

Virginia Western Community College
ITD220
E-Commerce Administration

Prerequisites

Divisional Approval

Course Description

Emphasizes techniques to plan and to design a platform-independent commerce Web site. Focuses on web business strategies, and the hardware and software tools necessary for Internet commerce, including comparison and selection of commerce architecture, installation and configuration, security considerations, and planning of a complete business-to-consumer and business-to-business site.

Semester Credits: 3 Lecture Hours: 3 Lab/Clinical/Internship Hours: 0

Required Materials**Textbook:**

None required.

Other Required Materials:

Apache and MySQL software (free download from the Internet)

The following supplementary materials are available:

1. Extensive use of Internet resources
2. Safari Online is available for students to view books online for free
3. Video movies provided by the instructor.

Course Outcomes

At the completion of this course, the student should be able to:

- Discuss the role of Web administrators
- Understand how the size of the company affects e-commerce
- Describe the difference between in house and hosted web sites
- Understand who has a stake in e-commerce administration
- Describe hardware, OS, server, database, and application programming considerations that must be made
- Choose web site software and understand what goes into decisions about choices

- Understand how data and electronic funds are transferred on the web
- Describe what a web service is and how they are used
- Understand advantages and disadvantages of in house versus hosted web services
- Install and configure a web server
- Install and configure a database server
- Understand security issues related to e-commerce servers

Topical Description

Daily or Weekly Schedule:

Module 1 - Discussion of what goes into being a Web administrator.

- a. Size of site
- b. Advantages of in house versus hosted
- c. Who else has a stake and how do you work with them?
 - a. How do they access the system?
 - b. What is the protocol for accessing the site's applications/databases/etc.

Module 2 - Designing your e-commerce web site. A study of the choices for the following five parts of your ecommerce site for a small, medium, large and distributed e-commerce web site.

- a. Hardware considerations for your Web presence.
- b. OS considerations for your Web presence
- c. Server considerations for your Web site
- d. Database considerations for your Web site
- e. Application programming considerations for your Web site

Module 3 - Choices of e-commerce web site software

- a. Web app servers versus web application servers
- b. Languages

Module 4 - Data and Money Transfers

- a. Online data exchange
- b. Transaction processing
- c. Electronic funds transfer
- d. Legal issues for transfers

Module 5 - Web services and clouds

- a. What are web services?
- b. In houses versus hosted

- c. RESTful web services
- d. Amazon AWS

Module 6 - Hands on practice on implementing your e-commerce web site (assume that you have the hardware and OS ready). We will assume a small to medium size application.

- a. Installing your web server (we will use Apache)
- b. Installing your database server (we will assume MySQL)
- c. Security issues

Notes to Instructors

1. Each module is generally two weeks long and may require both a quiz and a laboratory assignment submitted through Blackboard
2. A midterm exam is optional
3. A semester long project is required
4. A comprehensive final may be used in lieu of the project