**Syllabus**

**Course:** Dynamic Web Language I - SQL

**Number:** DWD 271

**Prerequisite(s):** DWD145, DWD150

**Date:** January 2, 2016 – March 16, 2016

**Quarter:** Winter 2018

**Credit Hours:** 3

**Instructional Contact Hours Lecture/Lab:** 50% / 50%

**Course Length:** 11 Weeks

**Instructor: Nicholaus Lawson**

Email: nlawson@sctd.edu

On campus: By appointment.

**Textbooks and Materials: Modern Database Management, 12th Edition**

ISBN: 9780133544619 Pearson

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**Course Description:**

**DWD271 Dynamic Web Language I:** This course provides a complete introduction to database concepts and the relational database model. Topics include QBE, SQL, normalization, design methodology, DBMS functions, database administration and other database management approaches, such as client/server databases, object-oriented databases and data warehouses.

**Course Objectives:**

1. **Understand the Relational model.**
2. **Understand data definition and data manipulation languages.**
3. **Understand normalization.**
4. **Understand Structured Query Language (SQL).**
5. **Understand database requirements and translates those requirements into a valid database design.**

**Topical Outline:**

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| --- | --- | --- | --- |
| Week | Topic | In class | Homework |
| 1 Jan 2 | Chapter 1: The database environment and development process | Lecture Lab | Read Chapter 2 Problems and Exercises p44-45 |
| 2 Jan 9 | Chapter 2: Modeling data in the organization | Lecture Lab  Quiz | Read Chapter 3 Problems and Exercises p100-101  Exclude 3-24, 3-28 |
| 3 Jan 16 | Chapter 3: the enhanced ER model | Lecture Lab  Quiz | Read Chapter 4 Problems and Exercises p145 |
| 4 Jan 23 | Chapter 4: Logical database design and the relational model | Lecture Lab Quiz | Read Chapter 5 Problems and Exercises p195-196  4-30,4-32,4-33,4-34,4-35,4-36 |
| 5 Jan 30 | Chapter 5: Physical database design and performance | Lecture Lab  Quiz | Read Chapter 6 Problems and Exercises p234-236 5-27, 5-31, 5-34, 5-35, 5-36, 5-47 |
| 6 Feb 6 | Chapter 6: Introduction to SQL | Lecture Lab  MidTerm | Read Chapter 7 Problems and Exercises p283-285  6-34, 6-36, 6-38, 6-39, 6-40, 6-44  Table creation scripts for project |
| 7 Feb 13 | Chapter 7: Advanced SQL | Lecture Lab Quiz | Read Chapter 8 Problems and Exercises p331-332  7-25, 7-28, 7-37, 7-38, 7-39, 7-40, 7-41  Data population scripts, 1 stored proc, 1 view |
| 8 Feb 20 | Chapter 8: Database application development | Lecture Lab Quiz | Read Chapter 9 Redo 6-36, 6-40, 6-44, 7-25, 7-28  New 6-45, 7-26, 7-29  Screenshots of each output from sql  All sql tables, stored procedures, views created and in online database |
| 9 Feb 27 | Chapter 9: Data Warehousing | Lecture Lab Quiz | Read Chapter 12 Problems and Exercises p411-413 |
| 10 Mar 6 | Chapter 12: Data and database administration | Lecture Lab Quiz | Final Review Questions Problems and Exercises p530 |
| 11 Mar 13 | Review Presentations | Lecture Project presentation Final |  |

**Grading:**

*Scale:*

A 93 – 100 %

B 85 – 92 %

C 76 – 84 %

D 70 – 75 %

F 0 – 69 %

*Breakdown:*

15 % Quizzes/Participation

40 % Homework/Labs

20 % Project

10% MidTerm

15 % Exam Final

Participation: Defined as attending class, actively engaging in class discussion and/or question and answer sessions. Performing in-class assignments.

Quizzes: Tuesday during the first fifteen minutes of class. Quizzes will cover reading assignment and lecture material. There will be no makeup quiz. Missed quiz will be graded at 0%.

Labs: Coding as assigned. All effort is made to allow adequate allotted lab class time. However, labs are student self-directed activities and not all students work at the same pace; it is not unusual for lab completion to require more than allotted class time. Labs not finished during in-class lab are considered homework, completed outside of normal class hours, and are due before the beginning of next scheduled class.

Homework: Defined as out of class work. Plan on spending at least six hours per week on out of class assignment work. Out of class work includes, but not limited to, reading assignment and end of review questions.

Mid Term/Final Exam: Comprehensive knowledge examination based on all material covered in class, assigned course text reading, lecture, and lab exercises.

Project: There will be one project that runs the entire time of the class. The requirements for the project will be discussed on the first day of class and a rubric will be provided. The project is intended to provide material for your portfolio and a presentation will be required during the final class period.

**Course Structure:**

*Weekly:* Each week will consist of lecture, guided discussions, lab, quiz, and out of class assignments.

**Teaching Strategy***:*

Each subject for this course will be taught with a brief lecture. Student should follow along and take notes. Each week will have a corresponding out of work assignment specific to the week’s topic.

Assignment/Lab: Student utilizes information from text, lecture, and discussion. Participates in class activities and creates content in a collaborative environment.

Homework: Student performs out of class assignments in a non-collaborative method.

**Out of class work:**

This is a 3 credit hour 50% lecture/50% lab course. You should plan on spending a minimum of 3 hours per week on out of class work (homework). This will assist in ensuring course content understanding, meeting learning objectives and help with the successful completion of the class. Out of class work will consist of, but not limited to, completing weekly assignments, and/or projects pertaining to the lesson(s) being covered. All out of class work should be neatly completed, turned in on time, and of a professional standard. See grading criteria percentage breakdown for the overall out of class work weighted percentage.

**Assignment submission:**

Assignments are due on the before the start of the next class. All work must be in a single zip file and submitted through blackboard for grading.

Diagrams can be handwritten but must be submitted digitally (you can take a picture of the work, so long as it is legible).

All other written assignments should be created using Notepad, unless a specific assignment denotes otherwise.

*Assignment Naming Convention:*

LastName\_Course\_Assignment\_ProblemNumber (if individual problem number needed)

Example: LAWSON\_DWD271\_WEEK1.zip

**Requirements for success:**

Attend all scheduled class meetings. Be on time and prepared. Complete and submit all assignments as scheduled. Read chapter assignments before attending class. Course text physical size and single chapter reading assignments is misleading in course work load perception. The course text is information dense and may require multiple readings to achieve adequate comprehension of material and concepts. Students are expected to take ownership of their actions and activities. If you are having trouble completing assignments, contact instructor immediately. Do not wait until the day submission is due. Being proactive in acquiring guidance, advice, and help is paramount if you encounter issues.

**Attendance:**

\*Reference Student Handbook for full policies, guidelines, and explanations.

*Absence:* Students are expected to attend all classes as scheduled and to remain in class for the entire scheduled time. Missing more than half the scheduled allotted class time is considered absent. Three absences constitute automatic withdrawal from the course.

*Tardy:* More than 15 minutes late or leaving more than 15 minutes early. Two tardies equal one absence.

**Class Policies:**

* No food or drink in class at any time.
* No children or pets in class at any time.
* Class disruptions will result in being asked to leave and count as an absence.

*These include but are not limited to:*

* + Inappropriate, suggestive, or abusive language.
  + Inappropriate, suggestive, or abusive behavior.
  + Sleeping.
  + Cell phone.
    - Ringing
    - Answering
    - Buzzing, vibrating, alerting, etc.
    - Texting
    - Chat
    - Social media (any)
  + Loud or obnoxious behavior
* Cell phones will be turned off or completely muted.
* No makeup work will be allowed. Assignments are due when and as assigned.
* Violation of academic honesty policy will result in course failure (grade F) and reported to academic officials
* Cell phone usage during quizzes or exams will be considered cheating and treated as violation of academic honesty policy.
* Computer use is limited to completing lab work or notetaking only.
  + Facebook, reading news, messaging, emailing are all unacceptable uses of a computer during class time.

**Academic Dishonesty:**

\*Reference Student Handbook for full policies, guidelines, and explanations.

Academic Dishonesty will not be tolerated.

In addition to the Student Handbook, the following policies apply to this course: You cannot copy and paste from any source (internet, fellow classmate, etc.) and submit such as your work. Any such assignments will receive an automatic “0”. If you do use another’s work, you must cite it according to proper formatting and procedure. Use the 80/20 own work/citation rule. Academic and scholarly resources only are acceptable as cited sources.