Week		Content	Reading	HW Assigned	HW Due
week1	Thursday, September 1, 2022	Course policies, introduction to Th. Of Comp. **First look at Finite State Automata (FSA)**	Chapter 0		
week 2	Tuesday, September 6, 2022	Terminology and formal defnition of FSAs state diagrams, regular languages (RL) **operations on RLs**	Chapter 1.1		
	Thursday, September 8, 2022	Closure of RLs under operations of union and concatenation, Non-deterministic Finite Automata	Chapter 1.2	Sat. 09/09 PS1 Out	
week 3	Tuesday, September 13, 2022	Equivalence of DFAs and NFAs	Chapter 1.2		
	Thursday, September 15, 2022	Regular Expressions and their relation to NFAs and DFAs	Chapter 1.3	Sat. 09/17 PS2 Out	Fri. 09/16 11:59pm PS1 Due
week 4	Tuesday, September 20, 2022	FSA minimization	Chapter 1.3		
	Thursday, September 22, 2022	DFA ➡ RE,	Chapter 1.3	Sat. 09/24 PS3 Out	Fri. 09/23 11:59pm PS2 Due
week 5	Tuesday, September 27, 2022	The Pumping Lemma for RLs, Non-regular languages	Chapter 1.4		
	Thursday, September 29, 2022	Context Free Languages Parse Trees	Chapter 2.1	Sat. 10/01 PS4 Out	Fri. 09/30 11:59pm P3 Due
week 6	Tuesday, October 4, 2022	The Pumping Lemma for CFLs, Chomsky normal form	Chapter 2.3		
	Thursday, October 6, 2022	Examples of non-CFG languages	Chapter 2.3	Sat. 10/08 PS5 Out	Fri. 10/07 11:59pm P4 Due
week 7	Tuesday, October 11, 2022	Monday schedule – no class			
	Thursday, October 13, 2022	Deterministic Pushdown Automata	Chapter 2.2		Fri. 10/07 11:59pm P5 Due
week 8	Tuesday, October 18, 2022	Review			
	Thursday, October 20, 2022	**MIDTERM EXAM**			
week 9	Tuesday, October 25, 2022	Turing Machines	Chapter 3.1		
	Thursday, October 27, 2022	Working with Turing Machines	Chapter 3.1, 3.2	Sat. 10/29 PS6 Out	
week 10	Tuesday, November 1, 2022	Variants of Turing Machines Church-Turing Thesis	Chapter 3.2, 3.3		
	Thursday, November 3, 2022	Decidable Languages, Enumerators	Chapter 4.1	Sat. 11/05 PS7 Out	Fri. 11/04 11:59pm P6 Due
week 11	Tuesday, November 8, 2022	Undecidability	Chapter 4.2		
	Thursday, November 10, 2022	Reductions	Chapter 5.1, 5.3	Sat. 11/12 PS8 Out	Fri. 11/11 11:59pm P7 Due
week 12	Tuesday, November 15, 2022	The Recursion Theorem	Chapter 6.1		
	Thursday, November 17, 2022	Applications of Recursion Theorem **Introduction to Complexity**	Chapter 6.1, 7.1	Sat. 11/19 PS9 Out	Fri. 11/11 11:59pm P8 Due
week 13	Tuesday, November 22, 2022	Polynomial Complexity/class P	Chapter 7.1, 7.2		
	Thursday, November 24, 2022	Thanksgiving!			
week 14	Tuesday, November 29, 2022	Class NP	Chapter 7.3		
	Thursday, December 1, 2022	NP-completeness	Chapter 7.4, 7.5	Sat. 12/03 PS10 Out	Fri. 12/02 11:59pm P9 Due
week 15	Tuesday, December 6, 2022	Examples of NP-complete problems	Chapter 7.5		
	Thursday, December 8, 2022	If time permits: beyond NP	Chapter 8.1, 8.2		Fri. 12/09 11:59pm P10 Due
	Tuesday, December 13, 2022	Review			
	TBA	FINAL EXAM			