



Business School
UNIVERSITY OF COLORADO DENVER

Information Systems Program

Database Management Essentials

Module 1: Course Introduction

Lesson 2: Course Topics and Assignments



Lesson Objectives

- Understand course topics and course flow
- Understand assessments especially practice and graded problems
- Obtain software

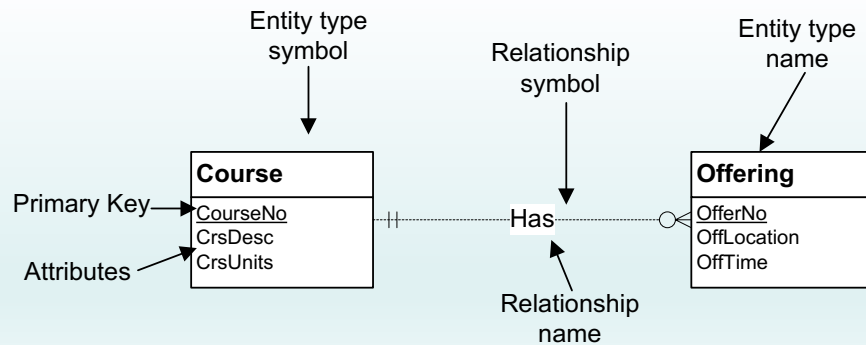


Course Topics

Student		Offering	
StdNo	StdLastName	OfferNo	CourseNo
123-45-6789	WELLS	1234	IS320
124-56-7890	KENDALL	4321	IS320
234-56-7890	NORBERT		

Enrollment	
StdNo	OfferNo
123-45-6789	1234
234-56-7890	1234
123-45-6789	4321
124-56-7890	4321

Integrity Rules



Data Modeling



Query Formulation

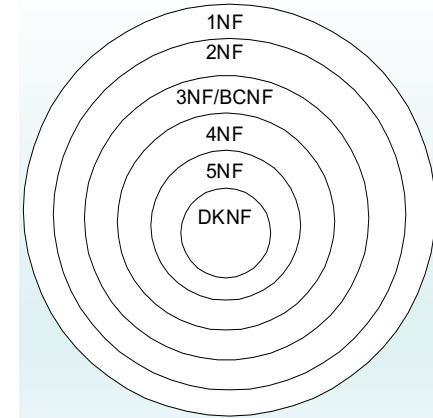
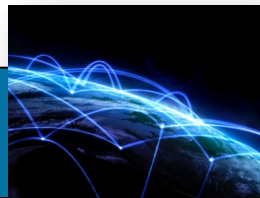
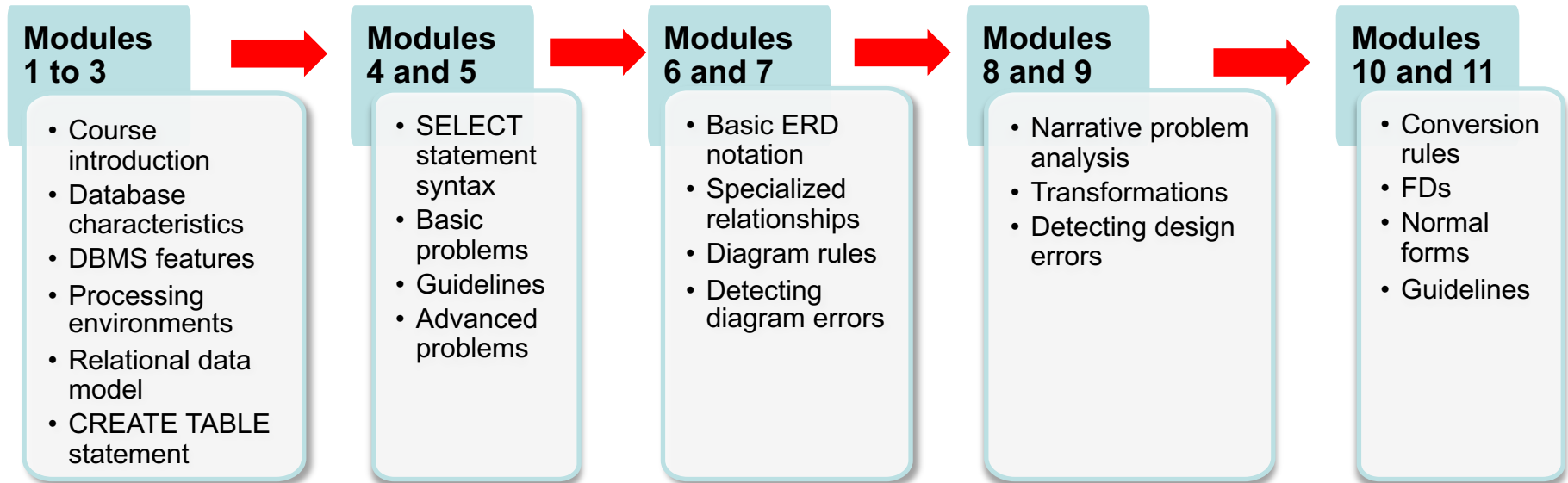


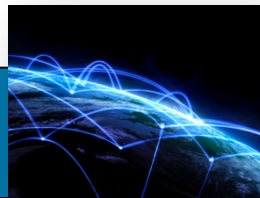
Table Design

Course Flow



Assessments

- Practice problem sets for most modules
 - Similar to graded problem sets
 - Solutions and detailed comments
 - Coverage of highlights in some video lectures
- Graded problem sets for most modules
 - Primary part of grading
 - Peer review for each problem set
 - Associated quizzes for some problem sets
 - Ungraded practice problems for most modules

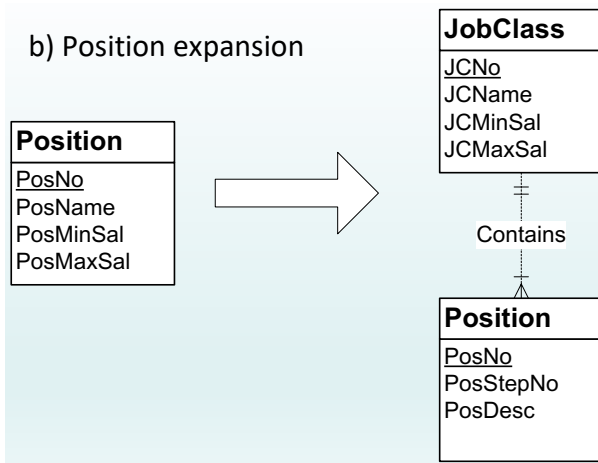


Problem Sets

```
CREATE TABLE Enrollment
(
    OfferNo      INTEGER,
    StdNo        CHAR(11),
    EnrGrade     DECIMAL(3,2),
    CONSTRAINT PKErollment PRIMARY KEY(OfferNo, StdNo),
    CONSTRAINT FKOfferNo FOREIGN KEY (OfferNo)
        REFERENCES Offering,
    CONSTRAINT FKStdNo FOREIGN KEY (StdNo)
        REFERENCES Student )
```

```
SELECT StdMajor,
       AVG(StdGPA) AS AvgGpa
FROM Student
WHERE StdClass IN ('JR', 'SR')
GROUP BY StdMajor
HAVING AVG(StdGPA) > 3.1
```

Create Tables



Data Modeling

Query Formulation

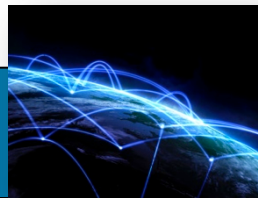
StdNo → StdCity, StdClass

OfferNo → OffTerm, OffYear,
CourseNo, CrsDesc

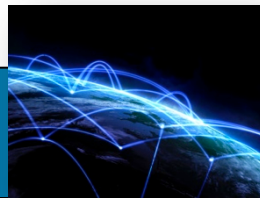
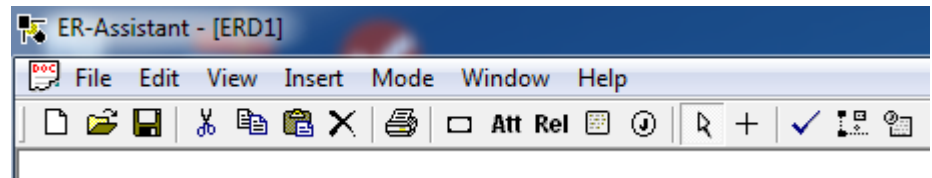
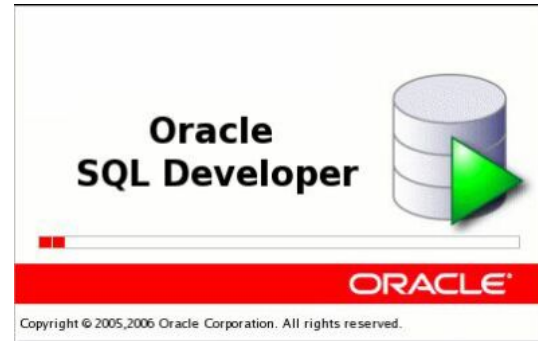
CourseNo → CrsDesc

StdNo, OfferNo → EnrGrade

Table Design



Tools



Summary

- Basic course on database management concepts and skills
- Detailed course topics
- Tools and assignments to develop and apply skills
- Career opportunities for information technology professionals along with business and computer science students

