

We will follow the textbook *Introduction to Automata Theory, Languages, and Computation* (third edition) by Hopcroft, Motwani and Ullman. The following schedule outlines the material to be covered during the semester and specifies the corresponding sections in the textbook.

Date	Topic	Quiz	Reading	Assigned	Due
Tue 01/30	Proofs, Strings & Languages		1.1-1.5	HW1	
Thu 02/01	Deterministic Finite Automata (DFA)		2.1-2.2		
Tue 02/06	Nondeterministic Finite Automata (NFA)		2.3.1-2.3.4	HW2	HW1
Thu 02/08	Equivalence of DFAs & NFAs		2.3.4-2.3.6, 2.5		
Tue 02/13	Regular Expressions		3.1-3.3	HW3	HW2
Thu 02/15	Regular Language Pumping Lemma		4.1		
Tue 02/20	Regular Language Closure Properties		4.2	HW4	HW3
Thu 02/22	Regular Language Decision Properties	Quiz 1	4.3		
Tue 02/27	DFA Minimization		4.4	HW5	HW4
Thu 03/01	Context-free Grammars (CFG)		5.1		
Tue 03/06	Parse Trees		5.2	HW6	HW5
Thu 03/08	Ambiguity	Quiz 2	5.4		
Tue 03/13	Pushdown Automata (PDA)		6.1-6.2		HW6
Thu 03/15	PDAs for CFGs		6.3.1		
Tue 03/20	<i>Spring Break</i>				
Thu 03/22	<i>Spring Break</i>				
Tue 03/27	CFGs for PDAs		6.3.2	HW7	
Thu 03/29	Chomsky Normal Form		7.1		
Tue 04/03	Context-free Pumping Lemma		7.2	HW8	HW7
Thu 04/05	Context-free Closure Properties	Quiz 3	7.3		
Tue 04/10	Context-free Decision Properties		7.4	HW9	HW8
Thu 04/12	Turing Machines I		8.1-8.2		
Tue 04/17	Turing Machines II		8.3-8.4	HW10	HW9
Thu 04/19	Turing Machines III	Quiz 4	8.5-8.6		
Tue 04/24	Undecidability I		9.1	HW11	HW10
Thu 04/26	Undecidability II		9.2		
Tue 05/01	Reductions		9.3	HW12	HW11
Thu 05/03	Undecidability III		9.4-9.5		
Tue 05/08	P vs NP		10.1	HW13	HW12
Thu 05/10	NP-completeness I	Quiz 5	10.2		
Tue 05/15	NP-completeness II		10.3-10.4		HW13
Thu 05/17	Final Exam 1:00pm - 3:00pm				