

CS 451	Theory of Computing	Page 2
Major Topics Covered in the Course		
<ol style="list-style-type: none"> 1. Review of mathematical preliminaries {3 classes} 2. Abstract machines and languages: formal grammars; the four types of phase structured grammars; derivation of sentences; ambiguity {6 classes} 3. Properties of finite state machines, equivalence, reduction. {6 classes} 4. Finite state acceptors, regular grammars, regular expressions, properties of finite state languages {6 classes} 5. Limitations of finite automata, automata with tape {2 classes} 6. Pushdown automata, context free grammars {6 classes} 7. Context free languages, canonical forms, closure properties {7 classes} 8. Turing machines, effective computability, recursive functions {4 classes} 		

Latest Revision: Spring 2021