UNIVERSITY OF REGINA Department of Computer Science

CS 215 - Web & Database Programming Fall 2017

Instructor: **Dr. Orland Hoeber**

Lectures: T/TH 2:30 - 3:45 PM (Luther College 100)

Webpage: http://www.cs.uregina.ca/~hoeber/teaching/cs215/

Email: orland.hoeber@uregina.ca

Office Hours: W 2:00 - 5:00 PM (other times by appointment only)

Office: **CW 308.25** Phone: **306-585-4598**

Labs: Lab Section 091: F 2:30 PM - 4:20 PM (CL 115) or

Lab Section 092: W 2:30 PM - 4:20 PM (CL 115) or Lab Section 093: W 10:30 AM - 12:20 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, 4th Edition, O'Reilly Media, 2014 (ISBN-13: 978-1491918661)

Evaluation

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

Assignments	5 x 7%	35%
Lab Assignments:	10 x 1.5%	15%
Midterm Exam	Oct 24	15%
Final Exam	Dec 12	35%
Total		100%

^{*} In order to pass the course, you must pass the final exam.

^{*} Your final mark may be adjusted by +/-5%, at the instructor's discretion.

Course Schedule & Topics (Tentative)

Topic #	Date	Topics	
0	Sep 7	Introduction & Syllabus Review	
1	Sep 12/14	Readings: Ch 1	
		The Internet & the Web	
2	Sep 19/21	Interface Design & Sketching	
3 Sep 26/28	Readings: Ch 18, 19, 22		
		HTML5 & CSS3	
	Assignment 1 (Tue Sep 19)		
4 Oct 3/5	Readings: Ch 13 - 16		
		JavaScript Fundamentals	
		Assignment 2 (Tue Oct 3)	
5	Oct 10/12	JavaScript, DOM, & Events	
6	Oct 17/19	JavaScript & DOM Manipulation	
	Oct 24	Midterm Exam (Tue Oct 24)	
7	7 Oct 26/31	Readings: Readings Package	
		Database Fundamentals	
	Assignment 3 (Thu Oct 26)		
8 Nov 2/7/9	Nov 2/7/9	Readings: Ch 8, 9	
		Databases & SQL	
9 Nov 14/16	Nov 14/16	Readings: Ch 10	
		MySQL & PHP	
10 Nov 21	Nov 21/23	Readings: Ch 17	
		AJAX & JSON	
		Assignment 4 (Tue Nov 21)	
11	Nov 28/30	Web Graphics & Visualization	
12	Dec 5	Security	
		Assignment 5 (Tue Dec 5)	

The **Final Exam** has been scheduled for Monday Dec 12, 2017 from 2:00 – 5:00 PM. The exam will be comprehensive, with extra weight given to the topics covered after the midterm.

Lectures and Lecture Notes

Lectures will be held twice per week: T/Th 2:30 - 3:45 PM in LC 100. All lecture notes and assignments will be posted on UR Courses. The lecture notes should not be used as an alternative to attending the lectures. It is expected that students will attend the lectures, listen to the explanations and discussions, and take notes about the important information.

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; 1/3 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, Section 5.9: 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 lectures and labs. If you must skip a lecture or lab, it is your responsibility to find out from classmates what you missed.
- 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 on paper or via email directly to the instructor (not to the marker). Explain which course component you want investigated, your current mark, and the perceived problem with the marking.