JOHN ABBOTT
CEGEP/COLLEGE

Centre for Continuing Education

Internet Programming and Development
AEC LEA.BN

420-P75-AB
Course Outline

General Information

Course Title	420-P75-AB
Course Number	PHP Programming
Course Ponderation	2-hour lecture + 3-hours laboratory + 3-hours homework
Total Hours	75
Number of Credits (Units)	2.66
Program Competency(ies)	DC74 – Use PHP language to create dynamic web pages with an SQL database backend
Prerequisite course(s)	(420-PZ4-AB) Programming II – Object-Oriented Programming, (420-P14-AB) Database I
Timetable and Location	8:30 a.m. to 1:30 a.m. in BH-210
Start Date	April 13th, 2018
End Date	May 1st, 2018
Semester	Spring 2018
Instructor	Dr. Khattar Daou, M.S., Ph.D. Technical Sciences Microsoft Certified Trainer (MCT), Microsoft Office Specialist (MOS)
Contact Information	The instructor can be reached from the email tool within JAC Portal: Khattar.Daou@JohnAbbott.qc.ca

Course Description

This Web Design course leads you through the entire Web site creation process, from start to finish, while developing and enhancing your HTML, CSS, and visual design skills along the way.

Responsive web design is a strategy for providing custom layouts to devices based on the size of the viewport (browser window). The trick to responsive web design is serving a single HTML document to all devices, but applying different style sheets based on the screen size in order to provide the most optimized layout for that device.

By implementing responsive design, the course shows how to adjust the work process to accommodate designing and prototyping for many different devices and screen sizes, and how to make content more portable.

Topics include the three tenets of responsive design: Fluid Layouts, Media Queries, and Responsive Media.

Competencies and Performance Criteria

Upon successful completion of this course, a student will be able to:
- Use Integrated Development Environment (IDE) to create and manage Web sites
- Understand the Fundamental Web design technologies
- Understand the basics of responsive web design
- Explore the development tools to build a responsive website.
- Use Fluid Layouts, Media Queries, and Responsive Media

OBJECTIVE	STANDARD

Statement of the Competency
Use PHP language to create dynamic web pages with an SQL database backend
	Achievement Context
	• In a classroom and computer laboratory environments – using:
	  ○ Using a workstation and the appropriate software
	  ○ Based on situations representative of the workplace and requiring the development of applications involving a limited number of classes
	  ○ Using all the documentation available on the applications to be developed
	• In written assignment(s) and/or in-class exam(s)
	• In simulation exercises
	• Working alone and in groups
	• Based on industry standards

Elements of the Competency	**Performance Criteria**
1. Understand PHP language	1.1 Explain PHP language syntax 1.2 Explain PHP language control structures 1.3 Explain PHP language integration with web server 1.4 Explain superglobals and variable scope rules
2. Setup an effective web development environment	2.1 Setup PHP for visual debugging 2.2 Setup a local Web Server 2.3 Setup and use Composer tool to install external PHP libraries
3. Create web software using MVC pattern	3.1 Explain the MVC pattern 3.2 Create web software using a (micro-) framework that supports MVC pattern 3.3 Explain how to structure directories and write code in your web software with security in mind
4. Use external PHP libraries	4.1 Install and use a (micro-) framework library 4.2 Install and use a templating library 4.3 Install and use a database access library 4.4 Install and use a logging library

COURSE CONTENT

Tentative Schedule

Class #	Topics
1	PHP Basic Language Features http://php.net/manual/en/features.php http://www.ptutorial.com/php-tutorial/php-introduction
2	Functions and Argument Type Declarations http://php.net/manual/en/functions.arguments.php https://doc.bccnsoft.com/docs/php-docs-7-en/language.functions.html
3	Strings and Patterns http://php-guide.evercodelab.com/pages/strings-and-patterns.html https://edward-designer.com/web/strings-patterns-php-5-3-certification-exam-series-3/ http://www.rexegg.com/regex-php.html
4	Declaring and Referencing Arrays http://php.net/manual/en/language.types.array.php https://www.afterhoursprogramming.com/tutorial/php/arrays/
5	Object-Oriented PHP http://php.net/manual/en/language.oop5.php http://objectorientedphp.com
6	Working with Web-Based Forms http://php.net/manual/en/tutorial.forms.php http://form.guide/php-form/php-login-form.html
7	Error Handling http://php.net/manual/en/book.errorfunc.php http://www.hostingadvice.com/how-to/php-show-errors/
8	Working with Cookies and Sessions http://php.net/manual/en/features.cookies.php https://www.guru99.com/cookies-and-sessions.html
9	Working with Images http://php.net/manual/en/ref.image.php https://murze.be/a-package-to-easily-manipulate-images-in-php
10	Databases and SQL https://www.tutorialspoint.com/mysql/mysql-introduction.htm https://dev.mysql.com/doc/refman/5.7/en/introduction.html
11	Using Application Frameworks https://mashable.com/2014/04/04/php-frameworks-build-applications/#SW_V74jfPaqI https://cakephp.org
12	Working on projects

13	Working on projects
14	Working on projects
15	Project presentations

Textbook and References:

- PHP 7 Zend Certification Study Guide, Andrew Beak, ISBN: 978-1-4842-3245-3, Copyright © 2017 APress

- Sams Teach Yourself PHP, MySQL & JavaScript All in One, Sixth Edition, Julie C. Meloni, ISBN: 978-0-672-33770-3 Copyright © 2018 by Pearson Education, Inc.

- Practical PHP and MySQL Website Databases – A Simplified Approach, Adrian W. West, ISBN: 978-1-4302-6077-6 @ 2013 by APress

Note: Please visit John Abbott Library for more available books:
http://jac.cegep.opalsinfo.net/bin/search/searchPage?sf0=1016&kw0=Dreamweaver&sortAttr=0&sortOrder=0&incRating=1&rid=&pNum=2

Evaluation Plan

Evaluation	Value	Competency Element						
		01	**02**	**03**	**04**	**05**	**06**	**07**
Class Exercises	40%	x	x	x	x	x	x	x
Project	50%	x	x	x	x	x	x	x
Project Presentation	10%							

(Note: Classes indicated are tentative)

Course Costs

None

Teaching Methods

The course is a combination of theory and labs. Students will:
- Work alone
- Work in groups

It requires your individual presence and your active, consistent and sustained participation in your individual work. Your individual responsibilities are to complete the work assigned and ready to work at the start of each class. **Léa,** the course management system within Omnivox, will be used in this course.

Learning Activities:
- **Lectures/Demonstrations**: Discussion is encouraged as is student-procured, outside material relevant to topics being covered.
- **Hands-On Exercises/Assignments/Project**: Case problems, concepts reviews, and skills practice, will help support and reinforce material in the course. These will be structured to be as realistic as possible given the time available.
- **Tests**
- **Classroom Activity**: Participation and Discussion

Departmental Attendance Policy:

Attendance

The Centre for Continuing Education expects all students to attend class regularly. It is an essential requisite for the academic success and the mastery of the competencies required. The level of mastery of theses competencies can be greatly increased with regular attendance as it allows the student time to demonstrate the complete understanding and perform certain elements of the competencies. Attendance and participation in class, lab, and fieldwork is mandatory. Attendance will be taken at the beginning of every class.

Without a valid reason or prior approval, students cannot miss more than 20% of the total hours of a course, i.e. 9 hours for a 45 hour course, 12 hours for a 60 hour course etc. or risks failing the course.

Since marks recognize the extent to which the competencies are met, no marks can be given for attendance alone or deducted for absence. Although attendance cannot be used as a component of the final grade, excessive absences may have consequences affecting the final grades.

Absences are subject to the following procedures:

Students who miss class without a valid reason or prior approval will receive a mark of zero on any in-class assignment or quiz given in the period without the opportunity for make-up work.

Exceptions apply in cases of authorized absences.

Authorized Absences

Students must be excused if they provide written proof of a valid medical or other special reason for missing a class or an evaluation within a 24 hour period. Teachers must require proof. (IPESA Art.7.1) Teachers are not required to re-teach course material missed by these students. Students with authorized absences cannot loose marks for missing an evaluation. The marks for the evaluation may be assigned to another evaluation even if the guidelines in IPESA Article 5 are exceeded. Teacher must provide alternative major evaluations if students miss a major evaluation due to an excused absence.

According to article 7.1 IPESA, special arrangements may be made in cases where chronic illness prevents the student from attending on a regular basis. Proof may be required. Special arrangements should also be made for religious holidays; however, students must inform the teacher at the beginning of the course, in writing.

Absences fewer than 5 days

Students who miss less than 20% of the course for justified reasons must provide a written note to the teacher or the program coordinator.

Five days or more

Students who will be absent for 5 days or more for justified reasons should provide a medical note to the Registrar's Office. The Registrar's Office will then advise the teacher of the date of return or if it is undetermined. Arrangements for submission of missed work, test, exams etc. are made between the teacher and the student. Extended Absences after the Course withdrawal deadline (according to the Registrar policy) http://www.johnabbott.qc.ca/academics/registrar/authorized-absences/

Classroom Policies

Students who miss a class will receive a mark of zero on any in-class assignments or quizzes given in the period without the opportunity for any make-up work. Exceptions to this policy apply only in the event of absence due to medical or special reasons or religious holidays.

All electronic communication and music devices (e.g., iPad, tablets, cell phones, etc.) must be turned off while in class, unless authorized otherwise by the teacher.

Class time is limited, and each student at John Abbott is entitled to the very best educational experience in every class. It is important that the atmosphere of each classroom or lab be as conducive to the learning process as possible. The following guidelines have been established so as to create and maintain such an atmosphere. Inappropriate behaviour in the classroom includes the following:

- Speaking while another person (teacher or student) has the floor (that is, he/she is addressing the class as a whole).
- Using cellular phones or other electronic devices not related to the course.
- Threatening, harassing, or offensive behaviour towards any person in the class, other students, teachers or College staff.
- Use of derogatory language or referring directly or indirectly to someone else in the class in a rude manner or using offensive language.
- Misuse or abuse of the College's computers, telephone systems or other equipment.
- Speaking, reading or writing about subjects which are not part of the current class discussion.
- Arriving late, leaving early, and leaving the room for any non-emergency without having teacher approval and the courtesy to make this known.
- Eating or drinking in the computer laboratories is forbidden.

College Policies

Policy No. 7 – IPESA, Institutional Policy on the Evaluation of Student Achievement:

http://www.johnabbott.qc.ca/wp-content/uploads/2014/12/2011-IPESA-FINAL-website-JAN-2013-rev-Dec-102014.pdf

- **Changes to Evaluation Plan in Course Outline (Article 4.3)**

  Changes to the evaluation plan, during the semester, requires unanimous consent.

- **Mid-Semester Assessment MSA (Article 3.3)**

  Students will receive an MSA in accordance with College procedures.

- **Religious Holidays (Article 3.2)**

  Students who wish to observe religious holidays must inform their teacher in writing within the first two weeks of the semester of their intent.

Student Rights and Responsibilities

- **(Article 3.2, item 19.)**

  It is the responsibility of students to keep all assessed material returned to them in the event of a grade review. (The deadline for a Grade Review is 4 weeks after the start of the next regular semester.)

- **(Article 3.3, item 7.)**

  Students have the right to receive the results of evaluation, for regular day division courses, within two weeks. For evaluations at the end of the semester/course, the results must be given to the student by the grade submission deadline. Where applicable: for intensive courses (i.e.: intersession, abridged courses), timely feedback must be adjusted accordingly.

- **Cheating and Plagiarism (Article 8.1 & 8.2)**

Cheating and plagiarism are serious infractions against academic integrity which is highly valued at the College; they are unacceptable at John Abbott College. Students are expected to conduct themselves accordingly and must be responsible for all of their actions.

Cheating

Cheating means any dishonest or deceptive practice relative to examinations, tests, quizzes, lab assignments, research papers or other forms of evaluation tasks. Cheating includes, but is not restricted to, making use of or being in possession of, unauthorized material or devices and/or obtaining or providing unauthorized assistance in writing examinations, papers or any other evaluation task and submitting the same work in more than one course without the teacher's permission. It is incumbent upon the Department through the teacher to ensure students are forewarned about unauthorized material, devices or practices that are not permitted.

Plagiarism

Plagiarism is a form of cheating. It includes the intentional copying or paraphrasing (expressing the ideas of someone else in one's own words), of another person's work or the use of another person's work or ideas without acknowledgement of its source. Plagiarism can be from any source including books, magazines, electronic or photographic media or another student's paper or work.