Grande Prairie Regional College

School of Business
Department: Business Administration and Commerce

COURSE OUTLINE - WINTER 2006

OA2096 3(3-0-2) – Advanced Web Design

Instructor:
Bruce Macdonald
Office: C302
Telephone: 539-2016(w)
513-8523(h)
E-Mail: bmacdonald@gprc.ab.ca
Website: dotCollege.com

Classroom:
A313
Dates:
Jan. 05 - Apr. 13, 2006
Times:
Tues., Thurs., & Fri. 13:00 - 14:20

COURSE DESCRIPTION:

This course will expand upon the knowledge gained in OA 2095, where static web sites were built with XHTML and CSS. Students will learn to use client-side scripting, to make their websites dynamic. We will then use Server-side scripting so that students realize the requirements for processing forms. Students will gain a basic understanding of what is involved in building and maintaining a data-base driven, E-Commerce website. Finally we will work with Adobe(formerly Macromedia) Flash.

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.

PREREQUISITES:

A solid understanding of XHTML and CSS gained through the successful completion of OA 2095 with a grade of 5 or better (or permission of instructor). Anyone attempting this course without a grade of at least 5 in OA2095 should be aware that they will be 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.

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 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 one of the above choices, namely ASP (Active Server Pages)
6. understand the basic idea of database queries and SQL.

RESOURCE MATERIALS:

There is no textbook required. Online resources such as www.w3schools.com will be used. Instructions and notices will be put on the course website from time to time, I will not be posting all of the lesson notes there. So visiting the website is not a substitute for attending class. .

DELIVERY MODE:

The course is delivered live in computer lab A313 in the winter semester. Attendance is required. Extra notes will be posted online from time to time, but will not be a substitute for coming to class.

COURSE CONTENT and TENTATIVE SCHEDULE:

The content is divided into three modules. At the end of each module there will be an assignment due. There will be two unit tests and a final comprehensive exam.

Module 1 - Client-Side Scripting

Jan. 5	The Document Object Model
	Introduction to JavaScript
	JavaScript Syntax
	The Window Object
	The Navigator Object
	The Screen Object
	The Document Object
	Variables
	Events, Arguments, Event Handlers and Parameters
	Control Logic
	Working with Strings - Form Validation
	The Date Object
Feb. 03	Test 1 (Assignment 1 due)

Module 2 - Server-Side Scripting and Database-Driven Websites

Feb. 07	Building a Database for a Simple Retail Web Store
	Introduction to SQL
	Introduction to ASP
	Collecting Data from a Web Form
Mar. 03	Test 2 (Assignment 2 due)

Module 3 - Adobe(formerly Macromedia) Flash

Mar. 7	Introduction to Flash
	Embedding a Flash Object in an HTML document
	Flash Video Format
	Building a Flash Website
Apr. 13	Assignment 3 due

GRADING SYSTEM

GPRC uses the alpha grading system as explained on page 40 of the College calendar. On a percentage basis you will be assessed as follows:

Assignment 1	10
Test 1	15
Assignment 2	10
Test 2	15
Assignment 3	15
Final Exam - Comprehensive	35

TOTAL: 100

I will translate your percentage score into a letter grade as follows:

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