SLIS 5717    Dynamic WWW Control Structures

Instructor

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Office Hours

Students are welcomed to make an appointment with Dr. Chen at any time to discuss course related questions. Dr. Chen's office hours are posted below. Please send her an email even if you plan to visit her during the office hours so that she can schedule individual meetings for all visiting students.

Date & Time: Thursday 9:00 am – Noon
Location: Discovery Park, Room E297J
Phone: 940-369-8393

Class Meetings

This is a blended course. We will have ONE face-to-face (F2F) meeting in Denton and FOUR mandatory online meetings

F2F Meeting Location: Discovery Park NTRP D212
Dates & Time: September 1: 9:00 am -- 5:00 pm

This course will have a website in Blackboard Learn (learn.unt.edu). It will use Live Classroom in learn.unt.edu for online lecturing, activities, and communication. Four online meetings are scheduled on Tuesday nights 7:00pm - 8:30pm. The schedule of the F2F meeting and the online meetings can be found in Table 2 at the end of this syllabus.

All students are not only required to attend the F2F and the online meetings, but also to prepare well for each meeting. The preparation may include reading the materials for respective lessons, trying out the exercise questions, developing presentation slides, or conducting team activity in advance.
Course Description

This course focuses on issues relating to Web database systems design and implementation. Students will develop thorough theoretical understanding of Web database systems and related issues, and obtain hands-on experience on building dynamic Web applications such as online survey systems and other applications for libraries, museums, bookstores, and/or other information organizations.

Course Goals & Objectives

Students will develop theoretical understanding of the basic concepts and challenges of database design and Web database systems. In the meantime, students will gain knowledge on Web techniques and hands-on experience on designing and implementing dynamic, interactive web sites.

Upon completion of this course, students should have achieved following objectives:

1) Master principles of Web database systems and procedures of Web database system design;
2) Identify applications of Web database system in the field of Library and Information Sciences, such as digital libraries, text retrieval, and image retrieval systems;
3) Convert conceptual database models to operational Web database systems;
4) Understand and apply SQL (structured query language) to insert, modify, and query the data in a Web database system;
5) Design and implement database-driven websites and applications using PHP and MySQL;
6) Document and report Web database systems.

To achieve the above learning objectives, students are expected to study 12 - 15 hours per week for this course.

Textbook


Online Reference Materials about SQL:

SQL Tutorial. [http://www.w3schools.com/sql/default.asp](http://www.w3schools.com/sql/default.asp)

Some lessons include specified readings that help students to understand important contents. The readings will be provided in the lessons. The class also developed MySQL tutorials, which will be announced in Blackboard Learn Website.

The contents of the course are organized into 12 lessons. Please reference Table 1. Readings and Lessons Release Schedule.
International Students Holding F-1 Visa

International students who hold F-1 Visa must meet with the instructor in Discovery Park Room E297J during the office hours of the first two weeks of each semester.

Assessment

A student’s grade is composed of the following:

- **Class Participation (10%)**
- **Assignments (30%)**
- **Quiz (10%)**
- **Project One: Online Survey System (20%)**
- **Team Project (30%)**

The UNT scale for grading is as follows:

- A = 90-100;
- B = 80-89;
- C = 70-79;
- D = 60-69;
- F = 59 and below

Class participation (10%)

The grade for class participation consists of on-campus class attendance, team project and online class discussion involvement. Students are expected to attend the F2F meeting on campus, the four online meetings, and actively participate in team activities and online discussions. Absence from the four meetings without acknowledgement from the instructor in advance, or lack of team project and online class discussion participation (You are required to have at least 3 significant postings/answers to questions provided in the course modules) will receive a lower class participation score. The arrangement of all class meetings is presented in **Table 2. Class Meeting Agenda**.

Assignments (30%)

The class will have **THREE** assignments. The assignments are designed to help students understand important concepts and gain hands-on experience in Web database design and implementation. Assignments should be typewritten and diagrams should be drawn using graphics software packages.

Turn in your assignments by submitting them to the drop boxes setup in the class website by the date specified in **Table 3. Study Schedule and Due Dates**. If an emergency arises which prevents you from submitting your assignments, you should contact the instructor and the teaching assistant as soon as possible before the due date. Late work without the permission of the instructor will receive a grade with a 10% penalty per day after the due date.
**Quiz (10%)**

There will be a quiz for this course near the end of the semester. The quiz will include 30 multiple-choice questions covering content of all 12 lessons. The quiz will be released at the class Website. Students can take the quiz anytime at home during the week that the quiz questions are available. The week that the quiz questions are available is specified in **Table 3. Study Schedule and Due Dates**.

**Project One: Online Survey System (20%)**: (Presentation: 5%; System and Report: 15%)

Students are required to complete two projects in this class. Project One is an individual project. The purpose is to develop an online survey system using database-driven technology. Students are required to work on this project individually. The specific requirements and/or grading details about this project will be discussed in the F2F class meeting specified in **Table 2. Class Meeting Agenda**.

**Team Project (30%)** (Presentation Slides: 5%; System 15%, and Final Report: 10%)

The purpose of the team project is to cultivate team collaboration in designing and developing Web database systems. Students are required to develop a Web database system that can be actually used in real world. The project teams will be formed at the F2F meeting. A project team should include no more than four people. Students in a team should be responsible for coordinating the work themselves. Each team member will receive an identical grade for the project. The instructor will suggest several team project topics. A team can select its topic from the suggested topics, or choose to work on a topic interests the team members. The team project can only be carried out after the instructor approves your project proposal. A final team project report and an online project presentation needs to be submitted at the specified due date near the end of the semester. The specific requirements and/or grading details about the proposal, the presentation, and the final team project report will be discussed at one of the online meetings as specified in **Table 2. Class Meeting Agenda**.

**Academic Integrity**

UNT has established a new policy on academic integrity, which can be found at the Provost office website: [http://vpaa.unt.edu/academic-integrity.htm](http://vpaa.unt.edu/academic-integrity.htm). The Department of Library and Information Sciences (LIS), formerly the School of Library and Information Sciences (SLIS), University of North Texas has passed an "Academic Misconduct Policy" on April 15, 2005. All students should have signed the form “Student Acknowledgement of Academic Misconduct Policy” prior to enrollment in their SLIS course or as part of their application to the Department.

The Department expects all students to demonstrate both academic rigor and academic integrity. The purpose of this policy is to inform LIS students of their responsibilities regarding the University of North Texas (UNT) Student Standards of Academic Integrity ([http://www.unt.edu/policy/UNT_Policy/volume3/18_1_16.pdf](http://www.unt.edu/policy/UNT_Policy/volume3/18_1_16.pdf)) and the procedures enforced by LIS for cases of misconduct. The LIS Academic Misconduct Policy is compatible with the UNT Academic Integrity policy.
The two categories of most relevance to LIS are cheating and plagiarism, which you can find the definitions from UNT Student Standards of Academic Integrity. To address problems of academic integrity, LIS has zero tolerance for violations of the LIS Academic Misconduct Policy. The following apply:

- The LIS Academic Misconduct Policy applies to any work submitted for LIS courses or degree requirements, including the Capstone Experience.
- LIS will retain students’ signed statements acknowledging their understanding of the LIS Academic Misconduct Policy. LIS instructors will not accept students’ claims that they were unaware of LIS and UNT policies, including definitions of forms of academic misconduct.
- LIS instructors will follow UNT regulations for reporting suspected violations to UNT, imposing academic sanctions, and recording sanctions for confirmed violations.
- An academic sanction is a penalty imposed on a student for academic misconduct. Sanctions may range from reduction of a test or assignment grade to revocation of an academic degree.
- LIS instructors retain the right to determine specific sanctions for their courses and to set additional policies and procedures that do not conflict with LIS or UNT policies.
- Students who have received academic sanctions are not eligible for LIS awards, honors, or other benefits.

**Americans with Disabilities Act Compliance Statement**

The Department of Library and Information Sciences, University of North Texas is committed to full academic access for all qualified students, including those with disabilities. In keeping with this commitment and in order to facilitate equality of educational access, faculty members in the Department will make reasonable accommodations for qualified students with a disability, such as appropriate adjustments to the classroom environment and the teaching, testing, or learning methodologies when doing so does not fundamentally alter the course.

If you have a disability, it is your responsibility to obtain verifying information from the Office of Disability Accommodation (ODA) and to inform me of your need for an accommodation. Requests for accommodation must be given to me no later than the first week of classes for students registered with the ODA as of the beginning of the current semester. If you register with the ODA after the first week of classes, your accommodation requests will be considered after this deadline.

Grades assigned before an accommodation is provided will not be changed. Information about how to obtain academic accommodations can be found in UNT Policy 18.1.14, at www.unt.edu/oda, and by visiting the ODA in Room 321 of the University Union. You also may call the ODA at 940.565.4323.

**See Next Pages for:**

- Table 1. Readings and Lessons Release Schedule
- Table 2. Class Meeting Agenda
- Table 3. Study Schedule and Due Dates
### Table 1. Readings and Lessons Release Schedule

<table>
<thead>
<tr>
<th>Lessons</th>
<th>Topics</th>
<th>Readings</th>
<th>Release Time (The first day of the week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to database-driven Web systems</td>
<td>Class notes</td>
<td>Week 1</td>
</tr>
<tr>
<td>2</td>
<td>HTML and PHP basics</td>
<td>Chapter 1</td>
<td>Week 1</td>
</tr>
<tr>
<td>3</td>
<td>PHP Strings and Arrays</td>
<td>Chapter 3</td>
<td>Week 1</td>
</tr>
<tr>
<td>4</td>
<td>Web database system design and development</td>
<td>Specified readings Chapter 8</td>
<td>Week 2</td>
</tr>
<tr>
<td>5</td>
<td>SQL and MySQL basics</td>
<td>Chapters 9, 10</td>
<td>Week 2</td>
</tr>
<tr>
<td>6</td>
<td>Simple Dynamic Web pages</td>
<td>Chapter 11</td>
<td>Week 4</td>
</tr>
<tr>
<td>7</td>
<td>PHP string manipulation and regular expression</td>
<td>Chapter 4</td>
<td>Week 4</td>
</tr>
<tr>
<td>8</td>
<td>Complex Dynamic Web pages</td>
<td>Chapter 5, 7</td>
<td>Week 6</td>
</tr>
<tr>
<td>9</td>
<td>Database security and implementation</td>
<td>Chapter 15, 16, 17, 18, 23</td>
<td>Week 6</td>
</tr>
<tr>
<td>10</td>
<td>Real-world database-driven Web systems</td>
<td>Chapters 25, 30, 31, 34</td>
<td>Week 8</td>
</tr>
<tr>
<td>11</td>
<td>Web programming skills</td>
<td>Readings</td>
<td>Week 8</td>
</tr>
<tr>
<td>12</td>
<td>Related concepts and practice</td>
<td>Readings</td>
<td>Week 10</td>
</tr>
</tbody>
</table>

### Table 2. Class Meeting Agenda

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Content</th>
<th>Activities</th>
</tr>
</thead>
</table>
| **September 1**       | 9:00 am – 5:00 pm | • Lessons 1, 2, and 3  
                      |                | • Connecting to Web Server  
                      |                | • Team Formation and Discussion  
                      |                | • PHP individual Exercise  
                      |                | • Team Formation  |
| **4th week**          | 7:00 pm – 8:30pm | • Lessons 4, 5, 6  
                      |                | • Project One  
                      |                | • MySQL individual Exercise |
| **7th Week**          | 7:00 pm – 8:30pm | • Lessons 7, 8  
                      |                | • Team project proposal  |
| **10th Week**         | 7:00 pm – 8:30pm | • Project One  
                      |                | • Lessons 9  
                      |                | • Project One Presentation |
| **12th Week**         | 7:00 pm – 8:30pm | • Lessons 10, 11, 12  
                      |                | • Team Project Discussion  |
Table 3. Study Schedule and Due Dates

<table>
<thead>
<tr>
<th>Academic Week</th>
<th>Dates</th>
<th>Study Focus</th>
<th>Assignment/Project /Survey Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>August 29 – September 1</td>
<td>Start Here Syllabus Lesson 1 <em>(F2F Meeting on September 1)</em></td>
<td>Class Survey (not graded)</td>
</tr>
<tr>
<td>2</td>
<td>Sept. 2 – 8</td>
<td>Lesson 2 Lesson 3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sept. 9 – 15</td>
<td>Lesson 2 (cont.) Lesson 3 (cont.)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sept. 16 – 22</td>
<td>Lesson 4 Lesson 5</td>
<td>Assignment One <em>(Sept. 25 Midnight)</em></td>
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<tr>
<td>5</td>
<td>Sept. 23 – 29</td>
<td>Lesson 5 (cont.)</td>
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</tr>
<tr>
<td>6</td>
<td>Sept. 30 – Oct. 6</td>
<td>Lesson 6</td>
<td>Assignment Two <em>(Oct. 2 Midnight)</em></td>
</tr>
<tr>
<td>7</td>
<td>Oct. 7 – 13</td>
<td>Lesson 7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Oct. 14 – 20</td>
<td>Lesson 8</td>
<td>Term Project Proposal <em>(Oct. 9 Midnight)</em></td>
</tr>
<tr>
<td>9</td>
<td>Oct. 21 – 27</td>
<td>Work on Assignment Three and Project one</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Oct. 28 – Nov. 3</td>
<td>Lesson 9</td>
<td>Project One <em>(Oct. 30 Midnight)</em></td>
</tr>
<tr>
<td>11</td>
<td>Nov. 4 – 10</td>
<td>Lesson 10</td>
<td>Assignment Three <em>(Nov.6 Midnight)</em></td>
</tr>
<tr>
<td>12</td>
<td>Nov. 11 – 17</td>
<td>Lessons 11</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Nov. 18 – 24</td>
<td>Happy Thanksgiving!</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Nov. 25 – Dec. 1</td>
<td>Lesson 12</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Dec. 2 – 8</td>
<td>Quiz and Team Project</td>
<td>Quiz <em>(Whole Week)</em></td>
</tr>
<tr>
<td>16</td>
<td>Dec. 9 – 14</td>
<td>Work on Team Project</td>
<td>Term Project Final Report and Presentation <em>(December 11 Midnight)</em></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Grades will be Submitted to the University</td>
</tr>
</tbody>
</table>