

CIS 430
COURSE NAME/NUMBER

LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:

At the end of this course, students should understand

- How indexing and hashing can improve performance, and when to use each technique.
- How optimization techniques enable RDBMS to perform better.
- Basic issues involved in tuning and measuring RDBMS performance.
- How object oriented (OODBMS) and object-relational (ORDBMS) databases differ from relational, and when each is useful and preferable.
- What data warehousing is, and the basic issues affecting construction and performance.
- What data mining is, and the methods used.
- Database administrator responsibilities and duties.
- In general, have a good sense of how to use databases, and where each of the specific topics is useful in solving business problems.

METHODS:

Lectures, assignments, and hands-on exercises involving relational database management system operation

PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

Credit can be awarded for this course through PLAR

Yes

No

METHODS OF OBTAINING PLAR:

Course challenge with departmental approval

TEXTBOOKS, REFERENCES, MATERIALS:

[Textbook selection varies by instructor. An example of texts for this course might be:]

Database Systems, 3rd Edition, Connolly & Begg, Addison-Wesley, 2002
Oracle Education Kit - Oracle9i DBA Fundamentals I

SUPPLIES / MATERIALS:**STUDENT EVALUATION:**

[An example of student evaluation for this course might be:]

Assignments	30%
Midterm Exam	35%
Final Exam	35%

COURSE CONTENT:

[Course content varies by instructor. An example of course content might be:]

- Indexing and hashing.
- Relational optimization techniques.
- Performance tuning.
- Comparison of modern relational systems.
- Object-relational database systems (ORDBMS).
- Object-oriented databases (ODBMS).
- Data warehousing and data mining.
- Oracle9i* architecture.
- Oracle9i* database administration.