# CSCI 170 Spring 2021 Syllabus

### Course Logistics

Staff	Email
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Lecture 1: TTh 9:30-10:50am Lecture 2: TTh 11:00-12:20pm Lecture 3: TTh 12:30-1:50pm Discussion 1: Friday 10:00-11:50

Discussion 1: Friday 10:00-11:50 am Discussion 2: Friday 12:00 - 1:50 pm Discussion 3: Friday 2:00 - 3: 50 pm

Textbook (Required): Essential Discrete Mathematics for Computer Science, by Harry Lewis

and Rachel Zax.

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

Forums: https://piazza.com/usc/spring2021/csci170/home

All class meetings, including lecture, discussion, and office hours, will be online. Zoom links for meetings and recordings will be in pinned posts on piazza. The schedule of office hours will be a pinned piazza post. *Most important course information will be posted on piazza*. Blackboard will primarily be used for submitting assignments, quizzes, and exams and for returning scores.

# Grading

Artifact	Weight	Date		
Midterm	20%	Friday,	March 19th,	5:00 - 7:00 pm
Final	30%	Wednesday,	May 12th,	7:00 - 9:00pm
Weekly Group Work Problem Sets	30%	Various		
Quizzes	20%	Various		
		1		

Final Weighted Average	Letter Grade
85 or better	A- or better
75 or better	B- or better
65 or better	C or better
60 or better	C- or better
50 or better	D - or better
below 50	F

These grades are guaranteed. These thresholds may be lowered, so that lower final weighted averages may receive higher letter grades than in this chart based on class performance, especially on exams.

#### Group Work During Class Meetings

We will have a group work during class in which we work as teams with course staff on homework problem sets. In order to help you prepare for class meetings, we will post pre-recorded content videos to help you prepare in addition to the readings. It is expected that you at least do the readings, review the provided videos, and review the problems before clinic. You must be prepared to work on the problems, so that there will be time to discuss solutions and problem solving methods. You must list all of your student collaborators on your homework. The final write up of your solutions that you submit must be your own work written by yourself from your own understanding without any use of notes.

### Quizzes and Exams

Quizzes and exams will be an individual effort. They will be taken online via Blackboard. There will be two quizzes, a midterm exam, and a final exam as indicated on the schedule. You may use your textbook and course resources. You may ask for clarifications during the assessments from course staff. You must not use any resources that are not course resources such as those found online. You may not use any means to communicate to others outside the course staff on exams for any reason. Quizzes and the midterm must be completed on Blackboard during the quiz section. The final exam must be taken at the time scheduled by the registrar. Any requests for accommodations for quizzes or exams must be made in writing via a form posted on piazza with supporting documentation emailed to the instructor.

# Late Policy

All group work problem sets are due by 11:59 pm on the Friday of the week in which they are assigned as indicated on the schedule via electronic submission on DEN Desire2Learn. There is a 48 hour grace period on all problem sets. No late assignments will be accepted after this grace period except for extenuating circumstances with supporting documentation and a letter of support from your academic adviser.

### Grading reconsideration

We honor transparency and fairness in grading. You may submit a regrade request for your work within one week of our release of scores. A form will be available on the course Piazza page for you to use to explain your reconsideration request. Once the reconsideration period has passed, grades are considered final.

#### CSCI 170 Spring 2021: Academic Honesty Guide

We encourage you to collaborate, but we must remind you of expectations in an academic environment. If you submit work that you have not created yourself, you must cite the source of that work clearly. In this course you may not search for solutions from other sources, especially online. You may collaborate with course staff and classmates, but please list all collaborators on your assignments. If you are ever in doubt about acceptable guidelines or circumstances, please feel free to ask the course staff directly.

# Tentative Schedule

Week	Day	Topic	Readings	Assignments
1	1/19	Introduction, Pigeon-Hole Principle	Ch. 1, 5	
	1/21	Sets	,	HW 1 Out
2	1/26	Functions	Ch. 6, 21	
	1/28	Growth of Functions: Order Notation		HW 1 In, HW 2 Out
3	2/2	Propositional Logic	Ch. 9	
	2/4	Applications of Logic		HW 2 In, HW 3 Out
4	2/9	Quantificational Logic	Ch. 12	
	2/11	First-Order Logic		HW 3 In, HW4 Out
5	2/16	Logic and Proofs	Ch. 2	
	2/18	Proof Methods		HW 4 In, HW5 Out
	2/19	${ m Quiz}  1  (5{ m pm})$		
6	2/23	Proofs	Ch. 3	
	2/25	Induction		HW 5 In, HW 6 Out
7	3/2	Induction	Ch. 4	
	3/4	Induction		HW 6 In, HW 7 Out
8	3/9	Recursive Functions		
	3/11	Recursion		HW 7 In, HW 8 Out
9	3/16	Recursion		
	3/18	Runtime Analysis		HW 8 In, HW 9 Out
	3/19	Midterm Exam (5pm)		
10	3/23	No Class: Wellness Day		
	3/25	Runtime Analysis	Ch. 21	HW 9 In, HW 10 Out
11	3/30	Runtime Analysis	Ch. 21	
	4/1	Sorting		HW 10 In, HW 11 Out
12	4/6	Introduction to Graph Theory	Ch. 13, 14	
	4/8	Graphs and Relations		HW 11 In, HW 12 Out
13	4/13	Induction on Graphs	Ch. 16	
	4/15	Graph Theory and Trees		HW 12 In, HW 13 Out
	4/16	Quiz 2 (5pm)		
14	4/20	Connectivity and Circuits	Ch. 17	HW 13 In, HW 14 Out
	4/22	No Class: Wellness Day		
15	4/27	Graph Coloring and Algorithms	Ch. 18	
	4/29	Graph Algorithms		HW 14 In
	5/12	Final Exam (7pm)		

Please note that quizzes and exam will be administered via Blackboard. Homework assignments are due on the Friday of the week in which they are posted via DEN Desire2Learn and new homework assignments will be posted by Friday on piazza.

# Statement on Academic Conduct and Support Systems

#### **Academic Conduct:**

Plagiarism presenting someone elses ideas as your own, either verbatim or recast in your own words is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, Behavior Violating University Standards policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct.

# **Support Systems:**

- Student Counseling Services (SCS) (213) 740-7711 24/7 on call
  Free and confidential mental health treatment for students, including short-term psychotherapy, group
  counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling
- National Suicide Prevention Lifeline 1 (800) 273-8255
   Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. www.suicidepreventionlifeline.org
- Relationship and Sexual Violence Prevention Services (RSVP) (213) 740-4900 24/7 on call
  Free and confidential therapy services, workshops, and training for situations related to gender-based
  harm. engemannshc.usc.edu/rsvp
- Sexual Assault Resource Center
  For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu
- Office of Equity and Diversity (OED)/Title IX Compliance (213) 740-5086
   Works with faculty, staff, visitors, applicants, and students around issues of protected class. equity.usc.edu
- Bias Assessment Response and Support Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support
- The Office of Disability Services and Programs
  Provides certification for students with disabilities and helps arrange relevant accommodations. dsp.usc.edu
- Student Support and Advocacy (213) 821-4710
  Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa
- Diversity at USC
   Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. diversity.usc.edu
- USC Emergency Information
   Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu
- USC Department of Public Safety UPC: (213) 740-4321 HSC: (323) 442-1000 24-hour emergency or to report a crime.
  - Provides overall safety to USC community. dps.usc.edu