

Almost every media organization, big business, educational institution and municipality website is powered by a CMS. This course prepares students to create, modify, maintain and publicize CMS websites, giving students studying for vocation in online communications and web development a valuable asset to include in their resume

- B. The course has a lab component to give students the opportunity to create, modify, maintain and publicize CMS websites
- C. This course generally transfers as a Computer Science Elective or a Free Elective.

IV. Place of Course in College Curriculum

- A. Free Elective
- B. This course meets a program requirement for:
 - 1. Web Developer A.S. degree
- C. This course serves as a CIS Elective on the Computer Science (CISY) Elective List
- D. Course Transferability: a) for New Jersey schools go to the NJ Transfer website, www.njtransfer.org; b) for all other colleges and universities, go to their individual websites.

V. Outline of Course Content

This course explores the following topics:

- A. **Understanding Web Content Management Systems**
 - 1. What is a web content management system?
 - 2. Dynamic vs Static websites
 - 3. Popular open source CMS
 - 4. CMS usage (ecommerce, blog, photo, education, business)
- B. **Planning and Developing Dynamic Web Content Sites**
 - a. Setting site goals; Identifying target audiences
 - b. Wireframing and planning site function and flow
 - c. Primer on PHP and MySQL database
 - d. Creating a sitemap
- C. **Building and Administrating a CMS powered Site**
 - 1. Purchasing a domain name
 - 2. Purchasing Web hosting
 - 3. XAMP and MAMP servers
 - 4. Installing a CMS
- D. **Managing Accounts**
 - 1. Wordpress.com vs Wordpress.org
 - 2. Akismet account
 - 3. Google analytics account
 - 4. Admin Area and settings
- E. **Adding Content**
 - 1. Etiquette and best practices
 - 2. Simple HTML and CSS

3. Visual editor vs HTML editor
 4. Posts
 - i. Categories
 - ii. Linking
 5. Pages
- F. Working with Media**
1. Hotlinking and .htaccess
 2. Images
 3. Audio
 4. Video
 5. Screencasts
- G. Managing Comments**
1. Best practices
 2. Measuring reader response
 3. Driving traffic to site
- H. Syndication & Publicizing**
1. RSS and Atom feeds
 2. Feedburner
 3. Publicizing site
- I. Customizing a Wordpress Theme**
1. Overview of Cascading Style Sheets (CSS)
 2. Installing new themes
 3. Using CSS to move and position web graphics
- J. Widget and Plugins**
1. Filtering useful from useless
 2. Troubleshooting conflicts
 3. Avoiding slow-loading content
 4. Installation, implementation, and updating
- K. Visualization Tools**
1. Wordle
 2. Slideshare
 3. Scribd
 4. Jing & Camtasia Studio
- L. Adsense, Adword, and Analytics**
1. Adsense and Adword overview
 2. Analytics in-depth
 3. Site analysis and adjustments
 4. Spotting trends
 5. Capitalizing on trends
- M. Keywords and Search Engine Optimization (SEO)**
1. Keywords (site, page, post)
 2. Sitemap
 3. Importance of alt, title, h1, h2 tags
- N. Discussion: advanced topics, student questions**

1. MySQL
2. Moving an existing Wordpress cms site to a new domain
3. Reviewing theme and layout
4. Discussing Joomla, Magento, ZenPhoto, Moodle

O. Final Presentations

1. Reporting traffic
2. Reporting web ranking
3. Reporting search ranking
4. Reporting homepage W3c validation errors

VI. General Education and Course Learning Outcomes

A. General Education Learning Outcomes:

At the completion of the course, students will be able to:

1. design and develop an easily navigable fast loading content management system (GE-NJ 4).
2. generate content suitable for targeted Web based audience (GE-NJ 1, 4, *).
3. utilize a variety of technological tools designed to assess content management systems' effectiveness (GE-NJ 1, 2, 4).

* embedded critical thinking

B. Course Learning Outcomes:

At the completion of the course, students will be able to:

1. Create, modify, maintain and publicize a CMS website.
2. Manage an online community, media assets, and content.
3. Compare and contrast open source content management systems.
4. Install and track Google Analytics to measure and enhance site performance.

VII. Modes of Teaching and Learning

- A. lecture/discussion
- B. student collaboration via small-group work
- C. computer-assisted instruction
- D. laboratory assignments
- E. student collaboration
- F. independent study projects

VIII. Papers, Examinations, and other Assessment Instruments

- A. research paper

- B. In class graded Lab projects
- C. Exams/Quizzes/Homework Assignments
- D. CMS Website Project

IX. Grade Determinants

In order to evaluate achievement of the learning outcomes above, possible grade determinants include:

- A. Homework
 - a. The student will publish 2 quality article posts per week to their CMS site.
- B. Research paper
 - a. The student will complete a research paper on the shift from hand-coded websites to CMS powered sites.
- C. Exams
 - a. Exams will be given three times during the course of the semester. Test questions will be multiple choice, short answer, fill in the blank, true/false.
- D. Graded Labs
 - a. Four labs will be assigned during the course's duration. Students will be required to follow lab specifications to completion with a minimum of errors.
- E. Final Project
 - a. CMS site will be graded based on functionality, style, reach, rank, community, w3c validation errors and site load time.

X. Texts and Materials

Suggested Textbook: *Wordpress: Visual Quickstart Guide 3rd Edition* ISBN-13: 978-0321957610

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

XI. Resources

- A. Access to remote Web server with CMS installed
- B. Computer Lab with access to the Internet