out your friend's answer from memory and submit it. The spirit of the rule includes that what you write and submit for homework must reflect *your* work and *your* understanding of the material at the time of submission.

You are responsible for understanding what is allowed, and what is not. Cheating can and does occur which is neither malicious nor intentional.

We have very observant graders who tend to notice inappropriate collaboration and plagiarism. Follow the above guidelines to make sure you never fall afoul of this.

You should never:

- Show your homework assignment to someone else.
- Seek homework solutions from outside sources.
- Tell a student specifically how to solve part of a homework problem.

If someone copies your work, both of you are culpable! Remember: friends that pressure you for unreasonable help are not really friends. There are plenty of course staff and instructors who are here to help!

Now you know, and knowing is half the battle!