COM3064
Automata Theory
2022-2023 Spring

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Week	Content
1	Introduction to Automata
2	Finite Automata
3	NFAs vs. DFAs, Closure Properties
4	Regular Expressions and Regular Languages
5	Properties of Regular Languages
6	Context-Free Grammars (CFG's) and Context-Free Languages
7	Midterm Exam
8	Pushdown Automata (PDA)
9	Equivalence of CFG's and PDA's
10	The Pumping Lemma for Context-Free Languages
11	Properties of Context-Free Languages
12	Turing Machines
13	Undecidability and NP-Completeness

Grading	
Midterm	%20
Quizzes	%10
Final	%80

Resources:

- M. Sipser, Introduction to The Theory of Computation, 3rd Edition, Course Technology, 2013.
- J.E. Hopcroft, R. Motwani, and J.D. Ullman, Introduction to Automata Theory, Languages, and Computation, 3rd Edition, Addison Wesley, 2007