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Faculty Availability:	By Appointment
Program Coordinator:	<i>Bernie Monette</i>

### COURSE OUTLINE ACADEMIC YEAR 2015/2016

Course Title: Web Application Development 2			
Course Code: HTTP 5202	Schedule Type Code: LES	Credit Value: 3	Class Hours:4
Programs: Web Development		Pre-Requisite(s): HTTP 5101, 5102, 5103, 5105	Co-requisite(s): N/A
Pre-requisite for: HTTP 5303, HTTP 5304, HTTP 5305			
Restrictions:			

Program outcomes emphasized in this course:

Develop data-driven websites for multiple platforms in accordance with best practices, industry standards in content management, security, database design, interface design, usability, accessibility and personalization.

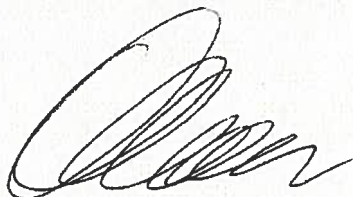
Design and develop web services for a website using software programs.

Design a full featured functioning commercial website using software programs, including a defined information architecture that is supported by navigation, layout, text and graphics.

Test, troubleshoot and debug software created in the web projects.

Approved By Associate Dean:

Signature:



Robert Richardson

Date: Dec 18 2015

## Course Description

In this course, students are introduced to website development using PHP and MySQL. Students will be able to use Server Side technology (PHP) to generate dynamic web based applications, and be able to apply their skills to manage a public and admin interface.

## Course Rationale

Balanced with ASP.net PHP is one of most important scripting languages in Web development. By learning two languages students are better prepared for the workplace.

## Learning Outcomes

Upon successful completion of this course, students will be able to:

Comprehend PHP for web development.

Develop and deploy a fully database driven PHP web site (public and administrator) according to industry standards and practices.

Use basic Text Editor or Integrated Development Environment (IDE).

Employ MYSQL.x as the effective data base (x - represents the current version) and implement MYSQL functions to execute data base commands (Insert, Update, Delete).

Perform dynamic processing and object oriented development implement classes and functions.

Create robust forms with data input and validation.

Maintain state with session variables and cookies.

Handle programming events and exceptions.

## Essential Employability Skills

Essential Employability Skills are transferable skills that provide the foundation for a student's academic, vocational, and personal success.

	<i>Communication</i>	<i>X</i>	<i>Critical Thinking &amp; Problem Solving</i>		<i>Interpersonal</i>
	<i>Numeracy</i>	<i>X</i>	<i>Information Management</i>		<i>Personal</i>

## Learning Resources

Required Resources:

Joel Murach, Ray Harris, Murach's PHP and MySQL (2<sup>nd</sup> edition), Murach, 978-1-890774-79-0

Supplemental Resources:

## Copyright

Copyright is the exclusive legal right given to a creator to reproduce, publish, sell or distribute his/her work. All members of the Humber community are required to comply with Canadian copyright law which governs the reproduction, use and distribution of copyrighted materials.

This means that the copying, use and distribution of copyright- protected materials, regardless of format, is subject to certain limits and restrictions. For example, photocopying or scanning an entire textbook is not allowed, nor is distributing a scanned book.

See the Humber Libraries website (<http://library.humber.ca>) for additional information regarding copyright and for details on allowable limits.

### Learning Delivery Format

Lab, Classroom

### Course Content

UNIT	TOPIC(S)	ASSESSMENTS	RESOURCES
<i>Introduction</i>	Review Course outline Introduction to web development with PHP Install and configure XAMPP to run PHP and MySQL locally	<b>lab</b>	<i>Course outline on Blackboard</i>
<b>PHP Syntax</b>	PHP language and syntax Variables, constants, data types Loops and control structures	<i>lab</i>	<i>Assignments, handouts, and lectures are on Blackboard</i>
<b>Arrays and functions</b>	PHP Built in and user defined functions Manipulating Arrays with array functions	<i>quiz</i>	
<b>Forms</b>	Manipulate HTML form elements with build in super global variables Validating forms inputs with regular expressions Dynamically populate form values	<i>Lab</i>	
<b>PHP with MySQL</b>	PHP and MySQL 1 (Connectivity) Connect to MySQL from PHP Handle MySQL errors PHP and MySQL 2 (Data manipulation) Execute SQL statement with PHP PHP and MySQL 3 (PHP Data Object)	<i>project</i>	

UNIT	TOPIC(S)	ASSESSMENTS	RESOURCES
<b>Objects and Classes</b>	Defining and using Classes	<i>project</i>	
<b>Session and cookies</b>	Include and Required files Managing state information with cookies and sessions variables Sending email, file uploads	<i>Lab</i> <i>Quiz</i>	
<b>Error handling</b>	Handling and reporting errors Logging errors with PHP	<i>project</i>	

**Please note: this course schedule may change as resources and circumstances require.**

**Please read Humber's academic calendar at <http://www.humber.ca/admissions/academic-calendar> for important dates.**

### **Student Evaluations**

Quizzes	20%
Tests	40%
Projects	30%
Labs	10%
Total = 100%	

### **Diploma Students / Post Grad:**

In addition to meeting all program specific course and credit requirements, students must have  
a  
Cumulative Program Grade Point Average (CPGPA) of  $\geq 60$  in order to be eligible for graduation.

### **Policies and Procedures**

*It is the student's responsibility to retain course outlines for possible future use in support of applications for transfer credit to other educational institutions.*

It is the student's responsibility to be aware of the College Academic Regulations which can be found on the following website: <http://www.humber.ca/academic-regulations>

The program handbook is available on Blackboard. If you cannot find it please contact the program coordinator. It is your responsibility to read, understand, and follow the program handbook.

### **Late work**

This is a post-graduate level course and it is expected that all work should be handed in on time. If for any reason this is not possible, it is your responsibility to anticipate and discuss the



matter with your professor. Medical cases which may interfere with deadlines usually require confirmation in writing from a health care professional. Late work is normally subject to a 5% (five per cent) per day penalty and a zero grade after 10 days. Late work will be accepted solely by arrangement and at the discretion of the professor.

### **Academic Integrity**

Academic integrity is essentially honesty in all academic endeavors. Academic integrity requires that students avoid all forms of academic misconduct or dishonesty, including plagiarism, cheating on tests or exams or any misrepresentation of academic accomplishment.

### **Academic Concern/Appeals**

If a student has questions or concerns regarding a grade on an assignment or test, the student should discuss the matter with the faculty member. The Program Co-ordinator and/or the Associate Dean may be asked to assist if the faculty member and student are unable to resolve issues. For additional information please refer to Section 13 of College's Academic Complaint and Appeal Policy at the web site identified above.

### **Prior Learning Assessment Recognition (PLAR)**

Course credits may be granted in recognition of prior learning, and that Application for Consideration is made through the Office of the Registrar at

<http://www.humber.ca/plar/docs/pla.pdf>.

Each course outline must indicate method(s) of assessment.

<i>Challenge Exam</i>	<i>Portfolio</i>	<i>Skills Test</i>	<i>Interview</i>	<i>Other (Specify)</i>	<i>Not Available For PLAR</i>
					<i>x</i>

### **Accessible Learning Services**

Humber seeks to create a welcoming environment where equity, diversity and safety of all groups are fundamental. Humber is dedicated to providing equal access to students with disabilities. The Disability Services staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. If you require academic accommodations, contact:

Disability Services: <http://www.humber.ca/disabilityservices/>

North Campus: (416) 675-6622 X5180

Lakeshore Campus: (416) 675-6622 X3265

### **Disclaimer**

While every effort is made by the professor/faculty to cover all material listed in the outline, the order, content, and/or evaluation may change in the event of special circumstances (e.g. time constraints due to inclement weather, sickness, college closure, technology/equipment problems or changes, etc.). In any such case, students will be given appropriate notification in writing, with approval from the Dean (or designate) of the School.

## **Appendix**

Essential Employability Skills (MTCU Requirements)	Graduates of the program reliably demonstrate the ability to:
Communication	
Reading	1. communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience  2. respond to written, spoken, or visual messages in a manner that ensures effective communication
Writing	
Speaking	
Listening	
Presenting	
Numeracy	
Understanding and Applying Mathematical Concepts and Reasoning	3. execute mathematical operations accurately
Analysing and using Numerical Data	
Conceptualizing	
Critical Thinking & Problem Solving	
Analysing	4. apply a systematic approach to solve problems  5. use a variety of thinking skills to anticipate and solve problems
Synthesising	
Evaluating	
Decision-Making	
Creative and Innovative Thinking	
Information Management	
Gathering and managing information	6. locate, select, organize and document information using appropriate technology and information systems  7. analyse, evaluate and apply relevant information for a variety of sources
Selecting and using appropriate tools and technology for a task or project	
Computer literacy	
Internet skills	
Interpersonal	
Teamwork	8. show respect for the diverse opinions, values, belief systems and contributions of others
Relationship management	



Essential Employability Skills (MTCU Requirements)	Graduates of the program reliably demonstrate the ability to:
Conflict resolution	9. interact with others in groups or teams in ways that contribute to the effective working relationships and the achievement of goals
Leadership	
Networking	
Personal	
Managing self	10. manage the use of time and other resources to complete projects  11. take responsibility for one's actions, decisions, and consequences
Managing change and being flexible and adaptable	
Engaging in reflective practice	
Demonstrating personal responsibility	