

SU DEPARTMENT OF COMPUTER SCIENCE SYLLABUS (Tentative)
COSC 386 Database Design and Implementation

Course Description

Introduction to the relational database model, data integrity, database management systems, high level database design technique, SQL database query language, relational algebra, data normalization, transactions in SQL, and web development of online database using PHP.

Prerequisites

- Data Structures & Algorithms (COSC 37.31) or Discrete Mathematics (COSC 37.32) or Discrete Mathematics (COSC 37.33) or Discrete Mathematics (COSC 37.34) or Discrete Mathematics (COSC 37.35) or Discrete Mathematics (COSC 37.36) or Discrete Mathematics (COSC 37.37) or Discrete Mathematics (COSC 37.38) or Discrete Mathematics (COSC 37.39) or Discrete Mathematics (COSC 37.40) or Discrete Mathematics (COSC 37.41) or Discrete Mathematics (COSC 37.42) or Discrete Mathematics (COSC 37.43) or Discrete Mathematics (COSC 37.44) or Discrete Mathematics (COSC 37.45) or Discrete Mathematics (COSC 37.46) or Discrete Mathematics (COSC 37.47) or Discrete Mathematics (COSC 37.48) or Discrete Mathematics (COSC 37.49) or Discrete Mathematics (COSC 37.50) or Discrete Mathematics (COSC 37.51) or Discrete Mathematics (COSC 37.52) or Discrete Mathematics (COSC 37.53) or Discrete Mathematics (COSC 37.54) or Discrete Mathematics (COSC 37.55) or Discrete Mathematics (COSC 37.56) or Discrete Mathematics (COSC 37.57) or Discrete Mathematics (COSC 37.58) or Discrete Mathematics (COSC 37.59) or Discrete Mathematics (COSC 37.60) or Discrete Mathematics (COSC 37.61) or Discrete Mathematics (COSC 37.62) or Discrete Mathematics (COSC 37.63) or Discrete Mathematics (COSC 37.64) or Discrete Mathematics (COSC 37.65) or Discrete Mathematics (COSC 37.66) or Discrete Mathematics (COSC 37.67) or Discrete Mathematics (COSC 37.68) or Discrete Mathematics (COSC 37.69) or Discrete Mathematics (COSC 37.70) or Discrete Mathematics (COSC 37.71) or Discrete Mathematics (COSC 37.72) or Discrete Mathematics (COSC 37.73) or Discrete Mathematics (COSC 37.74) or Discrete Mathematics (COSC 37.75) or Discrete Mathematics (COSC 37.76) or Discrete Mathematics (COSC 37.77) or Discrete Mathematics (COSC 37.78) or Discrete Mathematics (COSC 37.79) or Discrete Mathematics (COSC 37.80) or Discrete Mathematics (COSC 37.81) or Discrete Mathematics (COSC 37.82) or Discrete Mathematics (COSC 37.83) or Discrete Mathematics (COSC 37.84) or Discrete Mathematics (COSC 37.85) or Discrete Mathematics (COSC 37.86) or Discrete Mathematics (COSC 37.87) or Discrete Mathematics (COSC 37.88) or Discrete Mathematics (COSC 37.89) or Discrete Mathematics (COSC 37.90) or Discrete Mathematics (COSC 37.91) or Discrete Mathematics (COSC 37.92) or Discrete Mathematics (COSC 37.93) or Discrete Mathematics (COSC 37.94) or Discrete Mathematics (COSC 37.95) or Discrete Mathematics (COSC 37.96) or Discrete Mathematics (COSC 37.97) or Discrete Mathematics (COSC 37.98) or Discrete Mathematics (COSC 37.99) or Discrete Mathematics (COSC 38.00)

	1
Online Database Programming Using PHP	2
Design Theory- Normalization	2
Transactions in SQL	1
Project Presentation	1
	14

Evaluation

- Homework, Labs, and Project 35 - 45%
- Midterms and Final Exams
- Quizzes and In-class Exercises 10%