

**Continuous Improvement in
Foundations of Computer Science
CSC 2070-001, Spring 2018**

Course Objectives:

Upon successful completion of this course, the student has the ability to:

1. Perform regular expression operations.
2. Determine the language generated by a grammar and grammars for a given language.
3. Convert context-free grammars to Normal Forms and implement the CYK Algorithm.
4. Construct a DFA/NFA- λ automata and determine the acceptor language of the automata.
5. Convert an NFA- λ to an equivalent minimum state DFA.
6. Construct deterministic/nondeterministic pushdown automata (PDA/NPDA).
7. Construct the graph of a grammar and perform top-down/bottom-up/LA parsing.

Teaching Method: The course is an interactive lecture format with solutions to exercises discussed in class. Homework problems reinforce class discussions and are representative of exam problems.

Course Assessment Methodology: Use the following criteria to assess the effect of processes on your ability to develop competency in the *Course Objectives*. When appropriate, include comments for clarification.

Major Deficiencies	Some Deficiencies	Average	Good	Outstanding
1	2	3	4	5

Student Engagement (professionalism):

Metric	Description	Measure
1	<i>Knowledge of Course Syllabus</i>	1 2 3 4 5
2	<i>Attended Classes</i>	1 2 3 4 5
3	<i>Prepared for Class</i>	1 2 3 4 5
4	<i>Engaged in Class Activities</i>	1 2 3 4 5
5	<i>Attitude - Avoided Disruptive Activity (conversations, cell phones, computers, etc.)</i>	1 2 3 4 5

Class Environment:

Metric	Description	Measure
6	<i>Peer Professionalism</i>	1 2 3 4 5
7	<i>Class Size</i>	1 2 3 4 5
8	<i>Course Expectations</i>	1 2 3 4 5
9	<i>Classroom Facilities</i>	1 2 3 4 5

Faculty:
Class Management:

Metric	Description	Measure				
10	Class Organization	1	2	3	4	5
11	Focused Lectures	1	2	3	4	5
12	Engaged Students	1	2	3	4	5
13	Supplemental Materials	1	2	3	4	5

Exams and Homework Assignments:

Metric	Description	Measure				
14	Reflected Class Content	1	2	3	4	5
15	Allowed Adequate Time	1	2	3	4	5
16	Fairly Graded	1	2	3	4	5
17	Timely Feedback	1	2	3	4	5

Mentoring:

Metric	Description	Measure				
18	Committed to Student Success	1	2	3	4	5
19	Provided Perspective on Course Content	1	2	3	4	5
20	Provided Perspective on Careers	1	2	3	4	5