CIS 082C: FRONT END WEB DEVELOPMENT

Date Submitted:Thu, 11 Jul 2019 21:48:06 GMT

Originator
fmarhuenda

Justification / Rationale
remove prerequisite, update SLOs, and content. Course has not been overhauled in some time. We need to keep up with new technologies.

Effective Term
Fall 2020

Credit Status
Credit - Degree Applicable

Subject
CIS - Computer Information Systems

Course Number
082C

Full Course Title
Front End Web Development

Short Title
WEBSITE DEVELOPMENT

Discipline

Disciplines List
Computer Information Systems (Computer network installation, microcomputer technology, computer applications)
Graphic Arts (Desktop publishing)

Modality
Face-to-Face
100% Online
Hybrid

Catalog Description
This course teaches students to format World Wide Web pages using Hypertext Markup Language (HTML), Cascading Style Sheets (CSS) and other technologies including Content Management Systems (CMS). Emphasis is placed on development of effective pages. Students learn to incorporate text, graphics, audio files, video files, animation, forms, and eCommerce databases, among others, into their web pages.

Schedule Description
Design, create, and publish web sites.

Lecture Units
2
Lecture Semester Hours
36

Lab Units
1
Lab Semester Hours
54

In-class Hours
90

Out-of-class Hours
72

Total Course Units
3
Total Semester Hours
162

Required Text and Other Instructional Materials
Resource Type
Web/Other
Open Educational Resource
Yes

Year
2019

Description
Using open content curated by instructor.

Resource Type
Book (Recommended)
Open Educational Resource
No

Author
Boehm, Anne Ruvalcaba, Zak

Title
Murach's HTML5 and CSS3

Edition
4th

Publisher
Mike Murach Associates

Year
2018

Resource Type
Web/Other
Open Educational Resource
No

Year
2019

Description
W3School's Website
https://www.w3schools.com/

Resource Type
Web/Other
Open Educational Resource
No

Year

2019

Description

Website Magazine
https://www.websitemagazine.com/

Class Size Maximum

35

Course Content

1. Creating web pages
   a. HTML containers
      i. HTML, HEAD, and BODY containers
      ii. META tags
   b. Text containers
      i. Document sectioning containers
      ii. Lists
      iii. Text style and colors
      iv. Links
   c. Images
      i. File formats for images and their appropriate use and features.
      ii. Basic use of image editing software to convert and/or optimize image file formats.
      iii. HTML tags and attributes required to include inline images.
      iv. Image maps via manual methods or PC-based applications.
   d. Tables
      i. Tables to display tabular data in web pages.
      ii. Tables for HTML page layout.
   e. Forms
      i. Different types of forms on web pages.
      ii. Different HTML tags and attributes to create forms
   f. HTML file creation techniques
      i. Text editors
      ii. Web authoring tools
      iii. Open source tools
      iv. Code validation according to W3C standards
   g. Multimedia content
      i. File formats used to store sound, video, and other multimedia content.
      ii. Streaming audio and video formats.
      iii. Windows and/or Macintosh applications available for creating and editing multimedia files.
      iv. Introduction to Web 2.0 technologies that can be used to create, maintain, store multimedia files.
      v. HTML tags and attributes required to incorporate multimedia content into web pages.
   h. Organizing files on a server
      i. Links to HTML files stored in a local or cloud server.
      ii. Use of other platforms as web servers such as Windows or Linux server.
2. Style Sheets
   a. Style sheet basics
      i. Inline style
      ii. Embedded or document-level style sheets
      iii. External style sheets
      iv. CSS vs. tables for layout of web pages
      v. Hierarchy and inheritance when using style sheets
   b. Elements of style sheets
      i. Syntax used in style sheets
      ii. Cascading feature of style sheets
      iii. Media queries

      iv. CSS animation
      v. Images as background of elements and web pages
3. Configuring and transferring files to a web server
    a. Configure a web server to host static web sites
      i. Local development server
      ii. Cloud servers (e.g. AWS, Azure, Google Cloud, etc.)
    b. Secure file transfer
    c. FTP client software
4. Develop a website using a Content Management System (CMS)
    a. Install and configure a Content Management System (CMS) locally and on a web server
    b. Basic CMS functionality, configuration, and publishing
    c. Themes and multimedia
    d. Use plugins to extend web page functionality
      i. Marketplace
      ii. Contact Forms
      iii. Search Engine Optimizers
5. Legal, ethical issues, and accessibility in web development
    a. Web site security basics
    b. Copyright
      i. Avoid copyright infringement and plagiarism
      ii. Creative Commons Licensing
    c. Web 2.0 technologies
      i. Definition and examples
      ii. Effective use
      iii. Ethical issues and Cyberbullying
    d. Search Engine Optimization (SEO)
      i. How search engines catalog web sites
      ii. Effective use and practices to optimize web page's exposure
    e. Required attributes in HTML tags to enhance accessibility
    f. CSS properties to enhance accessibility in web pages

Lab Content

Hands on practice on all of the concepts listed above.

Course Objectives

	Objectives
Objective 1	Define the key elements of web publishing.
Objective 2	Analyze and demonstrate the key concepts of effective web page layout and navigation.
Objective 3	Conceptualize, plan, format, and publish a complex set of effective web pages.
Objective 4	Illustrate graphic images through the use of audio files, video files, animation and three dimensional effects in web pages.
Objective 5	Construct a web page using a Content Management System (CMS).
Objective 6	Extend the functionality of their web page to fit their needs through the use of plugins.
Objective 7	Research different options for hosting websites.
Objective 8	Describe, compare, contrast, and utilize various web hosting providers.

Student Learning Outcomes

	Upon satisfactory completion of this course, students will be able to:
Outcome 1	Identify and demonstrate user-centered and interface design.
Outcome 2	Evaluate the different methods to transfer data to a local or web server to publish a web page to the internet.
Outcome 3	Identify privacy, security, copyright, and user accessibility methods when developing web pages.

Methods of Instruction

Method	Please provide a description or examples of how each instructional method will be used in this course.
Discussion	Students will participate in classroom discussions or weekly discussion forums
Participation	Students will participate in classroom discussions and classmate web page critiques
Demonstration, Repetition/Practice	Instructor will design his/her web page using various HTML tags and CSS concepts
Lecture	Instructor will conduct lecture in a face-to-face class or provide video lectures for online classes
Laboratory	Students will work on their websites during lab time. They will apply the concepts learnt in class

Methods of Evaluation

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Laboratory projects	Regular assignments, as described above, to measure the student's ability to create and publish on a server HTML pages and CSS files. Students will create web pages using the topics presented during lecture. Students will complete a total of about 18 projects in and out of class	In and Out of Class
Student participation/contribution	Students are expected to participate in classroom discussions and online discussion forums	In Class Only
Mid-term and final evaluations	Written final examination covering material presented during the semester such as: create and publish HTML pages using tables, forms, and other elements and create CSS files to format and layout the pages	In Class Only
Tests/Quizzes/Examinations	Written and/or oral quizzes that measure the student's ability to: a. Create HTML pages that conform to the latest standard b. Publish HTML pages on a web server c. Incorporate images and other multimedia content into HTML pages	In Class Only
Presentations/student demonstration observations	Students are expected to present their websites to the entire class	In Class Only
Portfolios	Students are expected to create a portfolio containing all their work	Out of Class Only
Critiques	Students will provide web page critiques of their classmates' work.	Out of Class Only
Product/project development evaluation	Students will design their pages based on an initial plan that they will develop outside of class	Out of Class Only

Assignments

Other In-class Assignments
- Hands-on exercises to create HTML pages that include: basic HTML elements such as: sectioning containers, list containers, images, links, tables; use of style sheets for page layout and formatting of HTML element, and use of basic scripts to add interactivity.
- Discussion on material read from textbook and handouts.

Other Out-of-class Assignments
- Projects to create HTML web pages that include basic HTML elements, including document sectioning containers, list containers, and links and publish of the web page on a web server. The web pages should include elements such as: style sheets, images, tables, forms, and valid HTML code.
- Create comprehensive midterm and final projects incorporating all of the concepts.
- Search the internet to find commercial sites that use the concepts being studied.

- Short answer quizzes testing comprehension of the concepts covered.
- Reading from the textbook and/or materials presented by the instructor on topics such as: building web pages with HTML and CSS following latest standards, publishing HTML pages on a web server, ways to incorporate images and other multimedia content into HTML pages.

Grade Methods
Letter Grade Only

Distance Education Checklist

Include the percentage of online and on-campus instruction you anticipate.

Online %
60
On-campus %
40

Lab Courses

How will the lab component of your course be differentiated from the lecture component of the course?
Students will be working on building their websites during lab time. The lecture will consist of instructional videos.

From the COR list, what activities are specified as lab, and how will those be monitored by the instructor?
Anything dealing with students working on their website is considered lab. The instructor will provide regular, effective, and constructive feedback to every student that submits their work.

How will you assess the online delivery of lab activities?
After the first four weeks, students will have an opportunity to evaluate the delivery of the material.

Instructional Materials and Resources

Effective Student/Faculty Contact

Which of the following methods of regular, timely, and effective student/faculty contact will be used in this course?

Within Course Management System:
Timely feedback and return of student work as specified in the syllabus
Discussion forums with substantive instructor participation
Chat room/instant messaging
Regular virtual office hours
Private messages
Online quizzes and examinations
Video or audio feedback
Weekly announcements

External to Course Management System:
Direct e-mail
E-portfolios/blogs/wikis
Posted audio/video (including YouTube, 3cmediasolutions, etc.)
Synchronous audio/video
Teleconferencing
Telephone contact/voicemail

Briefly discuss how the selected strategies above will be used to maintain Regular Effective Contact in the course.
Regular Effective contact will be achieved through weekly instructor feedback on student work. Every week students are expected to complete an activity that needs to be manually graded by the instructor. This is our opportunity to provide feedback.

Other Information

Provide any other relevant information that will help the Curriculum Committee assess the viability of offering this course in an online or hybrid modality.
This course has been offered online since the days of Virtual Valley. It was one of the first ones to be offered in DE format.

Comparable Transfer Course Information
University System
CSU
Campus
CSU San Bernardino

Course Number
IST 150
Course Title
Web Publishing

Catalog Year
2019

COD GE
C5 - Personal Growth and Development

MIS Course Data

CIP Code
11.0103 - Information Technology.

TOP Code
070200 - Computer Information Systems

SAM Code
C - Clearly Occupational

Basic Skills Status
Not Basic Skills

Prior College Level
Not applicable

Cooperative Work Experience
Not a Coop Course

Course Classification Status
Credit Course

Approved Special Class
Not special class

Noncredit Category
Not Applicable, Credit Course

Funding Agency Category
Not Applicable

Program Status
Program Applicable

Transfer Status
Transferable to CSU only

Allow Audit
No

Repeatability

No

Materials Fee

No

Additional Fees?

No

Approvals

Curriculum Committee Approval Date

10/01/2019

Academic Senate Approval Date

10/10/2019

Board of Trustees Approval Date

11/13/2019

Course Control Number

CCC000579571

Programs referencing this course

Digital Design Production AS Degree (http://catalog.collegeofthedesert.eduundefined?key=126/)
Digital Design Production Certificate of Achievement (http://catalog.collegeofthedesert.eduundefined?key=127/)
General Business AS Degree (http://catalog.collegeofthedesert.eduundefined?key=190/)
Applications and Information Systems AS Degree (http://catalog.collegeofthedesert.eduundefined?key=223/)
Liberal Arts: Business and Technology AA Degree (http://catalog.collegeofthedesert.eduundefined?key=27/)
Computer Information Systems Associate of Science (http://catalog.collegeofthedesert.eduundefined?key=323/)
Computer Information Systems AS Degree for Employment Preparation (http://catalog.collegeofthedesert.eduundefined?key=61/)