Course Syllabus

[CMPT 350: WEB-PROGRAMMING]

Catalogue Description:
   This course will focus on the concepts, technologies and tools needed for the development of web applications. Special emphasis will be given to the front-end and back-end integration in a web system. Also, Web strategies and cloud services will be introduced.

Prerequisite(s):	CMPT 280
Class Time & Location:	1:30 pm - 2:20 pm, MWF, Murray 299
Website:	Moodle

Instructor Information

Instructors:	Mayra Samaniego, Eric Neufeld
Contact:	mayra.samaniego@usask.ca, eric.neufeld@usask.ca
Office Hours:	By appointment

Course Objectives
   - Students will understand HTML, CSS and JavaScript as the base of the Web development
   - Students will become familiar with the back-end (PHP, NodeJS) and database storage
   - Students will become familiar with key concepts of Web servers and Web services
   - Students will be briefly introduced to cloud computing and Web strategies

Student Evaluation

   Grading Scheme

Assignments	20%
Class Project	10%
Final Exam	50%
Midterm	20%
Total	100%

An additional 5 bonus marks will be awarded for participation.

There will be three (3) assignments in the class. Due dates will be added shortly. The project will consist of configuring the different assignments and labs into a single item. Projects will be marked during the last week of classes.

If there are *n* labs and *m* assignments, you will be graded on the highest *n-1* and *m-1* submissions. However, you will need to put together materials from all labs and assignments into the term projects.
 While it appears marks are low on the term project, note that the assignments feed into it, so you are being marked on the configuaration aspect for the final grade.

Criteria that must be met to Pass
   Completion of assignments and projects

   Students must pass the final examination.

Attendance Expectation

Students are expected to attend all lectures.

Final Exam Scheduling:

The Registrar schedules all final examinations, including deferred and supplemental examinations. Students are advised not to make travel arrangements for the exam period until the official exam schedule has been posted.

Note: All students must be properly registered in order to attend lectures and receive credit for this course.

Textbook Information
Required Text (not compulsory)

- Hoar and Connolly, "The Design of Websites" (Available in University Bookstore)
- Deitel & Deitel, "Internet & World Wide Web: How to Program", 5th Edition (2011), Prentice Hall_ISBN: 978- 0132151009

Recommended Sources
- HTML5, SQL, and Javascript: http://www.w3schools.com/
- HTML5: http://html5demos.com/
- HTML5: http://www.lynda.com/HTML-tutorials/HTML5-Structure-Syntax-Semantics/182177-2.html
- Web-based frameworks:
  http://jquery.com, https://angularjs.org/, https://facebook.github.io/react/ and http://mediaqueri.es
- NodeJS: http://www.lynda.com/Node-js-tutorials/Node-js-Essential-Training/417077-2.html

Course Overview

Please note that the topics and dates may be changed

1. Introduction to WWW

2. Front-end
   - HTML5 and CSS3
   - Design
     - Wireframes, Grids and Colors
     - Responsive Web
     - Web Tools
     - Media Queries
   - JavaScript
     - DOM
     - JQuery
     - JSON
   - Web APIs

3. Database
   - SQL (MySQL)
   - NoSQL (TBD)

4. Back-end
   - HTTP
   - MVC
   - Languages
     - PHP
   - Web servers
     - Apache
   - Web Services
     - REST
   - Web APIs
   - Web Frameworks
     - AngularJS

5. Cloud computing
   o Amazon Web Services

6. Web strategies
   o Social Web
   o Search Engine Optimization
   o Google Analytics

7. Project Inspection and Marking

Policies

Recording of Lectures
No recording of lectures without permission

Late Assignments
Discuss with the instructor but there will be penalty for each day of delay

Missed Assignments
Discuss with the instructor

Missed Examinations
1. Students who miss an exam should contact the instructor as soon as possible. If it is known in advance that an exam will be missed, the instructor should be contacted before the exam.

2. "A student who is absent from a final examination due to medical, compassionate, or other valid reasons, may apply to the College of Arts and Science Undergraduate Student's Office for a **deferred** exam. **Application must be made within three business days of the missed examination** and be accompanied by supporting documents." (http://artsandscience.usask.ca/undergraduate/advising/strategies.php)

Incomplete Course Work and Final Grades

"*When a student has not completed the required course work, which includes any assignment or examination including the final examination, by the time of submission of the final grades, they may be granted an extension to permit completion of an assignment, or granted a deferred examination in the case of absence from a final examination.*

Extensions past the final examination date for the completion of assignments must be approved by the Department Head, or Dean in non-departmentalized Colleges, and may exceed thirty days only in unusual circumstances. The student must apply to the instructor for such an extension and furnish satisfactory reasons for the deficiency. Deferred final examinations are granted as per College policy.

In the interim, the instructor will submit a computed percentile grade for the class which factors in the incomplete coursework as a zero, along with a grade comment of INF (Incomplete Failure) if a failing grade.

In the case where the student has a passing percentile grade but the instructor has indicated in the course outline that failure to complete the required coursework will result in failure in the course, a final grade of 49% will be submitted along with a grade comment of INF (Incomplete Failure).

If an extension is granted and the required assignment is submitted within the allotted time, or if a deferred examination is granted and written in the case of absence from the final examination, the instructor will submit a revised assigned final percentage grade. The grade change will replace the previous grade and any grade comment of INF (Incomplete Failure) will be removed.

A student can pass a course on the basis of work completed in the course provided that any incomplete course work has not been deemed mandatory by the instructor in the course outline and/or by College regulations for achieving a passing grade." (http://policies.usask.ca/policies/academic-affairs/academic-courses.php)

For policies governing examinations and grading, students are referred to the Assessment of Students section of the University policy "Academic courses: class delivery, examinations, and assessment of student learning" (http://policies.usask.ca/policies/academic-affairs/academic-courses.php)

Academic Honesty

The University of Saskatchewan is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Student Conduct & Appeals section of the University Secretary Website and avoid any behavior that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All students should read and be familiar with the Regulations on Academic Student Misconduct (http://www.usask.ca/secretariat/student-conduct-appeals/StudentAcademicMisconduct.pdf) as well as the Standard of Student Conduct in Non-Academic Matters and Procedures for Resolution of Complaints and Appeals (http://www.usask.ca/secretariat/student-conduct-appeals/StudentNon-AcademicMisconduct.pdf) Academic honesty is also defined and described in the Department of Computer Science statement on Academic Honesty (http://www.cs.usask.ca/students/academic-honesty/index.php).

For more information on what academic integrity means for students see the Student Conduct & Appeals section of the University Secretary Website at:
http://www.usask.ca/secretariat/student-conduct-appeals/forms/IntegrityDefined.pdf

Examinations with Disability Services for Students (DSS)

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with Disability Services for Students (DSS) if they have not already done so. Students who suspect they may have disabilities should contact DSS for advice and referrals. In order to access DSS programs and supports, students must follow DSS policy and procedures. For more information,
check http://students.usask.ca/health/centres/disability-services-for-students.php, or contact DSS at 966-7273 or dss@usask.ca.

Students registered with DSS may request alternative arrangements for mid-term and final examinations. Students must arrange such accommodations through DSS by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by DSS.