SECTION I

SUBJECT AREA AND COURSE NUMBER

COMM 675

COURSE TITLE

WEB DEVELOPMENT SPECIAL TOPICS

TYPE COURSE

NON-FEE   VOCATIONAL

CATALOG COURSE DESCRIPTION

This course introduces important ancillary topics that are critical in the web development field. Students learn about promotion of a website through search engine optimization (SEO) to increase a website's visibility. Basic optimization strategies, such as conducting keyword research, building inbound links, and optimizing pages and content are included. Students will also learn about accessibility strategies, how to maintain site health, and how to build and maintain a portfolio for success beyond the classroom. (FT)

LECTURE/LABORATORY HOURS

    60

ADVISORY

COMM 672 WEB PROGRAMMING: HTML AND CSS
COMM 673 USER INTERFACE DESIGN
COMM 674 MODERN WEB DEVELOPMENT TOOLS

RECOMMENDED SKILL LEVEL

Possess a 10th grade reading level; ability to communicate effectively in the English language.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
    SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
    SDCE students demonstrate effective communication skills.

3. Critical Thinking
    SDCE students critically process information, make decisions, and solve problems
    independently or cooperatively.
4. Personal and Professional Development
    SDCE students pursue short term and life-long learning goals, mastering necessary
    skills and using resource management and self-advocacy skills to cope with changing
    situations in their lives.

COURSE GOALS

1. Introduce and use search engine optimization
2. Learn how to promote a personal or business website
3. Understand web accessibility and the law
4. Learn how to make a website accessible by all
5. Understand website maintenance tools and techniques
6. Learn how to use Google Analytics
7. Plan, build, and launch a Web portfolio

COURSE OBJECTIVES

Upon successful completion, the student will be able to:

1. Demonstrate an understanding and ability to explain search engine optimization
2. Promote a personal or business website using Google and social media outlets
3. Knowledge and understanding of the law that governs web accessibility
4. Apply web accessibility techniques to their web pages to make them compliant and
    accessible by all
5. Demonstrate ability to use website maintenance tools to find and fix broken links,
    misspellings, and more within a website
6. Demonstrate ability to use Google Analytics to analyze traffic to a website and make
    appropriate web editing decisions based on behavior, sentiment, locale, usage statistics
    and more
7. Build and launch a web portfolio and make it shareable for potential employers to see

SECTION II

COURSE CONTENT AND SCOPE

1. Search Engine Optimization (SEO)
    1.1.   Overview
    1.2.   Reading a search engine results page
    1.3.   How SEO affects your business
    1.4.   Setting SEO expectations
    1.5.   Keywords
    1.6.   Content Optimization: How Search Engines and People View Web Pages
        1.6.1. Understanding content optimization
        1.6.2. Optimizing for site structure
        1.6.3. Recognizing different types of content
        1.6.4. Optimizing textual page elements

COURSE CONTENT AND SCOPE (CONTINUED)

        1.6.5. Optimizing non-text components of a web page
        1.6.6. Analyzing content quality
        1.6.7. Exploring the benefits of user-generated content
    1.7. Content Planning
        1.7.1. Planning a successful content strategy
        1.7.2. Defining your audience, topics, angle, and style
        1.7.3. Understanding different types of content
        1.7.4. Getting ideas for content
    1.8. Link-Building Strategies
        1.8.1. Understanding the importance of links
        1.8.2. Building internal links
        1.8.3. Building external links
        1.8.4. Finding link-building opportunities
    1.9. Measuring SEO Effectiveness
        1.9.1. Measuring SEO performance
        1.9.2. Analyzing keywords
        1.9.3. Analyzing links
        1.9.4. Analyzing the impact of social media
        1.9.5. Understanding Online Marketing Via Social Media
2. Social Media and SEO
    2.1. Setting up your business account
    2.2. Creating and applying custom backgrounds
    2.3. Tweeting and following
    2.4. Understanding news feeds
    2.5. Controlling access to your posts
    2.6. Customizing privacy settings
    2.7. Following terms of service
    2.8. Social Media Pages for Business
        2.8.1. Touring a page timeline features and controls
        2.8.2. Creating a new page
        2.8.3. Creating a profile picture
        2.8.4. Designing a cover image
        2.8.5. Creating a combined cover-and-profile image
        2.8.6. Using the admin panel
        2.8.7. Editing important page settings
        2.8.8. Adding and featuring page admins
3. Web Accessibility
    3.1. Web accessibility overview
    3.2. Why web accessibility matters
    3.3. Types of disabilities and the related challenges
        3.3.1. Blind
        3.3.2. Low vision
        3.3.3. Color-blind
        3.3.4. Deaf
        3.3.5. Deafblind
        3.3.6. Motor
        3.3.7. Speech

COURSE CONTENT AND SCOPE (CONTINUED)

        3.3.8. Cognitive
        3.3.9. Reading
        3.3.10. Seizures
    3.4. The assistive technologies and methods used by people with disabilities to access the web
    3.5. Core principles of accessibility and universal design
        3.5.1. Perceivable
        3.5.2. Operable
        3.5.3. Understandable
        3.5.4. Robust
    3.6. Accessibility laws
    3.7. Overview and explanation of accessibility guidelines
        3.7.1. Web Content Accessibility Guidelines (WCAG)
        3.7.2. Authoring Tool Accessibility Guidelines (ATAG) 2.0
        3.7.3. WAI-ARIA 1.0
    3.8. Accessibility myths and misconceptions
        3.8.1. Accessibility benefits only a small minority
        3.8.2. Accessibility is a short-term project
        3.8.3. Accessibility should be the last step
        3.8.4. Accessibility is hard and expensive
        3.8.5. Accessibility is ugly
4. Website Maintenance and Site Health
    4.1. Software for maintaining a healthy website
        4.1.1. Using the browser's developer tools to gauge performance
        4.1.2. The sitemap.xml file
        4.1.3. The robots.txt file
        4.1.4. The humans.txt file
        4.1.5. Creating custom 404 pages
        4.1.6. Creating a favicon
    4.2. Quality assurance and content quality scans
        4.2.1. Checking for broken links
        4.2.2. Checking for misspellings
        4.2.3. Assessing usability
        4.2.4. Assessing readability

    4.3. Managing website performance
    4.4. Google Analytics
        4.4.1. Google Analytics overview
            4.4.1.1. Why digital analytics?
            4.4.1.2. How Google Analytics works
            4.4.1.3. Google Analytics setup
            4.4.1.4. How to set up views with filters
        4.4.2. The Google Analytics Interface
            4.4.2.1. Navigating Google Analytics
            4.4.2.2. Understanding overview reports
            4.4.2.3. Understanding full reports
COURSE CONTENT AND SCOPE (CONTINUED)

                              4.4.2.4.   How to share reports

                              4.4.2.5.   How to set up dashboards and shortcuts

                    4.4.3. Basic Reports

                              4.4.3.1.   Audience reports

                              4.4.3.2.   Acquisition reports

                              4.4.3.3.   Behavior reports

                    4.4.4. Basic Campaign and Conversion Tracking

                              4.4.4.1.   How to measure Custom Campaigns

                              4.4.4.2.   Tracking campaigns with the URL Builder

                              4.4.4.3.   Use Goals to measure business objectives

                              4.4.4.4.   How to measure Google Ads campaigns

5.   Portfolio Design

    5.1. Pre-planning

        5.1.1. Analyze job market

        5.1.2. Find at least 3 target companies or clients to actively approach once project is complete

    5.2. Competitive analysis

        5.2.1. Identify at least 3 competitors and perform a full analysis on their websites, what makes the websites good, what can be improved upon

        5.2.2. Document inspiration and component ideas.

    5.3. Set personal project goals

        5.3.1. Identify phase 2 goals and establish timeline

6.   Building and Launching Your Portfolio

    6.1. Create persuasive copy and images

        6.1.1. Identify examples to use

        6.1.2. Write clear, compelling copy

    6.2. Develop UX deliverables

        6.2.1. User flow

        6.2.2. Personas

        6.2.3. Mood boards

        6.2.4. Wireframes

        6.2.5. Mockups

        6.2.6. Prototypes

    6.3. Optimize assets

        6.3.1. Prepare assets for final project

        6.3.2. Compress and optimize all media

    6.4. Code

        6.4.1. Develop website using HTML, CSS and JavaScript

        6.4.2. Validate all code

        6.4.3. Test on a variety of platforms and devices

    6.5. Soft launch

        6.5.1. Upload the site to a hosting platform

        6.5.2. Work with at least 2 peers to aid in troubleshooting and testing

        6.5.3. Utilize analytics

    6.6. Launch and Present

        6.6.1. Final site launch

        6.6.2. Presentation

<u>COURSE CONTENT AND SCOPE (CONTINUED)</u>

6.6.3. Promote your website

APPROPRIATE READINGS

Readings of appropriate reading level may include, but are not limited to, materials such as a textbook, supplemental reading assignments, industry-related periodicals or magazines, manuals, videos, television programs about the internet, online help, articles posted on the internet, and information from web sites, online libraries and databases. Topics should be related to search engine optimization, web accessibility, managing site performance and health, and portfolio design.

WRITING ASSIGNMENTS

Writing assignments may include, but are not limited to, completing assigned reports, providing written answers to assigned questions, performing internet research and reporting on that research. An example would include creating a report that outlines the core differences between Web Content Accessibility Guidelines (WCAG) priority level's A, AA, and AAA as it relates to color contrast on a web page.

OUTSIDE ASSIGNMENTS

Assignments may include, but are not limited to, appropriate internet research, reading, preparing reports and studying as needed to perform successfully in class. An appropriate assignment for instance, would include creating a CodePen account, uploading creative works to that account that are public and accessible by other developers, and shared from a web-based portfolio.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Assignments which demonstrate critical thinking may include, but are not limited to scanning a website for accessibility violations, broken links, misspellings, usability flaws, and readability issues then take those results and make the appropriate changes within the website.

EVALUATION

Evaluation methods may include, but are not limited to performance in a variety of activities and assignments, such as creating specified deliverables, a website that meets current web standards and demonstrates a student's understanding of languages and technologies that are included within the FEWD program. Students will need to show they understand portfolio best practice and demonstrate that they can create, publish and promote. In addition, the course may have quizzes, class participation, written and practical tests, attendance and punctuality.

Upon successful completion of all courses in the program a Certificate of Program Completion will be issued.

METHOD OF INSTRUCTION

Methods of instruction may include, but are not limited to, lectures, discussion, hands-on demonstrations, computer-assisted instruction, laboratory assignments and field trips.

This course, or sections of this course, may be offered through distance education.

<u>TEXTS AND SUPPLIES</u>

SEO 2014 & Beyond: Search Engine Optimization Will Never Be The Same Again!,
    by Dr. Andy Williams, CreateSpace Independent Publishing Platform, current edition
500 Social Media Marketing Tips: Essential Advice, Hints and Strategy for Business, Andrew
    McCarthy, CreateSpace Independent Publishing Platform, current edition
Profitable Social Media Marketing, Tim Kitchen, CreateSpace Independent Publishing
    Platform, current edition

Recommended Supplies:

Pen, journal (composition book), notebook paper and a soft 3-ring binder, or a one-subject 110 sheet college ruled notebook, and appropriate storage media such as a USB Drive or external hard drive or cloud-based storage.

PREPARED BY   <u>Zak Ruvalcaba</u>   DATE   <u>November 3, 2021</u>

REVISED BY   _____   DATE   _____

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

<u>REFERENCES</u>:

San Diego Community College District Policy 3100
California Community Colleges, Title 5, Section 55002
Continuing Education Catalog