

V. Student Learning Outcomes

Upon completion of this course, students will be able to:

1. describe the basic architecture of a DBMS;
2. describe the differences between relational, object-oriented and object-relational databases;
3. use entity-relationship diagrams to design databases;
4. use database constraints such as keys and referential integrity;
5. use the relational data model, including the algebra of relational operations;
6. use functional dependencies and normal forms;
7. structure databases and perform database queries and modifications in Structured Query Language (SQL);
8. implement constraints in SQL;
9. design and implement a small relational database in Oracle.

VI. Course Requirements and Evaluation Criteria

a. Final grades are assigned as follows:

A: 90-100

B: 80-89

C: 70-79

D: 60-69

F: < 60

- b. Attendance Requirements – Students are expected to attend all class sessions, to enter the classroom on time, and to remain until the class ends. Please notify the instructor when it is necessary for you to leave early. Exceeding the limit of four (4) unexcused absences will result in an EA interim grade for excessive absences.
- c. The course grade is based on: 8 homeworks/exercises (6% each) + midterm exam (26%) + final exam (26%)
- d. Policy on Late Assignments - Each assignment must be submitted on time. Up to twenty (20) percent of your assignment grade will be deducted for each school day the programming assignment is overdue. If you need to hand in an assignment late, please notify me ahead of time.
- e. Dishonesty on graded assignments will not be tolerated. Although students may discuss assignments with one another, they must neither give nor receive excessive help. Students learn by doing things themselves! Having access to another student's work on the system is definitely not allowed. Duplicate answers are not acceptable. Each student is responsible for disposing of printouts safely and for protecting their home directory. All students involved in dishonesty (those giving as well as those receiving unallowable help) will be penalized.

Please note: If these evaluation criteria must be revised because of extraordinary circumstances, the instructor will distribute a written amendment to the syllabus.

VII. Academic Support Resources – none for this course.

VIII. Continuity of Instruction. In case FSU must close for an emergency during the semester, instruction will continue using Blackboard.

IX. Teaching Strategies

The primary teaching strategies for this course will be lectures/discussions, homework exercises and SQL programming exercises. All assignments and lecture notes will be posted on Blackboard.

X. Bibliography

Kline, Kevin E. (2004) *SQL in a Nutshell, 2nd Edition*. O'Reilly.

Price, Jason (2004) *Oracle Database 10g SQL*. McGraw-Hill/Osborne.

Simsion, Graeme C. & Witt, Graham C. (2005) *Data Modeling Essentials, 3rd Edition*. Morgan Kaufmann.

XI. Course Outline and Assignment Schedule*

week #	start date	topics	Assignments	events
1	17-Aug	Course overview; Ch.1 Database Management	download & install Oracle Database 10g XE	Classes begin Thur 8/20
2	24-Aug	Ch.3 Relational Data Model		
3	31-Aug	Ch.4 SQL Order Entry Database	Exercise #1	
4	7-Sep	Ch.4 SQL	Exercise #2	Labor Day 9/7
5	14-Sep	Ch.9 Advanced SQL	Exercise #3	Fall Convocation 9/15
6	21-Sep	Ch.9 Advanced SQL	Exercise #4	
7	28-Sep	Ch.10 Views		
8	5-Oct	Ch. 10 & Midterm review	Exercise #5	Midterms begin 10/8
9	12-Oct	Midterm Exam (10/13) & Ch.5		Midterms end 10/14 Fall Break 10/15&16
10	19-Oct	Ch.5 E/R Diagrams		
11	26-Oct	Ch.5 E/R Diagrams	Exercise #6	Deadline to remove I grades 10/30
12	2-Nov	Ch.6 Developing Data Models		
13	9-Nov	Ch.6 Developing Data Models	Exercise #7	Veteran's Day 11/11
14	16-Nov	Ch.7 Normalization		
15	23-Nov	Ch.7 Normalization	Exercise #8	Thanksgiving 11/26&27
16	30-Nov	Ch.8 Physical DB Design & final review		Graduating senior finals 11/30-12/5 Last day of classes 12/4
17	7-Dec	Final Exam		Final exams 12/5-11 Commencement 12/12

* This schedule is subject to change for the optimum benefit of the class as a whole. Therefore it is important to stay alert and attend class regularly.