

CS 5363 Programming Languages and Compilers

Spring 2019 Course Schedule

Week	Date	Lectures	Projects & Assignments
1	Jan. 15	Introduction	
1	Jan. 17	Formal Languages: Basics	
2	Jan. 22	Formal Languages: Automaton	
2	Jan. 24	Formal Languages: Automaton	
3	Jan. 29	Tokenization and Lexical Analysis	
3	Jan. 31	Project Announcement	Project post
4	Feb. 2	Formal Languages: Context Free Languages	
4	Feb. 7	Formal Languages: Context Free Grammar and CYK	Assignment I post
5	Feb. 9	Parsing: Recursive Descendent Parsing	
5	Feb. 14	Parsing: LL (1)	
6	Feb. 19	Parsing: LL (1)	
6	Feb. 21	Parsing: LR	
7	Feb. 26	Parsing: Abstract Syntax Tree	Lexer due
7	Feb. 28	Parsing: Abstract Syntax Tree	Assignment I due
8	Mar. 5	Mid-Term Review	Assignment II post
8	Mar. 7	Mid-Term Exam	
9	Mar. 19	Type System and Type Checking	
9	Mar. 21	Type System and Type Checking	
11	Mar. 26	Code Generation: Tree Walking	
11	Mar. 28	Code Generation: Tree Walking	
12	Apr. 2	Code Generation: Instruction Set	Assignment II due

12	Apr. 4	Code Generation: Instruction Set	Parser due
13	Apr. 9	Code Generation: Register Allocation	
13	Apr. 11	Code Optimization: Data Flow Analysis	
14	Apr. 16	Code Optimization: Loops	
14	Apr. 18	Advanced Topics: Static Single Assignment	
15	Apr. 23	Advanced Topics: Functional Languages	
15	Apr. 25	Advanced Topics: Functional Languages	
16	Apr. 30	Final Review	
16	May. 2	Mid-Term Exam II	Code Generation due on May 3

This schedule is approximate and preliminary. The concrete dates and content of the classes may subject to change.