UNIVERSITY OF REGINA
Department of Computer Science

CS 215 – Web & Database Programming
Fall 2019

Instructor: **Mr. Dolinkumar Patel (dolinpatel@uregina.ca)**
Webpage: **http://www.cs.uregina.ca/~drp901/teaching/cs215/**

Lectures: **Online Course Delivery (no scheduled lectures)**
Online QA: **T 11 AM – 12:30 PM**
            Th 1 PM – 2:30 PM

Office Hours: **T 3:30 PM – 5 PM (CW 308.24)**
               Th 3:30 PM – 5 PM (CW 308.24)

Labs: **Lab Section 091: T   1 PM – 2:50 PM (CL 115)**   or,
                 Lab Section 092: W 11:30 AM – 1:20 PM (CL 115)   or,
                 Lab Section 093: F   11:30 AM – 1:20 PM (CL 115)   or,
                 Lab Section 094: TH 10:30 AM – 12:20 PM (CL 115) or,
                 Lab Section 095: T   8:30 AM – 10:20 AM (CL 115)

Course Prerequisites
CS 210 (Data Structures and Abstractions)

Course Objectives
This course shows how interactive database-driven web applications are designed and implemented. Appropriate protocols, and languages for web, and database programming will be discussed, with a focus on client-server architectures, interface design, graphics and visualization, event-driven programming, information management, data modelling, and database systems.

Textbook
Nixon, R. Learning PHP, MySQL, & JavaScript, *5th Edition*, O'Reilly Media, 2018 (ISBN-13: 978-1-491-97891-7)

Evaluation
The final grade in the course will be determined as follows:

Assignments	6 x 5%	30%
Lab Assignments:	avg. of 11 labs	13%
Online Quizzes	6 x 2%	12%
Online Midterm Exam	Thu 24 Oct	16%
In-Person Final Exam	Dec 12	30%
Total		**100%**

* In order to pass the course, you must pass the final exam (failure to pass the final exam may result in your final exam grade being assigned as your final course grade).
* Your final mark may be adjusted by +/- 5%, at the instructor's discretion.

Course Schedule & Topics (Tentative)

Topic #	Date	Topics
0	Week of Sep 4	CS 215 Introduction & Review Syllabus
1	Week of Sep 8	Readings: Ch 1 The Internet & the Web
2	Week of Sep 15	Interface Design & Sketching **Assignment 1 (Wed Sep 18)** **Quiz 1 (Fri Sep 20)**
3	Week of Sep 22	Readings: Ch 18, 19, 23 HTML5 & CSS3 **Quiz 2 (Fri 27)**
4	Week of Sep 29	Readings: Ch 13 - 16 JavaScript Fundamentals **Assignment 2 (Wed Oct 2)**
5	Week of Oct 6	JavaScript, DOM, & Events
6	Week of Oct 13	JavaScript & DOM Manipulation **Quiz 3 (Fri 18 Oct)**
7	Week of Oct 20	Database Fundamentals **Assignment 3 (Wed Oct 23)** **Online Midterm Exam (Thu Oct 24)**
	24 October	Online Midterm
8	Week of Oct 27	Readings: Ch 8, 9 Databases & SQL **Quiz 4 (Fri Nov 1)**
9	Week of Nov 3	Readings: Ch 10 Continue with Databases & SQL
	Nov 6 – Nov 9	Fall Break
10	Week of Nov 10	MySQL & PHP **Assignment 4 (Wed Nov 13)**
11	Week of Nov 17	Readings: Ch 17 Continue with MySQL & PHP **Quiz 5 (Fri Nov 22)**
12	Week of Nov 24	AJAX & JSON **Assignment 5 (Wed Nov 27)** **Quiz 6 (Fri Nov 29)**

Topic #	Date	Topics
13	Week of Dec 1	Security, Web Graphics & Visualization **Assignment 6 (Fri Dec 6)**
	12 December 9 AM – 12 PM	Final Exam

The **Final Exam** has been scheduled for Thursday, December 12, 2019 from 9:00 AM - 12:00 PM. The exam will be comprehensive, with extra weight given to the topics covered after the midterm exam.

Lectures and Online Material
This course will be offered in an online format. Every Sunday at noon, online course material will be posted to UR Courses for the week's topic. You will have the flexibility to review this material and try the online exercises according to your schedule.

Twice per week, the course instructor have dedicated Online Question/Answer time for responding to inquiries about the course material or assignments. It is recommended that you post your questions to the **"Ask Your Instructor"** forum in advance. The instructor will also be available for individual or online group video conferencing at those times.

In order to make effective use of the dedicated Online QA times, it is recommended that you review the course material early in the week, and get started on any assignments as soon as you are able. Doing so will allow you to identify areas where something does not make sense or where you need further explanations.

Quizzes and Exams
There will be *six online quizzes* distributed throughout the semester. These will be posted as part of the course material, and will be available for 24 hours (noon on Friday to noon on Saturday). These are meant to be self-assessment tools, so that you know where you stand in terms of knowledge for the midterm and final exams. The quizzes will have a time limit (1 minute per question) so that they can measure your knowledge and understanding of the topic, rather than what you can find in the course material or using other online resources. The topics of the quizzes will cover everything since the previous quiz (since the start of the course material, for the first quiz). You should take care to study this material before starting each quiz.

There will be one *online midterm* exam (Thursday, October 24, 2019), which will be available for 12 hours (noon to midnight). The time limit for this exam will be 60 minutes, and it will cover all course material to date. The exam will include both conceptual questions (short answer) and programming questions (writing software code).

You are required to do the quizzes and midterm exam alone, and not share the questions or answers with other students. All cases of academic misconduct will be reported and penalized. In your studying for these exams, you may prepare a single page (one-sided, 8.5x11) help-sheet, which you may consult during the exam.

The *final exam* will test your comprehensive knowledge of both the concepts and your ability to program web & database applications. The exam will be held in-person on Thursday, December 12, 2019 in one of the gyms (to be determined). As with the quizzes and midterm, you may prepare a single page (one-sided, 8.5x11) help-sheet, which you may bring to and consult during the final exam.

Assignments

All assignments are due at 11:55 PM of the specified dates, and must be submitted electronically via UR Courses. Late submissions will not be accepted, but the grades for missing assignments may be moved to the final exam under exceptional circumstances, and with appropriate documentation.

Note that the due dates for the assignments are weighted to the end of the course **(three assignments due in the last four weeks of the course)**. This is due to the nature of web & database programming, and the timing of the Fall Semester Break. After the break, it will be important to keep up with the course material and get started on the last few assignments as soon as possible.

Labs and Lab Assignments

Students are expected to attend the labs in the lab session in which they are registered only. Attending a lab session for which you are not registered is not permitted due to space and resource limitations.

Lab attendance will be logged during each lab session; 1/5 of your lab mark is based on your attendance and active participation in the activities of the lab.

Lab assignments are due by 11:55 PM on the day of the lab session in which you are registered. For example, if you are registered in the Wednesday afternoon lab, your lab assignment will be due at 11:55 PM on that day. Late submissions will not be accepted, but the grades for missing lab assignments may be moved to the final exam under exceptional circumstances, and with appropriate documentation.

Grades

All grades will be assigned according to the Undergraduate Calendar – Academic Regulations - Grading System and Descriptions:

> 90-100: An outstanding performance.
> 80-89: Very good performance.
> 70-79: Above average performance.
> 60-69: A generally satisfactory and intellectually adequate performance.
> 50-59: A barely acceptable performance.
> 0-49: An unacceptable performance.

Other Notes and Information

1. The best way to contact the course instructor is via the "Ask Your Instructor" forum on UR Courses. You may also send direct messages or email via UR Courses.
2. You should send class-related email using your University of Regina account only. This will ensure that spam filtering does not keep your email from getting to me.
3. You should check UR Courses and your University email on a regular basis. Important announcements for this class will be made on UR Courses. Other announcements and direct communication will be via email.
4. **Students are expected to attend the labs and keep up with the online course material.**
5. If any student who, because of special needs, may have a need for accommodations, please contact the Center for Student Accessibility (http://www.uregina.ca/student/accessibility/).
6. Although group discussions and study groups are encouraged, **all lab work and assignments are to be completed individually**. Such discussions should be focused on general concepts, ideas, and lecture materials, and not the specific solutions of any assignment or lab. More specifically, this communication should be limited to verbal discussion of concepts, and must never include the sharing of program code or written documentation. For example, if you are given an assignment on form validation, you may legitimately discuss how form data is submitted and the how regular expressions are supported in JavaScript, but you must not share any code from the solution. Any close resemblances in the submitted code will be assumed to be the result of cheating. **Copying of assignments is plagiarism. Allowing your assignments to be copied will be treated the same as copying.** You are NOT allowed to work in groups on the labs or assignments. THE CONSEQUENCE OF PLAGIARISM OR ANY OTHER FORM OF CHEATING MAY RANGE FROM A ZERO GRADE, TO FAILURE IN THE CLASS, TO EXPULSION FROM THE UNIVERSITY. Please note that the dean of the faculty will be informed of any such incident, as per university regulations. Refer to the section on Academic Misconduct and Penalties in the General University Calendar.
7. All exams allow a single page (single-sided, 8.5.x11) help sheet. For the in-person final exam, coats, hats, books, pencil cases, and all other personal items shall be left at the designated area in the gym. Cell phones, watches, and all other electronic devices are not allowed to be on your person. Cell phones and all other wireless devices must be turned off. Any student violating these rules may be charged with academic misconduct.
8. The instructor reserves the right to organize student seating during examinations.
9. **If you have any issues with the marking of any assignment or exam in this course, please submit your complaint via email directly to the instructor** (not to the marker or TA). Explain which course component you want to investigate, your current mark, and the perceived problem with the marking. All issues with marking must be raised one week before the final exam.
10. The Undergraduate Calendar is available here: https://www.uregina.ca/student/registrar/resources-for-students/academic-calendars-and-schedule/undergraduate-calendar/sections.html