

# CPCS-442 Syllabus

## Catalog Description

**CPCS-442** Database (II)

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

**Prerequisite:** CPCS-241

**Classification:** Elective

The objective of this course is to explore advanced topics in databases, with a focus on distributed and parallel database management systems followed by database design and implementation. Topics include performance optimization, database security, transaction processing, data warehouses, and data mining.

### Class Schedule

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

Lab/Tutorial 90 minutes 1 times/week

## Textbook

Andy Oppel, , "Databases DeMYSTiFieD, 2nd Edition",  
McGraw Hill Professional; 2 edition (2010-10-22)

**ISBN-13** 9780071748001

**ISBN-10** 0071748008

## Grade Distribution

Week	Assessment	Grade %
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## Topics Coverage Durations

Topics	Weeks
Distributed and parallel database management systems	2
Database design and implementation	2
Performance optimization	2
Database security	2
Transaction processing	3
Data warehouses and data mining	3

## Last Articulated

## Relationship to Student Outcomes

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

## Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. To be acquainted to different types of databases, Object-oriented databases, Distributed databases, Parallel databases. ()
2. To be familiar with database performance measurement. ()
3. To be able to optimize databases. ()
4. To understand what data warehouses are. ()
5. Perform data mining in data warehouses. ()
6. To be familiar with the modern procedures of database management. ()
7. To be familiar with intelligent databases. ()

## Coordinator(s)