

eBiz 509
Spring 2002

eBiz 509 Syllabus

Instructor: William Burrows
Office: 324 Mackenzie, 543-4474, burrows@u.washington.edu
WWW – <http://faculty.washington.edu/burrows>
Office Hours: T 1:00-3:00 and W 11:00-1:00
Required Text: Dreamweaver UltraDev 4 for Dummies☺, Harris, IDG Books, 2001.

Course Objective: This course is intended to provide you with an understanding of some of the major technologies that support B2C and B2B activity. In developing that understanding, you will be actively involved in using these technologies. The objective is not to turn you into a developer, but instead to give you a sufficient understanding to be able to work effectively with developers and suppliers of technology solutions. It's also the belief of the instructor that one does not really understand technologies unless one gets involved with them in a hands-on manner. This means that you will be creating sites and using tools that provide database-driven solutions and solutions that use XML and its associated technologies.

Course Goals: This course has been designed with three goals in mind. First, we feel that a basic understanding of basic Web architectures and technology is important. By definition, a Web application is multi-tiered. One of the most critical decisions in the design of a Web application is the decision of where to perform the various tasks (presentation, database management, and business rules) associated with the application. Client-side versus server-side decisions impact a number of critical performance factors including responsiveness, security, network bandwidth requirements, flexibility and scalability.

Second we will spend some time understanding XML. XML is critical in the business Internet world. Among other things, it is a platform- and technology-neutral way of representing data. This facilitates the electronic exchange of data between business partners as well as between browsers and electronic "bots". XML can be embedded within a web browser and can be rendered into a user-friendly presentation using both cascading style sheets (CSS) and the eXtensible Stylesheet Language Transforms (XSLT).

Finally, we look at alternative ways of displaying content and specifically look at wireless technology using the wireless application protocol (WAP) and the wireless markup language (WML).

Technology Tools: All of the software needed to complete the projects for this course is available on the School's eBiz lab as well as several of the general access labs. If you are interested, they can also be purchased for installation on your personal systems or downloaded for 30-day evaluations. The two main tools we will use are:

Macromedia Dreamweaver UltraDev 4. This is a web page development tool that not only supports the creation of web pages but also supports server-side database use. This tool creates either active server pages (Microsoft), java server pages (technology neutral) or ColdFusion web site. Thus it can be used to create solutions for a variety of platforms. (Note: if you are reading this syllabus and are wondering what was just said, that is, you are asking "what is he talking about?", then you need this course!).

Information on this product as well as access to a 30-day evaluation copy is available at the Macromedia [UltraDev](#) site.

XMLSpy. XMLSpy is an XML development tool. It supports a number of XML-related technologies (XSLT, XHTML, etc.). You can download a 30-day evaluation copy from [Altova, Inc.](#) If you choose to purchase this, be aware that they offer a 30% educational discount. Contact their support people for details.

Requirements: You will be working in teams of two or three to complete 3 projects (project details are available as separate documents). You are responsible for finding your team member(s). Each project will have a set of requirements defined for it. Grading will be based on how well your team's solution meets or exceeds the specific requirements. Projects that meet these requirements will earn a 3.4. Projects that fail to meet these requirements will receive a lower grade. It is possible to get a higher grade by adding additional features. If you choose to provide additional features, the specific choice of features is totally up to the team to determine. The degree of difficulty of these additional features (as determined by the instructor) will determine how much above 3.4 the project will earn.

Course Schedule

Date	Topic	Readings	Deliverables
Tue 7-May	Course Introduction. An overview of web architectures.		
Thu 9-May	Database driven web sites (I). Setting up a site, making a connection, ftp file transfer, and creating a recordset.	Chapters 1, 2, and 4 (Dummies).	
Tue 14-May	Database driven web sites (II). Server behaviors, performing and displaying queries.	Chapter 5 (Dummies).	Project 1a
Thu 16-May	Database driven web sites (III). Adding new records, deleting and modifying existing records.	Chapters 7 and 8 (Dummies).	
Tue 21-May	eXtensible Markup Language (XML). What is XML, why it is important, and XML tools.	XML Handout. XML Reference Sources .	Project 1b
Thu 23-May	Defining valid XML documents – XML Schemas.	Using W3C XML Schema .	
Tue 28-May	Transforming an XML document into another XML document – eXtensible Stylesheet Language Transforms (XSLT).	XSLT Handout. XML Reference Sources .	Project 2
Thu 30-May	Web Services.	A Web Services Primer .	
Tue 4-June	Wireless technologies.	What's new in wireless (Part 1 and Part 2). Tooling for e-commerce . Securing the Air: In code we trust .	
Thu 6-June	Web security and privacy issues.	Platform for Privacy Preferences (P3P) Project . The Twenty Most Critical Internet Security Vulnerabilities . Privacy Guidelines . Firewalls .	Project 3