

CSE 625: Introduction to Automata and Formal Languages
Fall 2007
(Tentative Syllabus)

Lectures	Chapter.Section	Materials	Assignments
Sep 19	1.5	Preliminaries, Languages	
Sep 21	1.5	Language Operations	
Sep 24	3.1	Regular languages and expressions	Assign1
Sep 26	3.1	More on RE and RL	
Sep 28	3.2, 3.3	Finite Automata	
Oct 01	3.3, 3.4	Practice FA	Assign2
Oct 03	3.5	Set operations and FA	
Oct 05	4.1, 4.2	Nondeterministic FA	
Oct 08	4.3	Kleene's Theorem	
Oct 10	5.1, 5.2	NDFA = FA	Assign3
Oct 12	5.3	Pumping Lemma	
Oct 15		Regular Grammars	
Oct 17		Practice	
Oct 19		Midterm	
Oct 22	6.1	Context-free Grammars	Assign4
Oct 24	6.3	Set Operations on CFL	
Oct 26	6.4, 6.5	Ambiguity and CFG	
Oct 29	7.1,7.2	Pushdown Automata	Assign5
Oct 31	7.3	DPDA	
Nov 02	7.4	PDA and CFG	
Nov 05	7.5	CFG and PDA	Assign6
Nov 07	7.6	Parsing	
Nov 09		Practice	
Nov 14	8.1	Pumping Lemma for CFL	Assign7
Nov 16	8.2, 8.3	Decision Problems on CFL	
Nov 19		Practice	
Nov 21	9.1	Turing Machines	Assign8
Nov 26	9.2, 9.3	More on Turing Machines	
Nov 28	9.5	NDTM	
Nov 30	9.6	Universal TM	

Instructor: **Tamal K. Dey**, Room: **293 DL, 292-3563**.

Classes: **MWF 10:30 at DL 0713**

Office hours: **MW 11:30-12:00 noon., F 2:00-2:30 pm. or by appointment**

Grading Policy: **Assignments: 30% Midterm: 30% Final: 40%**

Required Text: **Introduction to Languages and the Theory of Computation, John C. Martin, WCB McGraw-Hill, 2nd Edition**

No late assignment is permitted.