



FLORIDA STATE UNIVERSITY
COLLEGE OF COMMUNICATION & INFORMATION
School of Information

LIS 2780 - DATABASE CONCEPTS
SPRING 2018

LECTURE

TUESDAYS: 11:00 AM - 12:15 PM, LSB 006

LAB

SECTION 1: THURSDAYS: 9:30 AM - 11:45 AM, WJB 2010
SECTION 2: WEDNESDAYS: 11:00 AM - 12:15 PM, WJB 2010

Instructor: Hengyi Holly Fu

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Phone: 315-870-0429

Office Hours: Wednesdays 3-5pm

Note: *The best way to contact us is via email. We will be happy to respond to course-related e-mails during normal business hours (9am - 5pm Monday-Friday), although we may also respond at other times. If you do not hear back from us within 24 hours, resend the email. Please **start the email subject line with "LIS2780"** otherwise the response may be delayed.*

Office hours are not held on official University holidays unless otherwise stated. Any temporary unavailability, or temporary or permanent changes to office hours, will be noted in advance both online and in class.

COURSE DESCRIPTION:

This course introduces database design, creation, and manipulation using a database management system. The course combines both conceptual and practical discussions for a relational database. Topics include data modeling, database design, implementation, Structured Query Language (SQL), and remote access to databases.

COURSE OBJECTIVES:

The goal of this course is to provide students with a basic understanding of database design, implementation, and management concepts and techniques. Upon completion of the course, the student will be able to:

- Explain the operation of Database Management Systems.
- Demonstrate a basic understanding of relational data modeling, using Entity-Relationship diagrams.
- Design a relational database.
- Implement a database, using a database management system
- Identify and use basic Data Manipulation Language (DML) such as insert, update, and delete records, using a database management system
- Identify and use basic Data Definition Language (DDL) statements, such as create, drop, and alter database structures, using a database management system
- Summarize a basic understanding of the Structured Query Language (SQL) through the use of database queries and other operations.

COURSE PREREQUISITES:

- No prerequisites.

COURSE MATERIALS:

- The **Syllabus** (i.e., this document) establishes course policies on grading, attendance, and exams. The syllabus should be read in detail at beginning semester;
- The **Course Calendar** (see **Web site**) is particularly useful to keep up with weekly topics, assignments, and lecture notes;
- The **Textbook (required)**: Database Systems: Design, Implementation, & Management, 12th Ed. Carlos Coronel, Steven Morris. Course Technology ISBN: 9781305627482
- The **Course Slides** (under **Course library**) provide a compact view of the important topics of the course, while the textbook and reading assignments provide more details;
- **Assignments** will be released through the course **Calendar**;
- Students should be responsible for any **Announcements** made in the class or via Course Website.

TECHNOLOGY REQUIREMENTS:

Students taking this class must have access to a personal computer and be able to install software on that computer. Students will need to use specialized software packages in order to complete assignments. All required software is open source (free). Refer to the course site for details. Furthermore, the College of Communication and Information provides a computer lab in the Shores Building for use when students do not have access to a computer.

COURSE ASSIGNMENTS AND EVALUATION:

- Assignment 1 – Database Systems and Data Models
- Assignment 2 – Relational Databases
- Assignment 3 – Entity Relationship Modeling
- Project 1 – Database Design from Business Rules
- Assignment 4 – Advanced Data Modeling
- Assignment 5 – Normalization
- Project 2 –Data Modeling and Data Reporting
- Quizzes – Based upon weekly topics

Exams: Unless stated otherwise, all exams will be taken during the exam window.

GRADE CALCULATION:

Individual Assignments (5)	5% each
Projects (2)	10% each
Exams (2)	20% each
Quizzes (5)	1% each
Attendance	10%

ISCHOOL POINT BASED GRADING SCALE:

A	93 - 100	C	73 – 76
A-	90 – 92	C-	70 – 72
B+	87 – 89	D+	67 – 69
B	83 – 86	D	63 – 66
B-	80 – 82	D-	60 – 62
C+	77 – 79	F	0 – 59

COURSE SCHEDULE:

WEEK	TOPICS TO BE COVERED	Deliverables
1 (Jan. 9)	Course overview Introduction to database systems <ul style="list-style-type: none"> ▪ Chapter 1 	Install MySQL Workbench
2 (Jan.16&17&18)	Data models (1) <ul style="list-style-type: none"> ▪ Chapter 2.1-2.4 ERD practice SQL basics <ul style="list-style-type: none"> ▪ w3schools.com (SQL) 	Quiz 1 (Jan.21, 11:59pm) Set up CCI student connection
3 (Jan.23&24&25)	No class, the instructor @ conference	
4 (Jan.30&31&Feb.1)	Data models (2) <ul style="list-style-type: none"> ▪ Chapter 2.5-2.6 Assignment 1 Review	Assignment 1 (Feb.6, 11:59pm)
5 (Feb.6&7&8)	No class, the instructor @ conference	
6 (Feb.13&14&15)	Relational database model (1)(2) <ul style="list-style-type: none"> ▪ Chapter 3 	Quiz 2 (Feb.18,11:59pm)

7 (Feb.20&21&22)	ER modeling <ul style="list-style-type: none"> ▪ Chapter 4 Assignment 2 Review	Assignment 2 (Feb.27, 11:59pm)
8 (Feb.27&28&Mar.1)	Assignment 3 Review Introduction to Project 1 Exam 1 Review	Assignment 3 (Mar.8, 11:59pm)
9 (Mar.7&8)	Exam 1 (Middle term) <ul style="list-style-type: none"> ▪ Open book, online 	
10 (Mar.13&14&15)	No class, spring break	Quiz 3 (Mar.18, 11:59pm)
11 (Mar.20)	Advanced data modeling Chapter 5	Quiz 4 (Mar.25, 11:59pm) Project 1 (Mar.27, 11:59pm)
12 (Mar.27&28&29)	Advanced SQL <ul style="list-style-type: none"> ▪ Chapter 7 Assignment 4 review	Assignment 4 (Apr.3, 11:59pm)
13 (Apr.3)	Introduction to Project 2 Comparison of Workbench login and SSH login	
14 (Apr.10&11&12)	Normalization <ul style="list-style-type: none"> ▪ Chapter 6 Assignment 5 review (if you want to work individually or have a group for project 2, notify the instructor by this week)	Assignment 5 (Apr.17, 11:59pm)
15 (Apr.17)	Project 2 follow-up Exam 2 review	Quiz 5 (Apr.22, 11:59pm)
16 (Apr.25&26)	Exam 2 (final) <ul style="list-style-type: none"> ▪ Open book, online 	Project 2 (Apr.29)

Late Deliverables: Assignments should be submitted by 11:59 pm on the due date published on the *Course Calendar*. To receive full credit, assignment deliverables must be successfully submitted by the due date. **Late assignments will be assessed a 20% penalty, above and beyond the standard grade evaluation.** Assignments later than one week will not be graded.

UNIVERSITY ATTENDANCE POLICY

First Day Attendance Policy: Official university policy is that any student not attending the first class meeting will be automatically dropped from the class. For distance students, this policy is interpreted as posting to the discussion forum "First Day Attendance" no later than the first day of the semester.

Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences

will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

Corroborating documentation for all excuses must be submitted in writing, must be signed by the excusing authority, and must include complete contact information for the authority, including telephone numbers and address.

It is the student's responsibility to verify course drops and check that fees are adjusted.

ACADEMIC HONOR POLICY

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students' academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "... be honest and truthful and ... [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at <http://fda.fsu.edu/Academics/Academic-Honor-Policy>.)

Americans With Disabilities Act:

Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type.

Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Student Disability Resource Center has been provided.

This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdrc@admin.fsu.edu
<http://www.disabilitycenter.fsu.edu/>

SYLLABUS CHANGE POLICY

"Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice."

SCHOOL OR DISCIPLINARY POLICIES:

COPYRIGHT STATEMENT:

Some of the materials in this course are possibly copyrighted. They are intended for use only by

students registered and enrolled in this course and only for instructional activities associated with, and for the duration of, the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the *Technology, Education, And Copyright Harmonization* (TEACH) Act (refer to the 3/7/2001 TEACH Act at www.copyright.gov/legislation/archive/).

SEXUAL HARRASSMENT POLICY:

It is the policy of the University that its employees and students neither commit nor condone sexual harassment in any form. http://registrar.fsu.edu/bulletin/grad/info/university_notices.htm

ISCHOOL HARDWARE AND SOFTWARE REQUIREMENTS:

A list of all hardware and software requirements for students participating in the School of Information (iSchool) courses can be found at the following location:
<http://ischool.cci.fsu.edu/academics/online/requirements/>

STUDENT ELIGIBILITY FOR AN INCOMPLETE GRADE:

Incomplete (“I”) grades will not be assigned, except in the case of exceptional unforeseen circumstances that occur within the last three weeks of the semester and your work has otherwise been satisfactory (C average).