UNIVERSITY OF REGINA
Department of Computer Science

CS 215 – Web & Database Programming
Fall 2018

Instructor: **Dr. Orland Hoeber**
Lectures/QA: **Th 11:30 – 12:45 PM (ED 623)**
Online QA: **T 11:30 – 12:45 PM (link posted in UR Courses)**
Webpage: **http://www.cs.uregina.ca/~hoeber/teaching/cs215/**
Email: **orland.hoeber@uregina.ca**

Office Hours: **W 9:00 – 10:30 AM (other times by appointment only)**
Office: **CW 308.25**

Labs: **Lab Section 091: T 1:00 PM – 2:50 PM (CL 115)** or
Lab Section 092: T 3:30 PM – 5:20 PM (CL 115) or
Lab Section 093: F 3:30 PM – 5:20 PM (CL 115) or
Lab Section 094: F 11:30 AM – 1:20 PM (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	15%
Online Quizzes	6 x 1.5%	9%
Midterm Exam	Nov 6	16%
Final Exam	Dec 18	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	Sep 6	Introduction & Syllabus Review
1	Sep 11/13	Readings: Ch 1 The Internet & the Web
2	Sep 18/20	Interface Design & Sketching **Assignment 1 (Fri Sep 21)**
3	Sep 25/27	Readings: Ch 18, 19, 23 HTML5 & CSS3
4	Oct 2/4	Readings: Ch 13 – 16 JavaScript Fundamentals **Assignment 2 (Tue Oct 2)**
5	Oct 9/11	JavaScript, DOM, & Events
6	Oct 16/18	JavaScript & DOM Manipulation
7	Oct 23/25	Readings: Readings Package Database Fundamentals **Assignment 3 (Tue Oct 23)**
8	Oct 30/Nov 1	Readings: Ch 8, 9 Databases & SQL
	Nov 6	**Midterm Exam** **Assignment 4 (Tue Nov 6)**
9	Nov 13/15/20/22	Readings: Ch 10 MySQL & PHP
10	Nov 27/29	Readings: Ch 17 AJAX & JSON **Assignment 5 (Tue Nov 27)**
11	Dec 4	Security
12	Dec 6	Web Graphics & Visualization **Assignment 5 (Thu Dec 6)**

The **Final Exam** has been scheduled for Tuesday Dec 18, 2018 from 2:00 – 5:00 PM. The exam will be comprehensive, with extra weight given to the topics covered after the midterm.

Lectures and Online Material

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

On Tuesdays during the assigned class time (11:30 – 12:45) an online question and answer session will be held using Zoom. Links to this session will be provided on UR Courses. You may join the session to ask specific questions about the material, or to just listen to what others ask. Note that there will be no online session on November 6; instead the midterm exam will be written in-person in the classroom (ED 623).

On Thursdays during the assigned class time (11:30 – 12:45), an in-person question and answer session will be held in the classroom (ED 623). Attendance is optional, but encouraged.

In order to make effective use of the online and in-person sessions, it is important that you review the online course material and try the examples in advance of attending the sessions. 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 six hours (noon – 6:00 PM) on the Friday in the week in which it is posted. 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. You are required to do the quizzes alone, and not share the questions or answers with other students. All cases of academic misconduct will be reported and penalized. 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 midterm and final exams will test your knowledge of both concepts and ability to program web & database applications. They will both be comprehensive of all material covered to date, and will be held in-person as closed-book exams. The midterm will be held on Tuesday Nov 6 in the classroom (ED 623). The final exam will be held on Tuesday Dec 18 in one of the gyms (yet to be determined).

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.

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 me is via email.
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 are "closed book", with no additional material permitted. Coats, hats, books, pencil cases, and all other personal items shall be left at the front of the room during examination periods. Cell phones, watches, and all other electronic devices shall be put in a clear plastic bag and placed under your seat. 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 investigated, 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