SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: Introduction to Web Development

CODE NO. :   **CSD120**   **SEMESTER:**   **1**

PROGRAM: **IT Studies**

AUTHOR: **Dennis Ochoski**

DATE: **Sept 2012**   **PREVIOUS OUTLINE DATED:**   **Sept 2011**

APPROVED: "Brian Punch"   June 13/12

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                    CHAIR   **DATE**

TOTAL CREDITS: **5**

PREREQUISITE(S):   **N/A**

HOURS/WEEK: **4**

I.   COURSE DESCRIPTION:

A student in this course will learn the basics of the World Wide Web and creating Web Pages. The fundamentals of Web Page creation will be covered including how to: create anchors, attach relative and absolute hyperlinks, linking to other types of documents (such as Word, Excel, Powerpoint, PDF), work with fonts, colours, and graphics as well as a variety of tools to enhance web pages. The web development will be enhanced by the use of: tables, newspaper style layouts, Cascading Style Sheets, dynamic HTML, and forms. If time permits, we will explore JavaScripting and using other enhancing features such as sound, video, Java Applets, and animated features.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1.   Basics of the World Wide Web and HTML (Tutorial 1)

Potential Elements of the Performance:

- explore the history of the World Wide Web and HTML
- compare different versions of HTML
- become familiar with the syntax of HTML tags and attributes
- define a Web page head, body and title
- work with HTML5 structural elements
- create page headings, paragraphs, block quotes and addresses
- create ordered and unordered lists
- apply external style sheets
- use text-level elements
- inserting inline images, line breaks and special characters

2.   Developing a Web Site (Tutorial 2)

Potential Elements of the Performance:

- create navigation lists
- create links among documents
- understand absolute and relative folder paths
- set a base path
- mark locations with id attributes
- create a link to an id
- mark an image as a link

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Potential Elements of the Performance(cont'd):

- create an image map
- link to a resource on the Web
- link to an email address
- incorporate hypertext attributes and metadata

3. **Working with Cascading Style Sheets (CSS) (Tutorial 3)**

Potential Elements of the Performance:

- explore the history of CSS
- define a style rule
- apply style precedence and inheritance
- apply colour and colour extensions
- use contextual and attribute selectors
- apply text and style fonts
- define style lists
- use pseudo-classes and pseudo-elements
- create rollover effects

4. **Creating Page Layouts with CSS (Tutorial 4)**

Potential Elements of the Performance:

- set display properties
- create a reset style sheet
- define a background image
- set background image properties
- use browser extension styles
- understand fixed, fluid and elastic layouts
- float elements
- set margin and padding spaces
- format an element border
- create rounded corners
- display an element outline
- use absolute and relative positioning
- adapt overflow content
- use clipped objects
- stack objects in a page

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5.   **Working with Tables and Columns (Tutorials 5)**

Potential Elements of the Performance:

- understand the structure of a Web table
- create table headings and cells
- create cells spanning multiple rows and columns
- incorporate table captions
- create row and column groups
- incorporate table summaries
- format tables using HTML attributes and CSS styles
- collapse table borders
- display page elements in tabular form
- create a multi-column layout

6**.**   **Working with Web Forms (Tutorials 6)**

Potential Elements of the Performance:

- understand how Web forms interact with Web servers
- create form elements
- create field sets and legends
- create input boxes and form labels
- create option buttons
- create text area boxes
- create check boxes
- apply styles to Web forms
- understand HTML5 data types
- create spinners and range sliders
- create form buttons
- validate form data

7**.**   **Working with Multimedia (Tutorial 7)**

Potential Elements of the Performance:

- understand sound file formats and properties
- embed a sound clip using both *audio* and *embed* elements
- understand video file formats and properties
- embed a sound clip using both *video* and *object* elements
- use Shockwave Flash players
- embed YouTube videos
- embed a Java applet and other Objects

8.   Enhancing web Sites with Advanced CSS (Tutorial 8)

Potential Elements of the Performance:

- create text and box shadows
- incorporate IE filters
- rotate objects
- create linear gradients
- apply border images
- understand fixed, fluid and elastic layouts
- set the opacity of a page object
- apply styles to media devices
- create and apply print styles
- define the visual viewpoint
- create a media query
- create styles for mobile devices in both portrait and landscape modes

9.   Working with XHTML (Tutorial 9)

Potential Elements of the Performance:

- understand the theory of XHTML
- understand the rules for creating valid XHTML documents
- apply a DTD to an XHTML document
- understand the relationship between HTML5 and XHTML
- test an XHTML document under both the *transitional* and *strict* DTDs
- use both the *character* and *parsed character* data

III.   TOPICS:

1. Developing a Web Page
2. Developing a Web Site
3. Working with Cascading Style Sheets
4. Creating Page Layouts with CSS
5. Working with Web Tables and Web Forms
6. Working with Multimedia
6. Working with Advanced CSS
7. Working with XHTML

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IV.   REQUIRED RESOURCES/TEXTS/MATERIALS:

The specific book information for this course text is as follows:

Title: New Perspectives on HTML and CSS: Comprehensive,
                6th Edition

Author: Patrick Carey

ISBN-13:   978-1-1115-2644-3

Option 1: Purchase a hardcopy.

The student may choose to purchase a hardcopy of the text from the above sites
or from the bookstore.

Option 2: Purchase a subscription to a digital copy (eBook).
The student can purchase a web version or a downloadable version. The most
common subscription timeframe is 180 days but this varies depending on the
text, publisher and/or web site. After the subscription timeframe has expired, the
student no longer can access the text unless they extend/renew the
subscription. If the bookstore offers an e-version of the text, the subscription
timeframe is unlimited, but the subscription cost may be greater.
The advantages of the eBook version over the hardcopy version are twofold:
savings of approximately 40% – 60%, and, no physical text to carry.

eBook Links: 1)http://instructors.coursesmart.com/9781423925460?__professorview=false&__instructor=1732365
2) http://www.nelsonbrain.com/shop/isbn/9781423925460
3) see student portal for availability of e-book version from bookstore (bookstore offers an
"unlimited" timeframe on subscriptions)

eBook Help: http://support.coursesmart.com/ics/support/default.asp?deptID=8070&task=knowledge&folderID=53

Other Relevant Information:

The following link provides valuable information related to the Sault College
computer lab environment:

http://student.saultcollege.ca/ComputerLabs.asp

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V.   EVALUATION PROCESS/GRADING SYSTEM:

- ♦ **Quizzes**   **16%**
- ♦ **Tests**   **60%**
- ♦ **Labs/Assignments**   **24%**

Some minor modifications to the above percentages may be necessary. The professor reserves the right to adjust the mark based upon leadership, creativity and whether there is an improving trend.

- Students must achieve an average grade of **50%** on both the test and assignment portions of the course in order to pass the entire course.
- Assignments must be completed satisfactorily to complete the course. Late hand in penalties will be 10% per day. Assignments will not be accepted past one week late unless there are extenuating and legitimate circumstances.
- The professor reserves the right to adjust the number of tests, practical tests and quizzes based on unforeseen circumstances. The students will be given sufficient notice to any changes and the reasons thereof.

The following semester grades will be assigned to students in postsecondary courses.

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
A	80 – 89%	4.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	Below 50%	0.00

CR (Credit)	Credit for diploma requirements has been awarded.
S	Satisfactory achievement in field /clinical placement or non-graded subject area.
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

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VI.   OTHER EVALUATION CONSIDERATIONS:

1.   In order to pass this course the student must obtain an overall test/quiz average of **50%** or better, as well as, an overall assignment average of **50%** or better. A student who is not present to write a particular test/quiz, and does not notify the professor beforehand of their intended absence, may be subject to a zero grade on that test/quiz.

2.   There will be **no** supplemental or make-up quizzes/tests in this course unless there are extenuating circumstances.

3.   Assignments must be submitted by the due date according to the specifications of the professor. Late assignments will normally be given a mark of zero. Late assignments will only be marked at the discretion of the professor in cases where there were extenuating circumstances.

4.   Any assignment/projects submissions, deemed to be copied, will result in a **zero** grade being assigned to **all** students involved in that particular incident.

5.   It is the responsibility of the student to ask the professor to clarify any assignment requirements.

6.   The professor reserves the right to modify the assessment process to meet any changing needs of the class.

VII.   SPECIAL NOTES:

Communication:
The professor reserves the right to use tools other than ***WebCT/LMS ,*** such as
Microsoft Outlook, for the primary channel of communication.

Attendance:
 Sault College is committed to student success. There is a direct correlation
between academic performance and class attendance; therefore, for the benefit
of all its constituents, all students are encouraged to attend all of their scheduled
learning and evaluation sessions. This implies arriving on time and remaining for
the duration of the scheduled session. *It is the departmental policy that once the*
classroom door has been closed, the learning process has begun. Late arrivers
may not be granted admission to the room.

Absences due to medical or other unavoidable circumstances should be
discussed with the professor, otherwise a penalty may be assessed. The penalty
depends on course hours and will be applied as follows:

Course Hours	Deduction
5 hrs/week (75 hrs)	1.0% /hr
4 hrs/week (60 hrs)	1.5% /hr
3 hrs/week (45 hrs)	2.0% /hr
2 hrs/week (30 hrs)	3.0% /hr

Absentee reports will be discussed with each student. Final penalties will be
reviewed and assessed at the discretion of the professor.

VIII.   COURSE OUTLINE ADDENDUM:

> The provisions contained in the addendum located on the portal form part
> of this course outline.