

III. Statement of Course Need

- A. JavaScript is a popular Scripting language used in Industry to design and implement dynamic web pages. Knowledge of this subject matter is essential to those students pursuing programs in Web Development or Web Programming.
- B. This course does have a lab component. Students are required to use the software in the Computer labs in order to complete their assignments.
- C. This course generally transfers as a Computer Science Elective

IV. Place of Course in College Curriculum

- A. Free Elective
- B. This course meets a program requirement for:
 - a. Web Developer A.S.
 - b. Web Developer CertificateThis course is an option for:
 - c. Interactive Digital Media, A.A.S
 - d. Multimedia Communications, Certificate
- C. CISO Programming Elective
- D. Course Transferability: for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org . For all other colleges and universities, go to their individual websites.

V. Outline of Course Content

- A. Introduction to JavaScript and the Web
- B. Data types and variables
- C. Decisions and loops
- D. Functions and scope
- E. Objects
- F. String Manipulation
- G. The Document Object Model
- H. DOM Scripting
- I. Events
- J. JSON
- K. Data Storage
- L. AJAX
- M. JQuery
- N. Current JavaScript utilities, libraries and APIs.

VI. General Education and Course Learning Outcomes

A. General Education Learning Outcomes:

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

1. Solve information processing problems by using the JavaScript Programming Language to produce well designed computer programs (GE-NJ 4)

B. Course Learning Outcomes:

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

1. Differentiate between Client and Server Side programming
2. Explain the relationship among HTML, CSS, and JavaScript
3. Design and implement JavaScript client side programs that incorporate arrays, control structures, and functions
4. Create Web Pages that implement JavaScript programs
5. Manipulate the Document Object Model (DOM) using JavaScript.

C. Assessment Instruments

1. demonstrations
2. portfolios
3. computer programs

VII. Grade Determinants

- A. Lab Projects
- B. Homework Assignments
- C. Quizzes
- D. Final Exam
- E. Final Project

The primary formats, modes, and methods for teaching and learning that may be used in the course:

- A. lecture/discussion
- B. laboratory

VIII. Texts and Materials

- A. Suggested Textbook – *Beginning JavaScript Fifth Edition* by Jeremy McPeak and Paul Wilton. ©2015. John Wiley & Sons.

(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.)

IX. Resources

- A. Computer lab with Internet Connectivity

X. Honors Option

N/A