

MISSOURI WESTERN STATE UNIVERSITY

SCHOOL OF LIBERAL ARTS AND SCIENCES

DEPARTMENT OF COMPUTER SCIENCE, MATHEMATICS, AND PHYSICS
Undergraduate Program

COURSE NUMBER: ACT311
COURSE NAME: WEB DEVELOPMENT TOOLS

COURSE DESCRIPTION:

This course continues the instructions in Adobe Design Suite tools to lead the student through the process of web-application development. Students will gain knowledge and hands-on practice in building and maintaining web applications using XHTML, CSS, Dreamweaver, Flash, Photoshop and Fireworks. Students will also use Java, PHP and MySQL. To accommodate the on-line format, we will use Apache server, and Crimson Editor to create the web folder for your course web application. You may use Adobe to develop your graphics or you may use any other graphic program available on the web.

PREREQUISITES

CSC184 – Computer Concepts I (or equivalent), ACT202 – Web Design Tools, Or Permission

APPLICATIONS

Crimson Editor, Adobe Web Design Premium (optional), PHP, MySql, JavaScript, Java and Java runtime environment, Skype

OPERATING SYSTEM

Windows XP service pack 3 or Windows 7

REQUIRED TEXTS

REQUIRED MATERIALS

Portable storage device (such as a portable FireWire or USB2 hard drive, USB flash drive, Internet storage service, p: drive, iPod, etc.) to save and retain class work. Skype must be installed on your personal computer and your Skype name must be submitted with first assignment.

COURSE OBJECTIVES AND PROCESS

Using a hands-on approach, we will use the computer to apply website design principles. Our primary software package will be Adobe Design Suite. Specifically, we will learn how to setup a website in Dreamweaver or Crimson Editor, both locally and remotely. We will use elements in Photoshop, Flash and Fireworks to produce work according to current aesthetic principles, theories and industry standards. Technically this will include exposure to image resolution, dynamic website intros, and interactive web forms. This not an entry-level class, however I am aware that students will come to this class with varying degrees of technical and artistic experience. Students already familiar with the material presented in class are encouraged to use that expertise to assist students who are less familiar with the application and broaden their creative approach. One of the best ways to solidify ones understanding of any discipline is to share that knowledge with others.

PERFORMANCE BASED LEARNER OUTCOMES

Upon completing this course students will have acquired a working knowledge of:

1. Web-based applications within the Windows operating system.
2. Using structures within the PHP programming language.
3. Understand how CSS and XHTML integrate with PHP and MySQL.
4. Produce work using a combination of page layout, illustration, and photo manipulation software.
5. Design and implement a database design within a web application.
6. Control user access to software offered over the internet.

TOPICS COVERED:

- Webservers: Apache, IIS
- Separation of Form and Function, CSS
- Advanced HTML, PHP, MYSQL
- Website organization
- Audience Focus
- Customer Requirements
- Human Factors in Website Design
- Input forms
- E-Commerce dynamics