RARITAN VALLEY COMMUNITY COLLEGE
ACADEMIC COURSE OUTLINE

CISY 269 Advanced Web Page and Mobile

I. Basic Course Information

A. Course Number and Title: CISY 269 Advanced Web Page and Mobile
Development

B. New or Modified Course: New Course

C. Date of Proposal: Semester: Spring   Year: 2012

D. Sponsoring Department: Computer Science

E. Semester Credit Hours: 3

F. Weekly Contact Hours: Lecture: 2
                                        Laboratory: 2

G. Prerequisites/Corequisites: C or higher in CISY 268 Web Page Development
II, C or higher in CISY 244 JavaScript

H. Laboratory Fees: Yes

I. Name and Telephone Number or E-Mail Address of Department Chair:
Tom Edmunds – tedmunds@raritanval.edu

II. Catalog Description

Prerequisite: A grade of C or better in CISY 268 Web Page Development II and a
grade of C or better in CISY 244 JavaScript. The Web has begun to transition
from Flash to HTML 5 and professionals need to embrace HTML 5 in order to
remain employable in a global economy. Students will utilize HTML5, CSS 3 and
the JQuery Mobile library to create Web applications and mobile sites that adhere
to the latest Web standards.

III. Statement of Course Need

A. As the Web begins to transition from Flash to HTML 5, professionals need to stay ahead of the curve in order to remain employable in a global economy. However, these technologies cannot be adequately mastered without knowledge of the fundamentals: HTML4, CSS, JavaScript, and Jquery. As such, this course is the third step (after Web Page Development 1 and Web Development 2) any future Web developer must take in the journey to proficiency.

B. If course has a lab component, justify the need for the lab.

Web Page and mobile development cannot be mastered without a significant amount of time spent writing and debugging code. Lecture and lab complement each other in a hands on course such as this.

C. Please describe the transferability of this course. For example:
1. This course generally transfers as a computer science elective.

IV. Place of Course in College Curriculum

A. Free Elective (This applies automatically to all credit courses in the College.)
B. This course meets a program requirement for the AS in Web Page Development and the Web Page Development Certificate.
C. CIS Elective on the Computer Science Elective List
D. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

The course outline provides an overview of the subject content to be covered in the course. It contains sufficient detail so that the scope and depth of the course may be easily inferred and that someone unfamiliar with the subject area will be able to understand what the course entails. The outline order may be either hierarchical or chronological and include activities as well as topical areas. For example:
A. HTML 5
   a. Forms
   b. Audio
   c. Video
   d. Drawing
   e. Canvas
   f. Communication
   g. Geolocation
   h. Local Storage
B. CSS3

a.　Progressive enhancement
　　　　　　　　b.　Graphics effects without the use of graphics
　　　　　　　　c.　Multiple background images
　　　　　　　　d.　@font-face
　　　　　　　　e.　Media queries
　　　　　C.　Mobile Development
　　　　　　　　a.　JQuery Mobile
　　　　　　　　b.　Phonegap

VI. Educational Goals and Learning Outcomes

A. <u>Educational Goals</u>

Students will:
1. design and develop small Web sites and present the design and implementation to the class (GE-NJ 1).
2. demonstrate proficiency in using current Web authoring tools required to create effective standards based dynamic Web sites. (GE-NJ 4)

B. <u>Learning Outcomes</u>

Students will be able to:
1. work collaboratively in a group to design and publish Web pages using cutting edge technology including CSS 3 and HTML 5.
2. utilize a third party library to create dynamic pages accessible on mobile devices
3. reconstruct a flash based Website into one powered by HTML5
4. work collaboratively in a group to design and publish Web pages that utilize Web standards in order to ensure the pages are accessible on a variety of different browsers/devices.
5. present their design of a small Web site and the implementation of their design to the class (Goal 1)
6. utilize current Web authoring tools to create effective standards based dynamic Web sites (Goal 2)

VII. Modes of Teaching and Learning

Given the goals and outcomes described above, LIST the primary formats, modes, and methods for teaching and learning that may be used in the course:
　　A.　lecture/discussion
　　B.　small-group work
　　C.　computer-assisted instruction
　　D.　guest speakers
　　E.　laboratory
　　F.　student oral presentations
　　G.　student collaboration

VIII. Papers, Examinations, and other Assessment Instruments

Given the outcomes described above, LIST which of the following assessment methods may be used:
A. laboratory products (Web pages/sites)
B. pen/paper tests
C. presentations

IX. Grade Determinants

A. laboratory products (Web pages/sites)
B. presentations
C. pen/paper tests

X. Texts and Materials

LIST which of the following types of course materials will be used. Specify title and publication information about textbooks and any other major text sources or other materials.
Suggested textbooks
A. *HTML5 Solutions – Essential Techniques for HTML5 Developers*. Marco Casario, Peter Els, Charles Brown, Nathalie Wormser, and Cyril Hanquez, Friends of Ed/Apress ISBN: 978-1-4302-3387-2
B. *Stunning CSS3 – A Project Based Guide to the Latest in CSS*. Zoe-Mickley Gillenwater. New Riders ISBN: 978-0-321-72213-3

(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

What specific or unusual resources (such as library, computer, or laboratory resources) does the College presently have that will be necessary for the course? What additional resources will be needed? List the resources.

A. College's Unix server (RVCC2)
B. Computer Lab with Internet access
C. Web Browsers (IE/Firefox/Chrome/Safari)
D. FTP software (Filezilla, WSFTP)
E. Web Page Development Software (Notepad++)
F. jQuery mobile library
G. Dreamweaver 5.5 or Later