

CSCE 341 – F24: Exam 2 Study Guide

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Learning Goals

This is an outline of the things you have learned so far. Problems on the exam will reference these, showing why these problems were selected to test your knowledge. This outline may not be complete.

1. Regular Languages
 - (a) DFAs
 - (b) NFAs
 - (c) Regular Expressions
 - (d) Closure Properties
 - (e) Pumping Lemma
2. Context-Free Languages
 - (a) Context-Free Grammars
 - (b) Chomsky Normal Form
 - (c) Pushdown Automata
 - (d) Pumping Lemma
 - (e) Closure Properties
3. Turing Machines
 - (a) Chomsky Hierarchy
 - (b) TM Definition
 - (c) Implementation-level descriptions
 - (d) Modified Turing Machines
 - (e) Church-Turing Thesis
 - (f) Deciders