

# CIS 210 – Fall 2017

## Database Design and Implementation

**Instructor:** Robert S. Dollinger

**Office Hours:** Mon-Tue 2:00 p.m. – 3:50 p.m.

**Office:** B229 Science

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### *Administrative Information*

#### **Text Rental**

Rob Peter, Coronel Carlos - *Database Systems: Design, Implementation & Management – 10th edition*, Thomson Course Technology, 2012

#### **Website Resources**

Plenty of them world wide, just “google” any of the keywords.

#### **Optional Supplemental Texts [Would have to be purchased]**

Palinski, John Adolph. *Oracle SQL and PL/SQL Handbook: A Guide for Data Administrators, Developers, and Business Analysts Database Management Systems - 3<sup>rd</sup> ed.* McGraw-Hill. New York, NY. 2003.

Ramakrishnan, Raghu, Gehrke, Johannes. *Database Management Systems - 3<sup>rd</sup> ed.* Addison Wesley Professional. New York, NY. 2002.

#### **D2L**

Look for CIS 210 site.

#### **Attendance**

Regular attendance is expected. Students are responsible for all materials during their absence.

#### **Grades**

##### Homework Assignments:

- To receive full credit, assignments must be handed in on time.
- **To be acceptable for grading, they must be neat, readable, and professional looking. Assignments that fail to do so will be assigned a score of zero.**
- Assignments are due on assigned dates. No late assignments.
- Missing assignments will receive a grade of 0.

##### Testing: [No make-up exams will be given]

Two content tests during the semester. [*Oct., Nov.*]

A comprehensive final.

12/18/2017, Monday, 10:15AM - 12:15PM

Course grade will be calculated as follows:

45%	Content Tests [equal value]	10%	Extra Work
25%	Final Exam	20%	Assignments
10%	Course Participation		

##### Grading criteria: Cut-off percentages

	B+	86.5%	C+	76.5%	D+	66.5%	F	Below 62.5%
A	92.5%	B	82.5%	C	72.5%	D	62.5%	
A-	89.5%	B-	79.5%	C-	69.5%			

\*Flexibility in the above grading criteria will be provided by various opportunities for make-up and extra work such that interested and dedicated students may always have the chance of improving their final grade.

## Basic Terms

**Assignments** – mandatory, fully graded, directly contributing to your final grade. Feedback within 3 working days, correct solutions discussed in the classroom. Expect 6-8 assignments over the semester.

**Homeworks** – mandatory, basically given on a daily basis, contributing to the “Course Participation” percents, graded selectively based on a random selection of 5-6 students each day.

**Optional homeworks** – occasionally, for more difficult problems and motivated students. Good opportunity for grade enhancements, make-ups, extra-work.

## Working with DBMSs

You can choose to work at home as well by installing a free release of any of the above DBMSs or by remotely connecting to the UWSP DB Server. Server name and student’s accounts will be communicated in the classroom. Courtesy of the instructor, some step by step procedures are available to help setting up a working environment at home. However, this is a personal option of each student and the CIS Department is not responsible for any failure in this respect.

## Course Objectives

### Understand relational databases!!!

Gain proficiency in SQL, including correlated sub-queries and outer joins.

Be able to design, implement and query a relational database.

## Course Topics

Database Systems: Need and evolution;

Database Design: E/R Data Model, Relational Data Model, Convert E/R Description to Relational Schema;

Implement Relational Schemas using SQL DDL: describe tables, indexes, constraints; Views;

SQL Query Language : Simple Queries, Join Queries, Self-joins, Sub-queries, Correlated Sub-queries, Outer joins;

Database Security: Discretionary Access Control (DAC) model (user accounts, logins, granting and revoking privileges), Views as Security mechanism;

\*Database Refinement, Normalization;

\*Flow Control Languages, Stored Procedures.

\* - designates tentative topics. May be dropped at the expense of more detailed presentation of other more important topics.

## Office Hours Policy

Preferably, you should come during the office hours as scheduled.

However, my office door is open whenever I’m in, and you can drop by any time with questions or for getting help.

## Email

You can use email for shorter, immediate and specific questions. Good chance to get a response the same day.

Don’t use email for asking favors or announcing that you are sick!!!

## Academic Misconduct Policy

See: <http://www.uwsp.edu/dos/Documents/CommunityRights.pdf#page=11>

## Student Rights and Responsibilities

See: <http://www.uwsp.edu/dos/Documents/CommunityRights.pdf>.

## In an Emergency:

- In the event of a medical emergency, call 911 or use red emergency phone located to the right of the pendulum in the 2nd floor hallway of the Science Building. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

- In the event of a tornado warning, proceed to the lowest level interior room without window exposure on the first floor lavatory in the Science Building. If time or space do not allow, go to A224 or A225 Science Building or remain in the hallways around those classrooms. See <http://www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx> for floor plans showing severe weather shelters on campus. Avoid wide-span rooms and buildings.
- In the event of a fire alarm, evacuate the building in a calm manner. Meet at the far end of Lot X where the driveway enters Lot X. Notify instructor or emergency command personnel of any missing individuals.
- Active Shooter – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders.
- Watch the Active Shooter video at: <https://campus.uwsp.edu/sites/rmgt/campus/SitePages/Shots%20Fired%20-%20Lightning%20Strikes.aspx>
- Watch the Preventing Violence video at: <https://campus.uwsp.edu/sites/rmgt/campus/SitePages/Flashpoint%20on%20Campus.aspx>
- See UW-Stevens Point Emergency Management Plan at [www.uwsp.edu/rmgt](http://www.uwsp.edu/rmgt) for details on all emergency response at UW-Stevens Point.