



# Course Weekly Outline

**Course Name : Computational theory 1**

<b>Course Instructor</b>	Assist. Prof. Dr. Ali Jbaeer Dawood				
<b>E-mail</b>	draliyd@yahoo.com				
<b>Title</b>	Assist. Prof.				
<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 theorm,		
8		Kleen theorm (part 2)		
9		Kleen theorm 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:**



# Course weekly Outline

**Course Name :Advanced Mathematics**

<b>Course Instructor</b>	Suhail M. Ali				
<b>E-mail</b>	Suhail1958@yahoo.com				
<b>Title</b>	Advanced Mathematics				
<b>Course Coordinator</b>	15 weeks				
<b>Course Objective</b>	Strengthen essential advanced mathematic phenomena's				
<b>Course Description</b>	Advanced Mathematic for 2 <sup>st</sup> stage collage				
<b>Textbook</b>	Calculus , Thomas ,1990,5 <sup>th</sup> edition				
<b>References</b>	Calculus Anton ,2002 2 <sup>nd</sup> edition				
<b>Course Assessments</b>	TermTests	Laboratory	Quizzes	Project	Final Exam
	As ( 30 %)	.....	(10%)	----	60%
<b>General Notes</b>					



### Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	1-11-2015	Introduction to advance math	.....	...
2	7-11	Direct integration	.....	...
3	14-11	Exercises	.....	...
4	20-11	Variable separable	.....	...
5	27-11	Ex	.....	...
6	2-12	Homogeneous	.....	...
7	9-12	ex	.....	...
8	16-12	Linear 1 <sup>st</sup> order	.....	...
9	23-12	ex	.....	...
10	30-12	Other types of 1 <sup>st</sup> order	.....	...
11	6-1-2016	ex	.....	...
12	13-1	Bernoulli Linear 1 <sup>st</sup> order	.....	...
13	20-1	ex	.....	...
14	25-1	review	.....	...
15	1-2	ex	.....	...
16	10-2	exams	.....	...

**Instructor Signature:**

**Dean Signature:**



# Course Weekly Outline

Course Name :First course

<b>Course Instructor</b>	فلذ منصور محمد				
<b>E-mail</b>	<a href="mailto:falathm@yahoo.com">falathm@yahoo.com</a> falath2@gmail.com				
<b>Title</b>	Data structure				
<b>Course Coordinator</b>					
<b>Course Objective</b>					
<b>Course Description</b>	Give student overview about data structure and how they used to save data in it and deferent between they.				
<b>Textbook</b>	هياكل البيانات ، عصام الصفار				
<b>References</b>					
<b>Course Assessments</b>	TermTests	Laboratory	Quizzes	Project	Final Exam
	(20%)	(10%)	(10%)	(10%)	(50%)
<b>General Notes</b>					



Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		Define data structure , syllabus , Resources		
2		Introduction , Data structure , Type of data structure ,Selection of data structure		
3		Array , Representation of one dimensional array , Representation of two dimensional array		
4		EXAM		
5		Linear list , Type of linear list , Stack, Array representation of stack		
6		Record representation of stack, Stack's Application		
7		Queue, Array representation of queue, Queue's algorithms		
8		Queue's Subprograms, Record Representation of Queue, Queue's Applications		
9		(Circular Queue(CQ		
10		حل بعض اسئلة ومشاكل متعلقة بالفصل		
11		linked structures, storage allocation, sequential storage allocation, dynamic storage allocation		
12		(Pointers, linked list(I		
13		linked stack, linked queue		
14		circular linked list, double linked list		
15		EXAM		

**Instructor Signature:**

**Dean Signature:**