BLG311E – Formal Languages and Automata

2016-2017 SPRING

	CRN: 22171 – 22082
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Textbook: J.E. Hopcroft, J.D. Ullman, *Introduction to Automata Theory, Languages and Computation – Second Edition*, Addison-Wesley, 2001

Week	Topic	RECITATIONS
1 (7/9 Feb)	Finite State Machines - Definitions and Models	
2 (14/16 Feb)	Finite State Machines - State reduction and state equivalency	Recitation 1 Homework 1
3 (21/23 Feb)	Mathematical Foundations of Formal Languages - Inductive definitions, Alphabets and languages	Quiz 1
4 (28 Feb/02 Mar)	Mathematical Foundations of Formal Languages - Relations and closures, Languages and Grammars	Rec 2 - HW2
5 (07/09 Mar)	Mathematical Foundations of Formal Languages - Chomsky Hierarchy, Regular Expressions	Rec 3 - HW3
6 (14/16 Mar)	MIDTERM I – 14th of March	
7 (21/23 Mar)	Automata - Deterministic Finite Automata	Q2
8 (28/30 Mar)	SPRING BREAK	
9 (04/06 Apr)	Automata - Non-Deterministic Finite Automata	Rec 4 – HW4
10 (11/13 Apr)	Automata - NFA/DFA equivalency	Q3
11 (18/20 Apr)	Automata – Pumping Lemma	Rec 5 – HW5
12 (25/27 Apr)	MIDTERM II – 25th of April	
13 (02/04 May)	Push-down Automata and Context-free Languages	Q4
14 (09/11 May)	Push-down Automata and Context-free Languages	HW6
15 (16/18 May)	Turing Machines	Rec 6

Grading

- Homeworks will not be graded, however students should deliver at least 3 homeworks to pass
- Quizzes: 10%
- Midterm: 50%
- Final exam: 40%.
- To enter the final exam you must attend at least 70%, your **term** avarage should be over 35.
- At the end of the term, a **total** average below 40 will fail. Students who got less than 30 in final exam will also fail.

You can follow the course announcements, exam results and your attendance status on the Ninova system (http://ninova.itu.edu.tr/).