

CPIS-340 Syllabus

Catalog Description

CPIS-340 Database Management Systems II

Credit: 3 (Theory: 3, Lab: 0, Practical: 1)

Prerequisite: CPIS-240

Classification: Elective

The objective of this course is to study advanced concepts in Database Managements Systems. It emphasizes on practical skills in designing, using, and optimizing performance of databases. It covers the fundamentals of object-oriented and distributed databases and their architectures. It aims to equip the students with the required techniques to optimize database performance and troubleshoot the concurrency problems of transactions.

Class Schedule

Meet 50 minutes 3 times/week or 80 minutes 2 times/week

Lab/Tutorial 90 minutes 1 times/week

Textbook

Abraham Silberschatz, Henry F. Korth, S. Sudarshan, ,
"Database System Concepts" 5 edition (2006)

ISBN-13 9780071244763

ISBN-10 007124476X

Grade Distribution

Week	Assessment	Grade %
1	Final	100

Topics Coverage Durations

Topics	Weeks
Introduction to Data Warehousing and Mining	2
Review of Probability and Statistics	1
Data Warehousing and OLAP Technology	2
Classification and Prediction	3
Cluster Analysis	0
Data Preprocessing	0
Mining Frequent Patterns, Association and Correlations	2

Last Articulated

Relationship to Student Outcomes

a	b	c	d	e	f	g	h	i	j
x	x	x							

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. To understand thoroughly the concepts of object-oriented database design and development. ()
2. To be familiar with the various types of database architectures. ()
3. To understand the concepts of distributed database design and development. ()
4. To have the required skills to optimize database performance. ()

Coordinator(s)

Prof. Mostafa Saleh, Professor