

Global Learning Semesters

Course Syllabus

Course: COMP-472 Object-Oriented Databases

Department: Computer Science

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
COMP-472	Object-Oriented Databases	3
Semester Offered	Contact Hours	Prerequisites
Please contact us	42-45	COMP -362
Department	Level of Course	Language of Instruction
Computer Science	Upper Division	English

Course Description

This course introduces students to Object-Oriented Database Systems. It covers the fundamental object-oriented concepts emanating from object-oriented analysis, design and programming. Students are introduced to the data structure, integrity constraints and data manipulation part of the Object-Oriented Database Model. The Object Data Management Standard ODMG-93 is discussed. Specific Object-Oriented Database Systems are discussed with special emphasis given to the O2 Database System.

Prerequisites

COMP -362

Topic Areas

1. The Evolution of Analysis, Design and Programming to Object-Orientation.
2. Limitations and Shortcomings of Relational Databases.
3. Object-Oriented Databases. The Object-Oriented Database Model. ODMG-93 Standard.
4. Data Structures. Classes, Inheritance, Encapsulation.
5. Integrity Constraints
6. Data Manipulation. Object SQL. OSQL.
7. The O2 Database System.
8. Design and Implementation Considerations.

Readings and Resources

Required Textbook

- S. Khoshafian, Object-Oriented Databases, 1993, Wiley, (ISBN: 0-471-57058-3).

Recommended Readings

- P, Kroha, Objects and Databases, 1993, McGraw Hill, (ISBN: 0-07-707790-3).
- O2 Manuals, O2 Technology, 1996.