CompSci 162 Spring 2023 Projected Schedule

Note that this is a *projected* schedule and is subject to change. All non-exam artifacts this quarter are due at 9:15 AM Irvine time on their respective due dates. At the time of this writing, the plan is for there to be five problem sets, due Mondays of weeks 3, 5, 6, 8, and 10.

Week	Date	Topic	Reading (Sipser)
1	April 3	Introduction, mathematical preliminaries Regular Languages, finite automata, DFA	Chapter 0, 1.1
2	April 10	NFA, regular expressions, non-regular languages	1.2, 1.3, 1.4
3	April 17	Finish unit 1, take **Quiz 1 on Wednesday**, Context-free grammars, pushdown automata	2.1, 2.2
4	April 24	Equivalence of CFGs and PDAs	
5	May 1	More CFGs and PDAs Non-context-free languages. Parsing	2.3
6	May 8	Finish unit 2, **take Quiz 2 on Wednesday**, Turing machines. Reading for Monday May 15: Church-Turing Thesis.	3.1,
7	May 15	Decidability. Rice's Theorem	Chapter 4
8	May 22	Time complexity. **Quiz 3 on Wednesday**. NP-completeness. Cook's Theorem Reading for Wednesday May 31: Intro to NP	7.1, 7.2, 7.3, 7.4
9	May 29	**Monday of Week 9 is Memorial Day.** Polynomial-time reductions. More NP-complete problems	7.5
10		Finish up NP-complete problems **Quiz on Wednesday** Friday TBD	
Final Exam: Monday, Jun 12, 10:30 AM - 12:30 PM			

There will be two “required” short reading assignments. I won’t be collecting anything to demonstrate having done the reading, but the readings will be necessary to understand the immediate following lectures. I will provide the reading well in advance, as well as reinforcement questions related to the reading.

If desired by students and time permitting, I can give Zoom lectures that cover the same material as the readings. If I do this, we will mutually decide a time for these to happen. If I do this, recordings of the Zoom lectures will be made available -- live attendance will not be required, but will be available to anyone interested.