CSIS 3280 - Web Scripting

Course Schedule - Douglas College, Commerce & Business Administration

Semester: Winter 2019
Class Location: N5111
Class Times: Thursday, 12:30PM – 3:20PM
Section: 002

Office Hours: Thursday, 3:20PM - 3:50PM

Course Materials

Textbooks

Learning PHP: A Gentle Introduction to the Web's Most Popular Language Paperback - May 5 2016

Paperback: 416 pages Publisher: O'Reilly Media; 1 edition (May 5 2016) Language: English ISBN-10: 1491933577 ISBN-13: 978-1491933572

(Supplementary) **Modern PHP: New Features and Good Practices Paperback** - Mar 1 2015 Paperback: 270 pages Publisher: O'Reilly Media; 1 edition (March 1 2015) Language: English ISBN-10: 1491905018 ISBN-13: 978-1491905012

Software

Software	Url
Visual Studio Code	http://code.visualstudio.com
WAMP Server	http://www.wampserver.com/en/
Composer	https://getcomposer.org/
XDebug	https://xdebug.org/
Git	https://git-scm.com/downloads

Hardware

It is expected that students have access to a laptop or desktop PC for the purposes of completing labs and assignments. Student laptops and desktops running the Windows operating system may also be used in class or for assignments but must have the appropriate software and versions installed. You may use other operating systems and distributions however these will not be formally supported, and no concessions will be

given to students with technical issues. All students are advised that their lab submissions and assignments must work on college provided lab computers.

Blackboard will be used for all course materials, assignments and final project submission. Use of online materials via a browser or other files is expressly forbidden during exams and use of such will be considered cheating.

USB drives (min 8 GB) or use of Microsoft OneDrive are required for all classes and assignments. These will be used to save in-class work and assignments.

Any student who hands in an assignment or project that is similar in style as submitted by another student(s) in the same or previous semesters will be considered to be cheating. College policy on academic dishonesty will be applied against all those students involved, including the one who gives out his program to others.

Course Description

This course will introduce students to server-side scripting using popular scripting tools such as Perl or PHP. Emphasis will be placed on training students in applying scripting techniques to build and administer database driven dynamic web content and e-commerce solutions in an Apache web hosting environment. Note: CSIS 2380 and CSIS 3280 will be treated as equivalent.

Course Content

- 1. Introduction to web application architectures and server technologies
- 2. Introduction to basic PERL or PHP scripting language (data type, variables, syntax & development environments)
- 3. Basics of CGI programming
- 4. Working with forms, patterns, files and associative array
- 5. Text processing and regular expression
- 6. Manipulating files and directories
- 7. Persistent state mechanism and shopping cart
- 8. Extending server side functionality with additional email, ftp and other server technologies
- 9. Object-orientation in scripting language
- 10. Manipulating MySQL / MSSQL database server
- 11. Implementing user authentication with MySQL or MSSQL server
- 12. Implementing secure transaction with MySQL or MSSQL server

Learning Outcomes

- explain the design trade off and portability issues on different web based server-side architecture and technologies;
- 2. administer and configure Apache web servers using PERL or PHP scripting language;
- 3. write Common Gateway Interface (CGI) program using PERL or PHP scripting language;
- 4. extend web server functionality using PERL or PHP scripting language;
- 5. build database driven dynamic web content using server-based DBMS technology;
- 6. implement e-commerce features using PERL or PHP scripting language.

Evaluation

In order to pass the course, students must, in addition to receiving an overall course grade of 50%, also achieve a grade of at least 50% on the combined weighted examination components (including quizzes, tests, exams).

ltem	Weight
Labs/Assignments	20%
Quizzes	20%
Midterm Examination	30%
Final Examination	30%

Since this is a computer systems course, all students are expected to have attained a minimum level of knowledge in mathematics, logical thinking and general computer literacy. This course also requires a fair amount of typing both in class and at home. If a student requires special accommodations as deemed necessary by the college's Student Services, he/she must contact the instructor and the Center for Students with Disabilities in the beginning of the semester so that the proper arrangements can be made with Student Services.

Communications and Office Hours

Students are expected to use the Blackboard messaging system to communicate with the instructor. College email is reserved for administrative purposes.

If a student would like to make use of office hours (all students are encouraged to do so) students are expected to send a message via blackboard stating their intent and which office hours they would like to make use of (be specific about the date and time). Office hours will be posted outside of the instructors door. If the instructor is not in the office they may be located at on-site of their most recent class.

Labs/Assignments

Assignments are due at the specified date and time NO EXCEPTIONS and are to be submitted to the instructor directly via Blackboard as directed. An incomplete assignment, including missing files / folders, will end up with zero mark. Late submissions for assignments are not permitted.

You must work on your labs/assignments individually unless explicitly otherwise directed. The instructor must be shown the completed BEFORE submission IN CLASS or no mark will be given. Labs/assignments will not be accepted via email. NO EXCEPTIONS will be made for late labs/assignments. Class attendance for assignments and quizzes weeks are required. Note that department office staff will not accept labs/assignments under any circumstances. Assignments not handed to the instructor personally or submitted by blackboard may be lost: the instructor takes no responsibility for assignments lost in this manner.

Group participation and assignments may be required under the direction of the instructor only, unless otherwise mentioned students should assume that lab work and assignments are individual.

Regulations for Students

Course Schedule

The following Schedule will likely change based on class progress. Your instructor will do their best to ensure that the dates for invigilated components are not changed however depending on the speed of the class the contect is subject to change.

It is highly suggested that students pre-read the chapters in the textbook, doing so will ensure that more time can be spent on the practical aspects of the course, project and hands-on activities.

Week/Date	Topics Covered	Assignments/Labs
1 - Jan 3	Course Overview and Logistics Blackboard XAMPP Code and Environment Setup Coding Standards Assignment/Lab Expectations Introduction to PHP	LPHP - Chapter 1-3 MPHP - Chapter 3 Lab 1
2 - Jan 10	Functions Arrays	LPHP - Chapter 4,5 Lab 3 Last day to withdraw (Students will not receive a 'W')
3 - Jan 17	HTML Forms Date and Time	LPHP - Chapter 7,15 Lab 4, Quiz #1
4 - Jan 24	File Operations File Uploads Exception Handling	LPHP - 9 LPHP - 12 Lab 5
5 - Jan 31	Object Oriented PHP	LPHP - Chapter 6 Lab 6
6 - Feb 7	Advanced Object Oriented PHP	MPHP - Chapter 2 LPHP - 6 (Contd.) Lab7 Assignment #1 Due
7 - Feb 14	Midterm	
8 - Feb 21	Study Break - ALL CLASSES CANCELLED	

Week/Date	Topics Covered	Assignments/Labs
9 - Feb 28	Designing Web Databases Sequel Query Language Data Manipulation Language Data Defiition Language	LPHP - Chapter 8 Lab 8 Last day to DROP (Students will receive a 'W')
10 - Mar 7	PDO - PHP Data Objects CRUD Operations with PDO	LPHP - Chapter 8 MPHP Chapter 5 - Databases Lab 9
11 - Mar 14	Authenticaiton, Authorization Sessions	LPHP - Chapter 10 Lab 10 Quiz #2
12 - Mar 21	Web Services using the REST Working with JSON	LPHP - Chapter 11 Lab 13
13 - Mar 28	Working with Frameworks - an Introduction to Laraval Building a shopping cart	LPHP - Chapter 18 Lab 12 Group Project Due
14 - Apr 4	Final Exam Review Class	Study for your Final!

Rules (Applied to CBA Students)

- 1. If you are repeatedly LATE for the class, you will be warned by the instructor and will NOT be allowed to enter the classroom as you will be interrupting the class in progress. In that case, you may only enter the classroom during the natural break. If such a person still enters the classroom after the class has started, he/she will be considered disturbing the class. This individual will be escorted out by the security guard and will be given a warning for misconduct. A subsequent offense will result in possible suspension from the College.
- 2. Unless otherwise stated, all the assignments MUST be submitted in person at the beginning of the class BEFORE the lecture begins. Any assignment submitted after the lecture has started will be considered LATE and will be given a ZERO mark except for extraordinary circumstances or prior arrangements with the instructor.
- 3. If you are going to miss a scheduled test or examination, make sure that you inform your instructor (via e-mail or blackboard messaging) PRIOR to the test or examination; otherwise, you will be given a ZERO mark for that evaluation even though you may have a valid reason. In the case of illness, a doctor's note MUST be shown to your instructor as proof before or during the next class that you attend.
- 4. If you DO NOT write the midterm or final examination, you will be given a final grade of UN regardless of your achieved percentage up to that point. A UN grade will be assigned a 0.00 GPA.
- 5. If you DO NOT submit assignments or write quizzes with a combined weight of 30% or more, you will be given a final grade of UN regardless of your achieved percentage up to that point. A UN grade will be assigned a 0.00 GPA.
- 6. If you are caught cheating, you will receive a ZERO mark for that evaluation and you will be sent to the CBA Office. Subsequent offences will be dealt with via the CBA Administration

7. You will receive handouts or demo code (if any given out by your instructor) ONLY if you show up in class. If you cannot attend the class, make sure that you inform your instructor so that he can save you a set of the handouts; otherwise, you will NOT receive anything from your instructor. Also, you may NOT take any extra handouts for your friends who do not attend the class.

- 8. If you talk loudly during the class, you will be given a warning for disturbing your classmates. Any subsequent offense will result in possible suspension from the College.
- 9. All mobile phones and smart devices (including smart wathces) MUST be turned OFF BEFORE you enter the classroom.
- 10. You MUST do all the assignments on your own or with your team in this course. Anyone involved in copying another student's answers on any assignment, project, quiz or exam will be given a ZERO mark for such activity and a warning for academic dishonesty.
- 11. You are NOT allowed to use any calculators, language translators or dictionaries during any quiz or examination in this course.

Grades and Grading Policy

Please see the up to date [Douglas College Policy on grading] (https://www.douglascollege.ca/-/media/31860A31D38142059097A1FE1EFE43CC.ashx? la=en&hash=EF7A97A9D6105739C5B2054125BC22C857B99869).