SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

SAULT COLLEGE

COURSE OUTLINE

COURSE TITLE: Introduction to Web Development

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

PROGRAM: **IT Studies**

AUTHOR: **Dennis Ochoski**

DATE: **Sept 2014**   **PREVIOUS OUTLINE DATED:**   **Sept 2013**

APPROVED: June/14

"Colin Kirkwood"

_____   _____

DEAN   DATE

TOTAL CREDITS: 5

PREREQUISITE(S):   N/A

HOURS/WEEK: 4

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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.   TOPICS:

1.   **Basics of the World Wide Web**
2.   **Basics of HTML**
3.   **Basics of Web Design**
4.   **Basics of Cascading Style Sheets (CSS)**
5.   **Web Graphics Styling Basics**
6.   **More CSS Concepts**
7.   **Basics of Page Layout**
8.   **More on Links, Layout, and Mobile**
9.   **Table Basics**
10.   **Form Basics**
11**.**   **Media and Interactivity Basics**
12.   **Web Publishing Basics**

III.   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 (Chapter 1)

Potential Elements of the Performance:

- describe the evolution of the Internet and the Web
- explain the need for web standards
- describe universal design
- identify benefits of accessible web design
- identify reliable resources of information on the Web
- identify ethical uses of the Web
- describe the purpose of web browsers and web servers

Potential Elements of the Performance(cont'd):

- identify Internet protocols
- define URIs and domain names
- describe HTML, XHTML, and HTML5
- create your first web page
- use the body, head, title, and meta elements
- name, save, and test a web page

2.   **Basics of HTML (Chapter 2)**

Potential Elements of the Performance:

- configure the body of a web page with headings, paragraphs, divs, lists, and blockquotes
- configure special entity characters, line breaks, and horizontal rules
- configure text with phrase elements
- test a web page for valid syntax
- configure a web page using new HTML5 header, nav, and footer elements
- use the anchor element to link from page to page
- configure absolute, relative, and e-mail hyperlinks

3.   **Basics of Web Design (Chapter 3)**

Potential Elements of the Performance:

- describe the most common types of web-site organization
- describe principles of visual design
- design for your target audience
- create clear, easy-to-use navigation
- improve the readability of the text on your web pages
- use graphics appropriately on web pages
- apply the concept of universal design to web pages
- describe web page layout design techniques
- describe the concept of responsive web design
- apply best practices of web design

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4.   **Basics of Cascading Style Sheets (CSS) (Chapter 4)**

Potential Elements of the Performance:

- describe the purpose of Cascading Style Sheets
- list advantages of using Cascading Style Sheets
- configure color on web pages with Cascading Style Sheets
- configure inline styles
- configure embedded style sheets
- configure external style sheets
- configure web page areas with element name, class, id, and descendant selectors
- test your Cascading Style Sheets for valid syntax

5.   **Web Graphics Styling Basics (Chapter 5)**

Potential Elements of the Performance:

- describe types of graphics used on the Web
- apply the image element to add graphics to web pages
- configure images as backgrounds on web pages
- configure images as hyperlinks
- configure image maps
- configure bullets in unordered lists with images
- configure multiple background images with CSS3

6.   **More CSS Concepts (Chapter 6)**

Potential Elements of the Performance:

- configure text typeface, size, weight, and style with CSS
- align and indent text with CSS
- describe and apply the CSS box model
- configure width and height with CSS
- configure margin, border, and padding with CSS
- center web page content with CSS
- apply shadows with CSS3
- configure rounded corners with CSS3
- apply CSS3 properties to background images
- configure opacity, RGBA color, HSLA color, and gradients with CSS3

7.   **Basics of Page Layout (Chapter 7)**

Potential Elements of the Performance:

- configure float with CSS
- configure fixed positioning with CSS
- configure relative positioning with CSS
- configure absolute positioning with CSS
- create two-column page layouts with CSS
- configure navigation in unordered lists and style with CSS
- add interactivity to hyperlinks with CSS pseudo-classes
- configure CSS sprites

8.   **More on Links, Layout, and Mobile (Chapter 8)**

Potential Elements of the Performance:

- code relative hyperlinks to web pages in folders within a website
- configure a hyperlink to a named fragment internal to a web page
- configure images with captions using the HTML5 figure and figcaption elements
- configure a collection of images to float across a web page
- configure web pages with new HTML5 section, hgroup, article, and time elements
- apply techniques to ensure backward compatibility with older browsers
- configure web pages for printing with CSS
- describe mobile web design best practices
- configure web pages for mobile display using the viewport meta tag
- apply responsive web design techniques with CSS3 media queries and flexible images

9.   **Table Basics (Chapter 9)**

Potential Elements of the Performance:

- describe the recommended use of a table on a web page
- configure a basic table with the table, table row, table header, and table cell elements
- configure table sections with the thead, tbody, and tfoot elements
- increase the accessibility of a table
- style an HTML table with CSS
- describe the purpose of CSS structural pseudo-classes

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10.   **Form Basics (Chapter 10)**

Potential Elements of the Performance:

•   describe common uses of forms on web pages
•   create forms on web pages using the form, input, textarea, and
        select elements
•   associate form controls and groups using label, fieldset, and legend
        elements
•   use CSS to style a form
Potential Elements of the Performance(cont'd):

•   describe the features and common uses of server-side processing
•   invoke server-side processing to handle form data
•   configure new HTML5 form controls including the e-mail, URL,
        datalist, range, spinner, calendar, and color-well controls

11.   **Media and Interactivity Basics (Chapter 11)**

Potential Elements of the Performance:

•   describe types of multimedia files used on the Web
•   configure hyperlinks to multimedia files
•   configure audio and video on a web page with HTML5 elements
•   configure a Flash animation on a web page
•   use the CSS3 transform property
•   use the CSS3 transition property
•   describe the purpose of the HTML5 canvas element

12.   **Web Publishing Basics (Chapter 12)**

Potential Elements of the Performance:

•   describe criteria to consider when you're selecting a web host
•   obtain a domain name for your website
•   publish a website using FTP
•   design web pages that are friendly to search engines
•   submit a website for inclusion in a search engine
•   determine whether a website meets accessibility requirements
•   evaluate the usability of a website

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IV.   REQUIRED RESOURCES/TEXTS/MATERIALS:

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

Title: Basics of WEB DESIGN, HTML5 & CSS3
               6th Edition
               Author: Terry Felke-Morris
ISBN-13:   978-0-13-312891-8

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/basics-of-web-design-html5-and-css3-second/terry-ann-felke-morris/dp/9780133250527

2) see student portal for availability of e-book version from bookstore

Other Relevant Information:

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

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

V.   EVALUATION PROCESS/GRADING SYSTEM:

♦ **Tests**   **60%**
♦ **Labs/Assignments**   **40%**

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.

VI.   <u>**OTHER EVALUATION CONSIDERATIONS:**</u>

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.

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VII.   SPECIAL NOTES:

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

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VIII.   COURSE OUTLINE ADDENDUM

The provisions contained in the addendum located on D2L form part of this course outline.