



Grande Prairie Regional College

School of Business

Department: Business Administration and Commerce

COURSE OUTLINE - WINTER 2007

OA2096 5(0-0-5) – Advanced Web Design

Instructor:

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Dates:

Jan. 4 - Apr. 13, 2007

Classroom & Times:

*Tues., Thurs. & Fri. at 1:00 - 2:20 in Room
A307*

COURSE DESCRIPTION:

This course is for students who have a solid background in XHTML and CSS. It builds on that foundation. The course includes an introduction to JavaScript which is used on the client-side. It also introduces server-side scripting using ASP (Active Server pages) as an example. The student learns what is required to collect information from an HTML form and store it in a database on the server-side. Students exit with a basic understanding of what is involved in building and maintaining a database-driven, commercial website. The course finishes with a brief introduction to Adobe (formerly Macromedia) Flash.

Prerequisites: *OA2095 or an equivalent Web Design course, or permission of the instructor.*

Students taking this course are expected to know XHTML and CSS. Those languages will not be taught again in this course. You may need to review OA 2095 on your own in order to understand some of the concepts taken for granted in OA 2096.

BASIS:

The basis for this course is to start from an advanced knowledge of static web design, which students should already have. The goal is to build on that foundation, a basic level of knowledge about client-side programming, server-side programming, and database. The reason for this is that E-Commerce enabled web sites require all of those components. E-Commerce web sites must be interactive, dynamic and database driven.

A solid understanding of XHTML and CSS is needed to succeed in this course. In addition, some experience with database design is a definite asset. Students are not expected to become expert programmers, but will exit with a global understanding of the component parts of an E-Commerce web site. They will know how to assess the needs of an E-Business and where to look for solutions.

GENERAL OBJECTIVES:

Upon exit, successful students will

1. understand the difference between client-side and server-side scripting, and the appropriate place to use each.
 2. have a basic awareness of the Document Object Model.
 3. understand the basic syntax and objects of JavaScript(ECMAScript).
 4. be capable of dynamically controlling stylesheet properties using JavaScript.
 5. have an elementary knowledge of a server-side technology, namely ASP (Active Server Pages)
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RESOURCE MATERIALS:

There is no textbook required.

Lesson notes will be available on the website at gpbusiness.ca. In addition we will use online resources such as www.w3schools.com and the W3C specifications. Links to online resources will be provided at the appropriate times.

DELIVERY MODE:

The course is delivered live in computer lab A307 in the winter semester. Attendance is required. Although lesson notes are available online, they are not a substitute for coming to class.

COURSE CONTENT:

This course is very "hands-on". As we cover each lesson you should apply it to your own web site. That is the assignment, to develop a web site, demonstrating that you can apply the learning objectives from the lessons. I will give a grade for your website(s) for each module. You can ask for a website assessment as often as you like, and the last assessment will be the one that counts. There will be three unit tests to monitor your understanding of the material, but the best measure is your website itself.

Module 1 - Introduction to JavaScript

Lesson 1	- Introduction to Client-Side Scripting
Lesson 2	- Syntax of JavaScript
Lesson 3	- The Document Object Model
Lesson 4	- The Window Object
Lesson 5	- The Navigator Object
Tutorial 2	- Detect the Browser
Lesson 6	- The Screen Object
Tutorial 3	- Detect Screen Resolution
Lesson 7	- The Document Object
Lesson 8	- Variables
Tutorial 4	- Do a Calculation
Lesson 9	- Arguments
Tutorial 5	- Pass an argument
Lesson 10	- If and Switch
Tutorial 6	- Create a Slideshow
Module 1 Test	

Module 2 - The Server Side

Lesson 1	- Intro to Server-side scripting
Lesson 2	- Review of Database Concepts
Tutorial 1	- Create an Access Database
Lesson 3	- Connecting to a database
Tutorial 2	- Client-Side Form Validation
Lesson 5	- Server-Side ASP
Tutorial 3	- An Online Enrollment Application
Lesson 6	- Introduction to Frames
Tutorial 4	- Frames Example
Lesson 7	- Inline Frames
Lesson 8	- XML Revisited
Tutorial 5	- Import XML Data
Module 2 Test	

Module 3 - Adobe Flash

Lesson 1	- Intro to Flash
Lesson 2	- The Flash Workspace
Lesson 3	- Symbols Workspace
Lesson 4	- Flash Buttons
Tutorial 1	- Build a Flash Button
Tutorial 2	- Build a Slideshow
Module 3 Test	

GRADING SYSTEM

GPRC uses alpha grades as explained on page 37 of the College calendar. Since this course is so "hands-on", your website is more important than your test results. On a percentage basis you will be assessed as follows:

Module 1	Assignment 1	30
	Module 1 Test	15
Module 2	Assignment 2	30
	Module 2 Test	15
Module 3	Assignment 3	5
	Module 3 Test	5

TOTAL: 100

You will be allowed one re-write for each test. You can submit your website for assessment as often as you like. At the end of the course, I will assess it one final time. I will translate your percentage score into a letter grade as shown in the table opposite.

Percentage score to Letter grade:

Weighted Average %	Letter Grade
94 - 100	A+
90 - 93	A
85 - 89	A-
80 - 84	B+
76 - 79	B
72 - 75	B-
68 - 71	C+
64 - 67	C
60 - 63	C-
55 - 59	D+
50 - 54	D
0 - 49	F

STATEMENT ON PLAGIARISM:

It is O.K. to use other people's scripts (with permission) in your website. But you are expected to put comments in the code, giving credit where it is due. The instructor reserves the right to use electronic plagiarism detection services.