Al Imam Mohammad ibn Saud Islamic University
College of Computer and Information Sciences

CCIS

Computer Science Department
Course Syllabus
CS104 - Discrete Structures

Catalog Description:	This course will introduce the student to a body of mathematical concepts essential for the mastery of some of the higher-level computer science courses. Topics include: Set theory, Functions and relations, Propositional and predicate logic, Proof techniques, Recursive Algorithms, Elementary combinatorics and Counting methods, Graph theory, and Discrete probability.

Credit Hours: **3 Credit hours:**   **3** Lectures per week   **0** Labs. per week   **0** Recitation per week

Prerequisites: None

Course Learning Outcomes:
1. Develop an understanding of the basic mathematical structures and objects useful in the study of computer science.
2. Gain knowledge and practice in sing and manipulating logic expressions and proof techniques
3. Develop the ability to perform counting
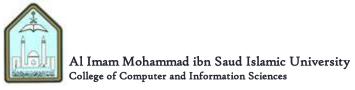4. Apprehend the foundations in graphs.

Major Topics:
- Logic Theory
- Proof Techniques:
- Fundamental Structures
- Counting
- Graph Theory

Text Books: Discrete Mathematics and Its Applications, Kenneth H. Rosen, 7th edition, McGraw Hill, 2011.

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Grading:	
	◉ The grading scale for this course is:

. 95 - 100 A+ Passing
. 90 - 94   A   Passing
. 85 - 89   B+ Passing
. 80 - 84   B   Passing
. 75 - 79   C+ Passing
. 70 - 74   C   Passing
. 65 - 69   D+ Passing
. 60 - 64   D   Passing
. 0 - 59   F   Failing

◉ Final grades will be determined based on the following components:
. 60% Semester Work
. 40% Final Exam

◉ Students may not do any additional work for extra credit nor resubmit any graded activity to raise a final grade.

◉ Late submissions will not be accepted for any graded activity for any reason.

◉ Studentshave one week to request the re-grading of any semester work.
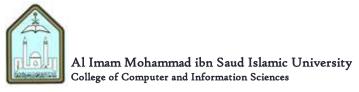
Attendance Policy:

Students should attend 80% of the overall course hours taught in the semester as per the University regulations.

If a student fails to achieve this portion, he/she shall not be allowed to appear in the final exam and shall be awarded "DN" grade and repeat the course.

Cheating and Plagiarism Policy:

The instructor will use several manual and automated means to detect cheating and/or plagiarism in any work submitted by students for this course.

When a student is suspected of cheating or plagiarism, the instructor raises the issue to the disciplinary committee.

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Communications: Registered students will be given access to a section of the Blackboard Learning System for this course. Bb will used as the primary mechanism to disseminate course information, including announcements, lecture slides, assignments, and grades.

Communication with the instructor on issues relating to the individual student should be conducted using CIS email, via telephone, or in person.