Tompkins Cortland Community College

Master Course Syllabus

Course Discipline and Number: CAPS/WD 154 **Year: 2024-2025**
Course Title: JavaScript **Credit Hours: 1**

Attendance Policy: *To maintain good grades, regular attendance in class is necessary. Absence from class is considered a serious matter and absence never excuses a student from class work. It is the responsibility of all instructors to distribute reasonable attendance policies in writing during the first week of class. Students are required to comply with the attendance policy set by each of their instructors. Students are not penalized if they are unable to attend classes or participate in exams on particular days because of religious beliefs, in accordance with Chapter 161, Section 224-a of the Education Law of the State of New York. Students who plan to be absent from classroom activity for religious reasons should discuss the absence in advance with their instructors. See college catalog for more information.*

Services for Students with Disabilities: *It is the College's policy to provide, on an individual basis, appropriate academic adjustments for students with disabilities, which may affect their ability to fully participate in program or course activities or to meet course requirements. Students with disabilities should contact the Coordinator of Access and Equity Services, to discuss their particular need for accommodations. All course materials are available in alternate formats upon request.*

Course Description

This course is designed for the student who is experienced with HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets), and would like to learn how to use the JavaScript programming language to add dynamic interactivity and other advanced features to his/her web pages, and to enhance his/her ability to create practical and compelling web sites. Prerequisites: WD/CAPS 153; prior completion or concurrent enrollment in ENGL 099, MATH 090, and RDNG 116 if required by placement testing. 1 Cr. (2 Lec., 2 Lab. for 5 weeks) Fall and spring semesters.

Course Context/Audience

This is a required course in the Web Design, A.A.S. degree program. It is cross-listed as CAPS 154.

Basic Skills/Entry Level Expectations

Writing: W1 Student should be taking ENGL 099 (if needed). The course requires very limited writing, e.g., short written responses of a paragraph or less.

Math: M3 Taking MATH 095 (if needed) – Course requires the use of basic mathematical skills plus very limited basic algebra skills.

Reading: R3 Course may be taken concurrently with RDNG 116.

Other: General knowledge and experience with desktop computers and the Internet, and basic knowledge of HTML and CSS coding.

Course Goals

This course is designed to impart technical programming skills. Through the use of hands-on learning techniques, these skills will be demonstrated and practiced. Upon successful completion of the course, the student will be able to:

1. Use effective methods to solve Web site development problems by adding JavaScript features that enhance both the appearance and the usability of their pages.

2. Recognize the stated purpose in the reading material and determine those details which relate to the point of the material. Each lab assignment will be provided in written form (and will be submitted electronically). The student will be required to read and interpret the information in order to correctly complete the lab (assignment).

3. Recognize implicit points and implied relationships in the reading material. Solutions and appropriate solution methods will not always be explicitly stated.

4. Creatively integrate features provided in JavaScript with their own understanding of good Web page design.

5. Continue their learning of this and related subjects.

Course Objectives/Topics

Objective/Topic	% Course
Students will understand the structure and the components of JavaScript programs.	100%
Students will understand how to apply JavaScript code to their Web pages by integrating it with HTML.	10%
Students will learn to distinguish between problems that can be solved by HTML and CSS, and those which require Web-based programming languages such as JavaScript to solve.	10%
Students will be able to apply pre-written JavaScript code from free online libraries and use the code on their pages, changing specific code parameters to meet their needs.	40%
Students will be able to write their own simple JavaScript programs.	40%
*NOTE: The sum of the percentages assigned to each objective exceeds 100%, as many of the objectives overlap; in some cases requiring the same activity to accomplish several objectives.	

General Education Goals - Critical Thinking & Social/Global Awareness

CRITICAL THINKING OUTCOMES	**HOW DOES THE COURSE ADDRESS THE OUTCOMES** (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
Students will be able to ➢ develop meaningful questions to address problems or issues. ➢ gather, interpret, and evaluate relevant sources of information. ➢ reach informed conclusions and solutions. ➢ consider analytically the viewpoints of self and others.	Students will discuss current issues in web page design. Students will gather information from various sources for projects, then compare and contract their findings. Group discussion and/or projects will allow students to develop the ability to solve problems effectively and creatively. Projects and/or discussion topics will be assigned.
SOCIAL/GLOBAL AWARENESS OUTCOMES	**HOW DOES THE COURSE ADDRESS THE OUTCOMES** (Include required or recommended instructional resources, strategies, learning activities, assignments, etc., that must or could be used to address the goal/outcomes)
➢ Students will begin to understand how their lives are shaped by the complex world in which they live. ➢ Students will understand that their actions have social, economic and environmental consequences.	Students will compare various opinions including globalization, internationalization, accessibility and/or sustainability. They will have to analyze information from various sources and make web page design recommendations and decisions based on the results. Projects and/or discussion topics will be assigned.

Instructional Methods
Sequence of material:

1. Integrating JavaScript with HTML
2. Variables
3. Arrays
4. Expressions, Conditions, and Operators
5. Statements
6. Functions and Events
7. Objects

Teaching methods:
Students will work on desktop computers in a hands-on manner. Lectures will be provided along with textbook readings and online assignments. Software will be provided to allow students to work from multiples locations. Students will work creatively on the computer to design and implement a new or enhanced Web site, using the JavaScript programming language.

Additional materials:
Students will be encouraged to draw upon the many Web based resources (existing sites, software, articles, tutorials, etc.) that are available both to demonstrate the use of the tools and methods taught, and to acquire technical information about the course content. It is expected that this course will provide students with the ability to continue their learning after the course is completed.

Methods of Assessment/Evaluation

Method	% Course Grade
Assignments, quizzes, and/or written work	40-60%
Final Project	30-50%
Class Participation	10%

Text(s)

JavaScript 1.5, Example, Adrian and Kathie Kingsley-Hughes, Latest Edition, Que.

Bibliography

JavaScript Goodies. Burns, Joe, 2nd edition. Que. © 2002.

JavaScript Programming for the Absolute Beginner. Harris, Andy, Premier Press, © 2001.

Teach Yourself JavaScript in 24 Hours. Moncur, Michael G., Sams, © 2001.

JavaScript: A Beginner's Guide. Pollack, John. Osborne McGraw-Hill, © 2001.

Other Learning Resources

Audiovisual No resources specified
Electronic Articles, software, and other materials available through TC3's e-reserves Web-based learning resources list on the JavaScript Resources Web page: (http://www.acad.sunytccc.edu/ets/tutorials/javascript.htm) Web sites that are already using JavaScript will provide students with examples of both implementation and code, that will enhance their learning of this subject.
Other No resources specified