



Programs & Courses

bcit.ca/study/outlines/20142055110

COMP 1850 - Web Development and Design 1

School:	School of Computing and Academic Studies
Program:	Computing Part-time Studies and Technical Writing
Course Credits:	3
Start Date:	April 10, 2014
End Date:	June 26, 2014
Total Hours:	36
Total Weeks:	12
Hours/Weeks:	3
Delivery Type:	Lecture/Lab
CRN:	55110

Instructor Details

Name: David Tanchak
Email: Instructor to provide
Location: N/A
Office Hours: Instructor to provide

Course description

Learn the fundamental principles and techniques to design and develop effective Web sites. As the foundation for several advanced web courses in the BCIT School of Computing, this hands-on course provides an introduction to basic and advanced web technologies, including HTML5 and CSS3. Students are shown how to hand code web pages according to W3C standards using HTML, style text and content with CSS, and manage files and Web sites using FTP software. Labs and exercises include an introduction to JavaScript and PHP for adding dynamic features with client side and server side scripting and other advanced web technologies courses. In addition, the course will provide an introduction to web interface design concepts, information architecture, and basic interactivity using web forms. Students will have an opportunity to explore social media and web analytics as they relate to web design and development. COMP 1850 is required for the Applied Web Development Associate Certificate as well as the Computer Systems Certificate. By the end of this course successful students will be able to design and build basic web sites as well as move on to COMP 1911 JavaScript Workshop, and/or COMP 1950 Web Development and Design 2. Prerequisite: COMP 1002, or equivalent knowledge of using a Windows PC and file management.

Course goals

- Learn to use current web technologies and tools to hand code basic web pages.
- Understand best practices and industry standards to design, build and manage websites.

Course learning outcomes / competencies

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

- Outline and plan basic Web pages and sites.
- Mark up pages by hand using HTML5.
- Understand the differences between versions of HTML and CSS.
- Plan site and page elements using information design techniques.
- Create basic interface elements using Photoshop or similar software.
- Style text and page elements using CSS3.
- Use CSS for simple page layout.
- Understand introductory concepts for client side scripting with JavaScript.
- Implement Server Side Includes (SSI) and use PHP scripts for basic form processing.
- Manage Web pages and sites with FTP.
- Move on to a series of courses in advanced web development.

Evaluation criteria

Criteria	%
Homework Exercises	20
Assignments	20
Final Project	25
Midterm	10
Final Exam	25
Total	100

Attendance requirements

Computing PTS Attendance Policy

Attendance in lectures and labs is mandatory and recorded for all lessons in this course.

- In case of illness or other unavoidable cause of absence, the PTS student must communicate as soon as possible with his/her Instructor indicating the reason for the absence.
- Prolonged illness which causes the PTS student to miss 20% or more of the lessons will require a BCIT -approved medical certificate submitted to the department, substantiating the reason for the absence.

Excessive absence of 20% or more may result in failure or forced withdrawal from this course.

Learning resources

Required:**Web Development & Design Foundations with XHTML** (6th Edition)

Felke-Morris, Terry, Addison Wesley ISBN-10: 0-132783398 ISBN-13: 978-0-132-78339-2

Recommended:

See class Web site:

<http://www.bcitwebdev.com/>¹

Other information

Computer Use Guidelines

BCIT Computing students are expected to use BCIT resources in both a professional and ethical manner.

When using BCIT computer resources, some specific expectations include:

- Respect others. Do not download, view, or distribute inappropriate or offensive material.
- Respect copyright. Do not download or share any unauthorized materials (e.g. music, movies, games and software).
- Respect our vendor software agreements. Do not download products which are not used in your specific courses (we have tracking mechanisms in place). It is each student's responsibility to remove vendor provided software when the course ends.
- Respect confidentiality. Do not attempt to gain unauthorized access to any account, system, or data. Do not attempt to bypass any protective mechanism or attempt unauthorized access or alteration of BCIT data.
- Respect availability. Do not engage in any denial of service activity or take actions that will degrade the use of BCIT or other resources. Only use BCIT resources for your BCIT course work.

For more information see BCIT policies [3501 Acceptable Use of Information Technology](#)² and [3502 Information Security](#)³.

Consequences of policy violation could result in loss of access to BCIT resources and / or removal from classes.

Course specific requirements

- Prior experience with PCs and file management.
- Access to a PC with internet outside of class.

Course topics

Date	Material Covered	Readings	Assignment	Due Date
Session 1	Course Introduction: Account setup, introductory web concepts	None	Homework 1	Session 2
Session 2	HTML, FTP & CSS: Page formatting, lists, links, and file management	Chapters 1 and 2	Homework 2	Session 3
Session 3	HTML & CSS: Getting started with style sheets: paragraphs and text	Chapter 3	Assignment 1	Session 4
Session 4	HTML & CSS: Creating visual elements; tables	Chapters 4 and 8	Homework 3	Session 5
Session 5	CSS: Advanced techniques	Chapters 6 and 7	Assignment 2	Session 7

Session 6	Planning Site Structure: Principles of information architecture and interaction design	Chapter 10	Midterm Quiz	
Session 7	Design Principles: Visual design principles for the Web	Chapter 5	Final Project	Session 12
Session 8	Layout & Graphics: Creating and managing graphics for the web	None		
Session 9	Forms: Adding basic interactivity to your site	Chapter 9	Homework 4	Session 10
Session 10	Client-side Scripting: Adding JavaScript elements	Chapter 14	Homework 5	Session 11
Session 11	Server-side Technologies, Video & Analytics: Server-side scripting/includes, adding video, traffic measurement	Chapter 11		
Session 12	Review & Examination: Q&A, Troubleshooting projects	None	Final Examination	

BCIT policy

The following statements are in accordance with the BCIT Policies 5101, 5102, 5104, and 7507, and their accompanying procedures. To review these policies and procedures please click on the links below.

Attendance/Illness:

In case of illness or other unavoidable cause of absence, the student must communicate as soon as possible with his/her instructor or Program Head or Chief Instructor, indicating the reason for the absence. Prolonged illness of three or more consecutive days must have a BCIT medical certificate sent to the department. Excessive absence may result in failure or immediate withdrawal from the course or program. Please see [Policy 5101 - Student Regulations, and accompanying procedures](#).⁴

Academic Integrity:

Violation of academic integrity, including plagiarism, dishonesty in assignments, examinations, or other academic performances are prohibited and will be handled in accordance with [Policy 5104 - Academic Integrity and Appeals, and accompanying procedures](#).⁵

Accommodation:

Any student who may require accommodation from BCIT because of a physical or mental disability should refer to BCIT's Policy on Accommodation for Students with Disabilities (Policy #4501), and contact BCIT's Disability Resource Centre (SW1 2360, 604-451-6963) at the earliest possible time. Requests for accommodation must be made to the Disability Resource Centre, and should not be made to a course instructor or Program area.

Any student who needs special assistance in the event of a medical emergency or building evacuation (either because of a disability or for any other reason) should promptly inform their course instructor(s) and the Disability Resource Centre of their personal circumstances.

Human Rights, Harassment and Discrimination:

The BCIT community is made up of individuals from every ability, background, experience and identity, each contributing uniquely to the richness and diversity of the BCIT community as a whole. In recognition of this, and the intrinsic value of our diversity, BCIT seeks to foster a climate of collaboration, understanding and mutual respect between all members of the community and ensure an inclusive accessible working and learning environment where everyone can succeed. Campus Mediation Services is a supportive resource for both students and employees of BCIT, to foster a respectful learning and working environment. Any student who feels that they are experiencing discrimination or harassment (personal or human rights-related) can confidentially access this resource for advice and support. Please see [Policy 7507 – Harassment and Discrimination and accompanying procedure](#).⁶

Students should make themselves aware of additional Education, Administration, Safety and other BCIT policies listed at <http://www.bcit.ca/about/administration/policies.shtml>⁷

Policy for School of Computing and Academic Studies

Attempts: Students must successfully complete a course within a maximum of three (3) attempts at the course. Students with two attempts in a single course will be allowed to repeat the course only upon special written permission from the Associate Dean. Students who have not successfully completed a course within three attempts will not be eligible to graduate from their respective program.

Approved

I verify that the content of this course outline is current.

David Tanchak, Instructor

April 01, 2014

I verify that this course outline has been reviewed.

Kevin Cudihee, Program Head

April 15, 2014

I verify that this course outline has been reviewed and complies with BCIT policy.

Dean Hildebrand, Associate Dean, Science and Technology

April 15, 2014

Note: Should changes be required to the content of this course outline, students will be given reasonable notice.

Links

1. bcitwebdev.com
 2. bcit.ca/files/pdf/policies/3501.pdf
 3. bcit.ca/files/pdf/policies/3502.pdf
 4. bcit.ca/files/pdf/policies/5101.pdf
 5. bcit.ca/files/pdf/policies/5104.pdf
 6. bcit.ca/files/pdf/policies/7507.pdf
 7. bcit.ca/about/administration/policies
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