Kingdom of Saudi Arabia المملكة العربية السعودية Ministry of Education وزارة التعليم Umm AlQura University جامعة أم القرى Adham University College الكلية الجامعية بأضم Computer Science Department قسم الحاسب الآلي





Computation Theory Course Outline

First Semester of 2018-2019 Academic Year

Course Information:		
Course Code	6803415-3	
Pre-Requisite	Files Processing and Organization, 6803327-3 / Programming Languages, 6803331-4	
Post-Requisite	None	
Course Level	Seventh Level	
Time	Monday, from 10:45 P.M. to 13:00 P.M. and Tuesday, from 12:15 P.M. to 14:30 P.M.	
Teacher Name	Mariah Sami Ahmed Khayat	
Emails	mskhayat@uqu.edu.sa, mariahkhuqu@gmail.com	

Course Description:

Upon the completion of this course, the student will have learned, through appropriate classroom lectures, what are the fundamental capabilities and limitations of computers, which problems can or cannot be computed, and how quickly can a problem be computed.

Course Reference Book:

Michael Sipser, Introduction to the Theory of Computation, 3rdEdition, Cengage Learning, 2012.

Course Evaluation:		
Midterm	25%	
Assignment 1	5%	
Assignment 2	5%	
Assignment 3	5%	
Project	20%	
Final Exam	40%	
Sum	100%	

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Course Syllabus:		
Week	Syllabus	
1	Registration	
2	Introduction	
3	Finite Automata	
4		
5	Regular Languages	
6		
7	Midterm	
8	Context-Free Languages	
9		
10	Turing Machines	
11		
12	Complexity	
13	P and NP Problems	
14		
15	Review and Projects Discussion	
16	Final Exam	
17		

Remember, "Success is 1% inspiration and 99% perspiration" 😉

If you have any questions, feel free to ask me through my email T.Mariah Sami Ahmed Khayat Teacher Assistant @ Adam University College <u>mskhayat@uqu.edu.sa</u>