



# Course Weekly Outline

Course Name: Computational theory 1

<b>Course Instructor</b>					
<b>E-mail</b>					
<b>Title</b>					
<b>Course Coordinator</b>					
<b>Course Objective</b>	This course covers the Theory of computation. Computation models: automata and formal languages. Practical consequences				
<b>Course Description</b>	Set notation, Definitions, Finite Automata ( DFA, NFA), Regular Expression, Transition Graph, Kleens Theorem				
<b>Textbook</b>	Daniel L. A. Cohen, Introduction of the theory of computation.				
<b>References</b>	-Lewis, H.R. and Papadimitriou, Christos. 1998. Elements of the Theory of Computation. 2 <sup>nd</sup> Edition. Prentice-Hall.				
<b>Course Assessments</b>	TermTests	Laboratory	Quizzes	Project	Final Exam
	Exam1=15% Exam 2=15%		10%	-	60%
<b>General Notes</b>					



### Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		Set notation, Definitions		
2		Regular Expression		
3		Regular Expression		
4		Finite Automata(F.A.)		
5		Finite Automata(F.A.)		
6		Transition Graphs		
7		Kleen theorem,		
8		Kleen theorem (part 2)		
9		Kleen theorem part 3		
10		DFA, NFA		
11		F. A. with output (Moore machine) (Mo)		
12		F. A. with output (Mealy machine) (Me)		
13		Converting from (Mo) to (Me) and vice versa		
14		Chomsky hierarchy language,		
15		Grammar( PSG, CSG, CFR, FSG)		

**Instructor Signature:**

**Dean Signature:**