

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY  
SAULT STE MARIE, ON



COURSE OUTLINE

Course Title: Web Development

Code No.: CSD1200

Semester: Two

Program: Computer Studies

Author: Willem de Bruyne/Frank Turco/Doug McKinnon

Date: December 2002

Previous Outline Date: New

Approved: \_\_\_\_\_

Dean

Date

Total Credits: 5

Prerequisite(s): None

Length of Course: 16 Weeks

Total Credit Hours: 48

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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 a relative and absolute hyperlinks, linking to other types of documents (such as Word, Excel, Powerpoint, PDF), work with fonts, colors, 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, frames, Cascading Style Sheets 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 TO BE COVERED: Each topic will cover approximately one class period.**

Introduction to Course  
Basics of World Wide Web and HTML  
Creating and Applying HTML tags  
Adding Special Elements to a Web Page  
Anchors and Hypertext links on a Web Page  
Links to other Web Pages  
Creating Hypertext Links to Documents Located in other Folders  
Adding Color to Text  
Using Different Image File Formats to Create Special Effects  
Creating Image Maps  
Adding Tables to a Web Page  
Customizing the Appearance of Tables  
Creating a Newspaper-Style Layout  
Creating a Web site containing Frames  
Working with Hypertext Links within Frames  
Fundamentals for Creating Forms  
Creating and Working with Selection Lists  
Creating and Submitting Reset Buttons  
The History and Theory of Cascading Style Sheets  
CSS Language  
Formatting Hypertext Links  
Development and Features of JavaScript  
Fundamentals of the JavaScript Language  
Adding Decision Making Capabilities to your JavaScript Program  
The Principle of Form Validation  
Using Event Handlers to run JavaScript Programs  
Working with Check Boxes and Copying Values from one Field to Another  
Attributes of External and Embedded Media  
Working with External and Inline Video Clips

## **II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

### **A. Learning Outcomes and Elements of the Performance:**

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

#### **1. Develop a Basic Web Page**

##### ***Elements of the performance:***

- ◆ Introducing the World Wide Web
- ◆ HTML: the language of the Web
- ◆ Creating an HTML Document
- ◆ Creating headings, paragraphs, and lists
- ◆ Creating character tags
- ◆ Inserting a graphic
- ◆ Adding special characters
- ◆ Inserting horizontal lines

#### **2. Adding Hypertext Links to a Web Page**

##### ***Elements of the performance:***

- ◆ Creating a hypertext document
- ◆ Web page structures
- ◆ Creating links among documents
- ◆ Linking to documents in other folders
- ◆ Linking to documents on the Internet
- ◆ Linking to other Internet objects

### **3. Designing a Web Page**

#### ***Elements of the performance:***

- ◆ Working with color in HTML
- ◆ Specifying a color scheme for your page
- ◆ Modifying text with the <font> tag
- ◆ Inserting a background image
- ◆ Working with GIF files
- ◆ Working with JPEG files
- ◆ Controlling image placement and size
- ◆ Understanding image maps
- ◆ Defining image map hotspots

### **4. Developing a Basic Web Page**

#### ***Elements of the performance:***

- ◆ Creating a text table
- ◆ Defining a table structure
- ◆ Modifying the appearance of a table
- ◆ Working with table and cell size
- ◆ Spanning rows and columns
- ◆ Applying a color scheme to a table
- ◆ Designing a page layout with tables

### **5. Using Frames in a Web Site**

#### ***Elements of the performance:***

- ◆ Creating a frame layout
- ◆ Controlling the appearance of your frames
- ◆ Working with frames and hypertext links
- ◆ Using reserved target names
- ◆ Using the <nonframes> tag
- ◆ Working with frame borders
- ◆ Creating floating frames

## 6. Creating Web Page Forms

### ***Elements of the performance:***

- ◆ Working with CGI scripts
- ◆ Starting an online form with the <form>
- ◆ Working with text boxes
- ◆ Creating a selection list
- ◆ Working with radio buttons
- ◆ Creating form buttons
- ◆ Working with hidden fields
- ◆ Working with form attributes
- ◆ Using the “mailto” action

## 7. Working with Cascading Style Sheets

### ***Elements of the performance :***

- ◆ Introduction to cascading style sheets
- ◆ Using inline styles
- ◆ Creating an embedded style
- ◆ Using an external style sheet
- ◆ Resolving style precedence and working with style inheritance
- ◆ Setting font and text attributes
- ◆ Working with color and background
- ◆ Working with list styles
- ◆ Formatting hypertext links
- ◆ Working with ids and classes
- ◆ Working with container elements
- ◆ Formatting block-level element boxes

## 8. Programming with JavaScript

### ***Elements of the performance:***

- ◆ Introduction to JavaScript
- ◆ Running JavaScript
- ◆ Sending output to a Web page
- ◆ Working with variables and data
- ◆ Working with expressions and operators
- ◆ Creating JavaScript functions
- ◆ Working with conditional statements
- ◆ Using Arrays
- ◆ Working with loops

## 9. Creating a Multimedia Web Page

***Elements of the performance:***

- ◆ Working with multimedia
- ◆ Understanding sound files
- ◆ Embedding a sound file
- ◆ Working with video files
- ◆ Using the <noembed> tag
- ◆ Introducing Java applets
- ◆ Using the Internet Explorer <marquee> tag

**IV. EVALUATION METHODS:**

The mark for this course will be arrived at as follows:

◆ <b>10 Weekly Quizzes @</b>	<b>3 %</b>	<b>30 %</b>
◆ <b>2 Tests @</b>	<b>15 %</b>	<b>30 %</b>
◆ <b>10 Case Labs</b>	<b>2 %</b>	<b>20 %</b>
◆ <b>2 Assignments @</b>	<b>10 %</b>	<b>20 %</b>

**The grading scheme used will be as follows:**

A+	90 - 100%	Outstanding achievement
A	80 - 89%	Excellent achievement
B	70 - 79%	Average achievement
C	55 - 69%	Satisfactory achievement
R	Repeat	
X	Incomplete .	

## V. SPECIAL NOTES

1. In order to pass this course the student must obtain an overall **test/quiz** average of 60% or better.
2. Assignments must be submitted by the due date according to the specifications of the instructor. Late assignments will normally be given a mark of zero. Late assignments will only be marked at the discretion of the instructor in cases where there were extenuating circumstances. Ask for permission from your instructor to hand assignments in late **before** the due date.
3. Some minor modifications to the above percentages may be necessary. The professor reserves the right to adjust the mark up or down 5% based on attendance, participation, leadership, creativity and whether there is an improving trend. Students must have passing grades in the tests and assignments portion to pass the entire course. Each exercise will contribute points to the final grade.
4. Students with special needs eg. physical limitations, visual impairments, hearing impairments, learning disabilities are encouraged to discuss required accommodations confidentially with the instructor.
5. Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.
6. 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.
7. A student who is absent for 2 or more times without any valid reason or effort to resolve the problem will result in action taken. If action is to be taken, it will range from marks being deducted, additional work, to a maximum of removal from the course.
8. All students should be aware of the Special Needs Office in the College. If you have any special needs such as being visually impaired, hearing disabled, physically disabled, learning disabilities you are encouraged to discuss required accommodations confidentially with the Professor and/or contact the Special Needs Office, Room E1204, Ext. 493, or 717, or 491 so that support services can be arranged for you.
9. Your professor reserves the right to modify the course as he/she deems necessary to meet the needs of students.
10. It is the responsibility of the student to retain all course outlines for possible future use in gaining advanced standing at other post-secondary institutions.
11. Plagiarism  
Student should refer to the definition of “academic dishonesty” in the “Statement of Student Rights and Responsibilities”. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided by the professor.
12. Substitute course information is available at the Registrar’s office.
13. Students must achieve a passing grade in **both** the assignment and the test portions of the course.
- . The topics will not necessarily be covered in the order shown in this course outline.

## **VI. REQUIRED STUDENT RESOURCES**

Text: Creating Web Pages with HTML and XML, Patrick Carey

## **VII. PRIOR LEARNING ASSESSMENT**

Students who wish to apply for advanced credit in the course should consult the instructor.