

CSIS 3280 – WEB SCRIPTING

COURSE INFORMATION AND SCHEDULE

DOUGLAS COLLEGE COMMERCE AND BUSINESS ADMINISTRATION

Term: Summer 2021

Instructor: Bambang A.B. Sarif

Section: 002

Time: Thu 12:30 - 15:20 ONLINE

Email: sarifb@douglascollege.ca

Online Office Hours: Wed/Thu 15:30 – 16:30

Note: Office hour meeting will be conducted online. Further detail will be discussed in the first lecture.

COURSE MATERIALS

Text book: Kromann, Frank, Beginning PHP and MySQL: From Novice to Professional, 5th Edition.

Software:

Visual Studio Code (<http://code.visualstudio.com>)

WAMP Server (<http://www.wampserver.com/en/>)

XDebug (<https://xdebug.org/>)

Web Browser (Mozilla or Chrome for better compatibility with the other software)

Please consult the environment setup document shared on the blackboard

Hardware:

Access to a desktop computer or laptop with the following minimum requirements is required for the online learning sessions, office hour, hands-on, and working on assignments and tests.

Windows based computer with 8 GB RAM (16 GB is better), decent processor speed, SSD drive, webcam, microphone (if it is not embedded with the webcam) and speaker.

All the software demo built for the course, the labs and the tests are designed in a Windows-based operating system. If you have a MacOS machine, the instructor will not be able to provide any guidance for you in setting up the environment and on how to do the labs, assignments and tests.

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 OBJECTIVES

The student will be able to

1. 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.

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

METHOD OF INSTRUCTION

Synchronous (online, real time) activities. The online real-time learning is exemplified by the course virtual classroom lecture sessions, virtual office hours and online proctoring exams.

ONLINE SPECIFIC GUIDELINES

The minimum requirements to attend Douglas College's online courses are published on the college's website. Instructor could use any combination of the college's available services in order to deliver the course. The student is advised to make sure that all the hardware/software that he/she intends to use during the semester are following the college's published minimum requirements.

In order to maintain overall standards, unless agreed in advance by the instructor, the student may not use non approved hardware/software. Using non approved hardware/software may put the student in a difficult situation to complete the course assessments.

<https://www.douglascollege.ca/student-services/essential-resources/online-learning/Online-Learning-Requirements>

Note: the link above states the minimum hardware requirements for the online courses. Please refer to the specification mentioned at the beginning of this course outline for a more specific requirement for our course.

GENERAL GUIDELINE

Attendance and Participation

Even though the course is delivered online the students are expected to prepare for, attend and actively participate in all class sessions and exercises, to sit the required tests, quizzes and examination, to submit assignments and projects, and to deliver an oral presentation as and when required. If missed, certain assessments such as labs, quizzes, assignments, presentations cannot be taken at a later stage.

If there is a medical reason, please submit to your instructor as soon as possible a medical note from a BC registered doctor that must have: clinic's letterhead with contact info (address, telephone number), the number of days covered by the note, the doctor's full name (no initials) and the doctor's signature. Only the original note is accepted; no scans, photocopies or faxes. No nurse notes will be accepted.

Plagiarism and Cheating:

The College values academic integrity.

Plagiarism is presenting or submitting as one's own work, research, words, ideas, artistic imagery, arguments, calculations, illustrations or diagrams of another person or persons without explicit or accurate citation or credit; this includes submission of purchased material as well as material in which the student has permitted someone else (a fellow student, tutor, mentor or teaching assistant, friend, etc.) to contribute unacknowledged. Persons include past and current students. Unless explicitly awarded by the Instructor, in a written document or communication, the right to submit common/team work by two or more students, the submission/presentation is considered plagiarism.

Self-plagiarism is submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted.

Cheating is the possession or provision of unauthorized aids, assistance or materials in the preparation of assignments, during examinations or in the completion of practical work (in clinical, practicum or lab settings). See the Academic Integrity policy for other definitions of academic dishonesty. Academic dishonesty will be treated as a serious offence. Disciplinary measures can range from a zero grade on the exam or assignment for which the offence occurred to suspension or expulsion from the College.

The use and/or reference of any/all websites (e.g. coursehero.com or similar) which host copies of Douglas College course work assessments such as but not limited to quizzes, assignments, midterms, labs, exams, practical work, etc., constitutes plagiarism.

Douglas College condemns cheating or attempted cheating within its community. Regarding the details of the policy on Academic Dishonesty, please visit <https://www.douglascollege.ca/sites/default/files/docs/finance-dates-and-deadlines/Academic%20Integrity%20Policy%20w%20Flowchart.pdf>

Electronic Communication between Instructor and Students

The main method of electronic communication is Blackboard and Douglas College email system. It is the students' responsibility to ensure that they have access to Blackboard and Douglas College email system, and they check regularly for any new postings.

All academic related communication through emails **must originate or destined from/to a valid @douglascollege.ca email address**. Emails originated from a different email address will be disregarded as there is no method to recover complete history of communication from other email service providers.

The student needs to use her/his student email account to send email to the instructor (sarifb@douglascollege.ca) with the mention of: course and section numbers, e.g. CSIS 3280 – 002, student name and student ID numbers.

Online Office Hour

Any student who needs to personally talk to the instructor during the instructor's designated official office hours, he or she needs to book an appointment beforehand through email. If the student would like to discuss about their labs or assignments, she/he needs to send any related files through email prior to the meeting. Students are expected to be punctual if he or she booked an appointment. The instructor has the right to remove the meeting link if the student is not on time.

Student Conduct during the Class (lectures, labs, seminars, presentations)

Any student who displays disruptive or dangerous behavior will be asked by the instructor to leave the classroom. Reprimands will be exercised according to official college policy.

College policies are available at <http://www.douglascollege.ca/about-douglas/governance/policies>

Use of Cell/Mobile phones during the Class (lectures, labs, seminars, presentations)

Unless the Class is on break or explicitly allowed by the Instructor cell/mobile devices are not allowed to be used during class. Cell/Mobile devices will be muted and stowed away.

Laptops and tablets may be used with the sole purpose of taking notes or reading the textbook. Audio or Video recording or taking of Photos of the class proceedings, participants or material is prohibited unless permission is obtained from the instructor in advance.

Timeliness

Students are expected to be in class at the start of class. If a student must be late, contact the instructor with an explanation prior to the late class. It is the Instructor's discretion to allow the student to join late the class. If allowed by instructor, the late student can enter the online classroom. Arriving on time is a matter of respect for the instructor and fellow students. After due warning, students who are repeatedly late and disruptive for class may be prohibited from entering the classroom. College policies are available at <http://www.douglascollege.ca/about-douglas/governance/policies>.

Class Cancellation

In the event that a class is cancelled due to unforeseen circumstance, a notification will be made through Blackboard and/or email to every student enrolled in the course. Appropriate notices will be posted. It is the responsibility of students to be proactive and to check announcements and/or e-mail before coming to class. Every effort will be made to ensure that the notification is made as soon as possible.

Student responsibility regarding announcements

Students are responsible for all the announcements made in the classroom and lab concerning course information and schedule changes WHETHER OR NOT they are in attendance.

ASSESSMENT GUIDELINE

EVALUATION

A final course grade will be determined based on the following instruments and their corresponding weighted percentages:

Labs/Assignments	20%
Quizzes **	20%
Midterm**	30%
Final**	30%
Total	100%

IMPORTANT NOTE:

- 1. Passing grade is 50% with the additional condition that the total value of proctored assessments** (quizzes, midterm and final) aka “MOA mark” have to average a minimum of 50%.**
For example: the total value of proctored assessments is $20\% + 30\% + 30\% = 80\%$. Minimum 50% of the total is 40%. So, in order to pass you need a minimum of 50% overall mark and an average minimum of 40% for the total of proctored assessments.
- 2. A UN marks will be issued if the student completed less than 70% of the total evaluation of the course, or missed more than 30% of the classes where the Instructor’s Course Outline specifies that attendance is a course requirement.**

Missed tests or examinations

Tests (quizzes, Midterm) and final examinations will be offered only during the scheduled date and time of sitting. Exceptions may be considered in cases of extraordinary circumstances. It is the responsibility of the student to inform the College and the instructor at the earliest reasonable opportunity if he/she intends to miss a test or examination. Otherwise, the student will receive a **ZERO** Mark for any missed Quizzes and will receive a **UN** as the final course grade for missing the **FINAL** examination.

ASSIGNMENTS

Assignment Submission

Assignments submitted by Blackboard must be submitted before the deadline. Unless otherwise communicated by the instructor, Blackboard will not accept late assignments.

The assignment **MUST** be in the format specified by the instructor (please refer to the work submission guideline document). If the assignment or assignment file name is not in the correct format or it is submitted without a valid student full name or student ID will receive a **ZERO** mark.

It is the student’s responsibility to ensure that the submitted file is the correct file and it can be opened by the instructor. Any file submitted that is incorrect or can not be opened by the instructor will receive a **ZERO** mark.

Late Assignment

Unless otherwise communicated/agreed by/with the instructor, late assignments will NOT be graded and receive an automatic **ZERO MARK** and will count towards a UN mark requirement

Assignment Work

Unless otherwise communicated in the Course Outline or by the instructor, all assignments are considered **INDIVIDUAL** work. Submitting assignments by two or more students that contains substantially common work is considered plagiarism. Not using quotations and references is also considered plagiarism. See the academic integrity guideline above.

Extra Copies of Assignment

Students are advised to keep extra copies (i.e. photocopies or file backups) of their assignments in case of any possible misplacement or digital data loss.

QUIZZES/TESTS

Unless otherwise stipulated in the course outline or by the instructor, quizzes/tests, midterms, labs, etc. will take place at the beginning of the class at scheduled date and time. There is no additional time awarded in case the student is late. The student will only have use of the time between his/her arrival and the scheduled end. Failure to attend quiz/test will cause the student to receive a **ZERO MARK** and will count towards a UN mark requirement. See “Missed Tests or Examinations”

Bonus Marks

The instructor could offer Bonus Marks (fractions or full points or percentages). These marks are over and above the original 100% marks allocated to the course. Bonus marks will not be awarded in the detriment of the 100% marks covered by the CG and/or CO. These Bonus Marks could be offered for either team or individual work. Before the activity for which bonus marks would be awarded, the Instructor will explain the conditions under which the student can achieve the bonus marks. The students have the right to not participate in any or all bonus mark activities. The students have to actively accept or reject participating in the Bonus Mark event or activity by communicating with the instructor in advance of the event or before a specified deadline that was marked to award Bonus Marks. A submission of the result of the activity will be considered active acceptance.

Material used in Exam (Midterm or Final)

For exams that make use of computers, it is strictly forbidden to take photographs, make copies or to duplicate the material from the exam by emailing or posting it to websites. Without the instructor’s explicit permission, the action to remove or make duplicate copies will cause the exam to be scored at **ZERO** marks and the behavior will be reported to the CBA management.

CHANGES TO THE COURSE OUTLINE AND SCHEDULE

The course outline and/or schedule are subject to change (Consistent with College Policy and with notice to the students).

The Final Examination period is *start day to final day*. Please check the examination schedule as soon as it becomes available for potential scheduling conflicts.

Douglas College Grading System

Grade	Numerical Value	Achievement Level	Description
A+	4.33	95% and above	Outstanding Achievement
A	4.00	90% to 94%	
A-	3.67	85% to 89%	
B+	3.33	80% to 84%	Good Achievement
B	3.00	75% to 79%	
B-	2.67	70% to 74%	
C+	2.33	65% to 69%	Satisfactory Achievement
C	2.00	60% to 64%	
C-	1.67	55% to 59%	
P	1.00	50% to 54%	Marginal Achievement
F	0.00	49% and below	Unsatisfactory Achievement
FD	0.00	Failure due to Dishonesty	
UN	0.00	Student completed less than 70% of the total evaluation of the course, <u>or missed more than 30% of the class where the instructor's Course Outline specifies that attendance is a course requirement.</u>	
W	N/A	Does not include in GPA calculation.	

Tentative Course Schedule

Week	Date	Activity	Details and Deadlines
1	13-May-21	Course overview and logistics Code and environment setup (CH 2) Introduction to PHP (CH 3)	
2	20-May-21	Functions (CH 4) Arrays (CH 5)	Lab 1
3	27-May-21	QUIZ 1 (Lecture 1 ~ 2) Date and Time (CH 12) Forms (CH 13)	Lab 2 May 25: Last day to withdraw without W record. Last day to add a course
4	03-Jun-21	Exception Handling (CH 8) File handling and Uploads (CH 10, 15)	Lab 3
5	10-Jun-21	Object Oriented PHP (CH 6)	Lab 4
6	17-Jun-21	Strings and RegEx (CH 9) M I D T E R M (Lecture 1 ~ 6)	Lab 5
7	24-Jun-21	Advance OOP (CH 7)	Midterm (Lecture 1 ~ 6)
8	01-Jul-21	College Closed (Canada Day)	
9	08-Jul-21	Intro. to SQL and Web Database Design (CH 22, 25) Using PHP with SQL (CH 27)	Lab 6
10	15-Jul-21	PDO and CRUD Operations with PDO (CH 28)	Lab 7 Jul 12: Last day to withdraw with W record
11	22-Jul-21	QUIZ 2 (Lecture 7 ~ 10) Authentication (CH 14), Session (CH 17)	Lab 8
12	29-Jul-21	JSON and Web Services (CH 18)	Lab 9
13	05-Aug-21	MVC and Introduction to Framework (CH 21)	Lab 10
15	11-Aug-21 until 19-Aug-21	FINAL EXAM PERIOD (All materials covered in class) Please DO NOT make any travel arrangements until the final exam date is set by the College	

KEEPING OUR CAMPUSES HEALTHY

This Fall semester, Douglas will welcome a small number of faculty and students on our campuses for in-person instruction. Other students may also attend campus to seek advice or assistance from a number of our service areas. To help ensure the safety of our campus community, please adhere to the following guidelines.

If you come to campus:

- Complete a daily self-assessment before coming to campus: <https://bc.thrive.health/>
- Follow all posted signage.
- Maintain physical distance of 2m (6 feet) from others. Do not congregate in groups.
- Wear a non-medical face mask in public areas or areas where physical distancing is not possible.

DO NOT come to campus if:

- You are sick.
- You have been in contact with someone with a confirmed case of COVID-19 within the last 14 days.
- You have travelled or been in contact with someone who has travelled outside of Canada in the past 14 days.

If you are unable to attend a class due to illness, contact your instructor immediately.

Illness on campus

If you become ill while on campus, **contact Campus Security immediately** for first aid and to report your symptoms. If you are concerned that you may have COVID-19, use the BC government COVID-19 self-assessment tool to help guide you on what to do. The province of BC has also set up a dedicated COVID-19 hotline at **1-888-COVID19** or text **604-630-0300**. The service is available daily from 7:30 a.m. to 8 p.m. with information available in over 110 languages.