WEB 2300 - JavaScript
3 Credit Hours

Course Description:

This course teaches developers how to use the features of the JavaScript language to design client-side, platform-independent solutions. Students learn how to write JavaScript programs, script for the JavaScript object model, control program flow, validate forms, animate images, target frames, and create cookies. Students will also understand and use the most popular applications of JavaScript.

Course Outcomes:

Students will learn to:

- Describe the origins of JavaScript.
- List the key JavaScript characteristics.
- Describe the differences between Java and JavaScript.
- Discern among JavaScript JScript, and VBScript.
- Differentiate among server-side and client-side JavaScript applications.
- Embed JavaScript into HTML.
- Use the JavaScript comment tags.
- Communicate with users through the alert(), prompt () and confirm () methods.
- Define variables.
- Define data types.
- Obtain user input and store it in variables.
- Report variable text to the client window.
Discern between concatenation and addition.

Use expressions.

Use operators.

Define inline scripting.

Implement simple events such as onLoad() and onUnload().

Define keywords and reserved words.

Define functions.

Call functions.

Pass arguments to functions.

Return values from functions.

Define operator precedence.

Discern between global and local variables.

Employ the conditional operator.

Identify user events and event handlers.

Use methods as functions.

Use conversion methods.

Use the if… statement.

Use the while… statement.

Use the for… statement.

Use the break and continue statements.

Define the do…while statement.

Use the switch… statement.
Describe the JavaScript object model.

Use the window object.

Manipulate properties and methods of the document object.

Use the with statement.

Deploy the image object.

Evaluate and change URL information with the location object.

Use the navigator object.

Use the String Object to test user input.

Identify basic regular expressions and the RegExp object.

Deploy the Array object to create more efficient code.

Identify uses for the Date and Math objects.

Identify and use form controls.

Refer to form objects.

Define the form object.

Use the button object.

Use the checkbox object.

Evaluate text in the text and textarea subjects.

Process radio objects options.

Capture choices from a select list.

Conduct form validation.

Explain cookies.

Delete cookies from your disk.
Assign a cookie.

Test for the presence of a cookie.

Clear a cookie.

Enable and disable cookies in the browser.

Use cookies and passwords to restrict entry to a page.

Discuss security issues relevant to JavaScript.

Define signed scripts.

Target frames with JavaScript.

Change two or more frames simultaneously.

Use functions and variables within framesets.

Use functions and variables with related windows.

Target the opener window.

Create a custom JavaScript object.

Define properties and methods of custom objects.

Create new object instances.

Create client-side databases using custom objects.

Create functions and methods for manipulating client-side databases.

Prerequisites and Corequisites:

Practical knowledge of how the Internet operates, HTML code and web page design.

Course Topics:
Lesson 1: Introduction to JavaScript
Lesson 2: Working with Variables and Data in JavaScript
Lesson 3: Functions Lesson 4: Methods and Events in JavaScript
Lesson 5: Controlling Program Flow in JavaScript
Lesson 6: The JavaScript Object Model
Lesson 7: The JavaScript Object Model (cont.)
Lesson 8: Midterm Review and Discussions
Lesson 9: JavaScript Language Objects
Lesson 10: JavaScript Language Objects (cont.)
Lesson 11: Developing Interactive Forms with JavaScript
Lesson 12: Cookies and JavaScript Security
Lesson 13: Controlling Frames with JavaScript
Lesson 14: Custom JavaScript Objects Lesson 15: Reflection and Summary

Specific Course Requirements:

Students taking this course should be proficient in Windows XP or Vista; have a working knowledge of the Internet; and have a working knowledge of web page development using HTML, an HTML editor, and industry standard Web development software. Students should also be able to submit files online using online courseware, SFTP software, and email attachments.

Required Textbooks:

Please visit the Virtual Bookstore to obtain textbook information for this course. Move your cursor over the "Books" link in the navigation bar and select "Textbooks & Course Materials." Select your Program, Term, Department, and Course; then select "Submit."
Supplementary Materials:

Students will also need to subscribe to training videos from Lynda.com. Student should have Zip disks, CDs or DVDs available for saving and external back-up of work. Update back-ups of your work during each session, so in the event of computer or service problems work can be transferred or sent to instructor. (The student is responsible for keeping work safe and sending it to be evaluated.)

Hardware and Software Requirements:

Minimum hardware requirements can be found here.

Minimum software requirements can be found here.

Common applications you might need:
To read a PDF file download the latest version of Adobe Reader here
Don’t have Microsoft Word? Explore an alternative OpenOffice here
Accessing a PowerPoint file? Download the PowerPoint Viewer here

Web Resources:

Purdue OWL Online Writing Lab (for APA, MLA, or Chicago style)

The Writing Center Online Writer's Handbook

Student Resources:

- Technical support information can be found on the TN eCampus Help Desk page.
- Smarthinking virtual tutoring is available FREE of charge. To access Smarthinking, visit the course homepage and select Smarthinking under Course Resources. You also view sample sessions to see what Smarthinking offers and how it works.
- Information on other student issues or concerns can be located on the TN eCampus Student Resources page.

Instructor Information:

Please see "Instructor Information" in the Getting Started Module for instructor contact information, virtual office hours, and other communication information. You can expect to receive a response from the instructor within 24-48 hours unless notified of extenuating
Testing Procedures:

Online quizzes will be built into the course. Due to security issues in online testing, the weighting of the quizzes will be minor in relation to the overall grade for the course. The primary portion of the student's grade will be based on the projects completed and discussion board participation. The purpose of the online quizzes is to encourage the student to work through the exercises and to become familiar with the textbook chapters. The quiz items will be randomly generated from a bank of quiz items; each student may receive a different set of quiz questions over a specific topic.

Grading Procedures:

Projects: 60 percent of grade.

Students will be given several chapter-based projects (a.k.a. labs). The projects will be completed in the course of reading and working through the textbook.

Quizzes: 20 percent of grade.

Students will take a series of non-cumulative theory quizzes over textbook content during the course. These quizzes will consist of true/false, multiple choice, and short answer questions. Students will take a similar comprehensive final quiz at the end of the course.

Online Participation: 20 percent of grade

Students will use Discussion to communicate with each other and the instructor. The Discussion board will be used to discuss assignments, ask for assistance, provide information, ask questions and help other students in the class. Active helpful participation earns points for class participation.

Grading Scale:

The following grading scale will be used in this course:
A 90-100%  
B 80-89 %  
C 70-79 %  
D 60-69 %  
F 0-59 %

**Assignments and Projects:**

Readings: You will be assigned readings from the textbook as well as guidelines, articles and online tutorials. To create effective web sites, you learn best by doing--and the course is designed for hands-on exercises as you work through the chapters.

Assignments/Projects: Assignments for the week are usually due at the end of each weekend. This will give you 7 days for each topic and the weekend to work. Always check assignments themselves for any change in due dates.

Quizzes: There will be online quizzes delivered through D2L. These quizzes will consist of true/false and multiple choice questions and will check the comprehension of the reading and practical application of the textbook chapters and assigned tutorials. Students may use their textbooks while completing the quizzes.

**Class Participation:**
Students are expected to communicate and submit work on a weekly basis at a minimum. This includes taking quizzes, submitting assignments and communicating through the discussion board. Class participation is monitored and used to award points. Participation in Discussions by contributing information, helping each other, solving problems and answering questions is rewarded.

**Late Policy:**

Assignments are expected to be in by the due date and time. Under extenuating circumstances the instructor may grant an extension. If you require an extension you must contact the instructor before the assignment is due. Any partial credit that is offered is at the discretion of the instructor. Course Ground Rules

**Course Ground Rules:**

*The following two statements (1., 2.) were derived from the TBR System-wide Student Rules document, released January 2012:*

RULES OF THE TENNESSEE BOARD OF REGENTS STATE UNIVERSITY AND COMMUNITY COLLEGE SYSTEM OF TENNESSEE SYSTEMWIDE STUDENT RULES
CHAPTER 0240-02-03 STUDENT CONDUCT AND DISCIPLINARY SANCTIONS

Read the document in its entirety here.

**1. Standards of Conduct:**

- Students are required to adhere to the same professional, legal and ethical standards of conduct online as on campus. In addition, students should conform to generally accepted standards of "netiquette" while sending e-mail, posting comments to the discussion board, and while participating in other means of communicating online. Specifically, students should refrain from inappropriate and/or offensive language, comments and actions.
2. Review the TN eCampus Academic Integrity/Academic Honesty Policy:

- In their academic activities, students are expected to maintain high standards of honesty and integrity. Academic dishonesty is prohibited.

Such conduct includes, but is not limited to:

- an attempt by one or more students to use unauthorized information in the taking of an exam
- to submit as one’s own work, themes, reports, drawings, laboratory notes, computer programs, or other products prepared by another person,
- or to knowingly assist another student in obtaining or using unauthorized materials.

Plagiarism, cheating, and other forms of academic dishonesty are prohibited.

Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are subject to disciplinary action through the regular procedures of the student’s home institution. Refer to the student handbook provided by your home institution to review the student conduct policy.

In addition to other possible disciplinary sanctions that may be imposed, the instructor has the authority to assign an "F" or zero for an activity or to assign an "F" for the course.

Other Course Rules:

Students are expected to:

- Participate in all aspects of the course
- Communicate with other students
- Learn how to navigate in Brightspace
- Keep abreast of course announcements
- Use the assigned course management (Brightspace) email address rather than a personal email address
- Address technical problems immediately:
  - Contact Technical Support
  - View Term Calendar here
- Observe course netiquette at all times.

Guidelines for Communications:

Email:
• Always include a subject line.
• Remember without facial expressions some comments may be taken the wrong way. Be careful in wording your emails. Use of emoticons might be helpful in some cases.
• Use standard fonts.
• Do not send large attachments without permission.
• Special formatting such as centering, audio messages, tables, html, etc. should be avoided unless necessary to complete an assignment or other communication.
• Respect the privacy of other class members

Discussions:

• Review the discussion threads thoroughly before entering the discussion. Be a lurker then a discussant.
• Try to maintain threads by using the "Reply" button rather starting a new topic.
• Do not make insulting or inflammatory statements to other members of the discussion group. Be respectful of other’s ideas.
• Be patient and read the comments of other group members thoroughly before entering your remarks.
• Be cooperative with group leaders in completing assigned tasks.
• Be positive and constructive in group discussions.
• Respond in a thoughtful and timely manner.

Library:

The Tennessee Virtual Library is available to all students enrolled in TN eCampus programs and courses. Links to library materials (such as electronic journals, databases, interlibrary loans, digital reserves, dictionaries, encyclopedias, maps, and librarian support) and Internet resources needed by learners to complete online assignments and as background reading will be included within the course modules. To access the Virtual Library, go to the course homepage and select the Virtual Library link under Course Resources.

Students with Disabilities:

Qualified students with disabilities will be provided reasonable and necessary academic accommodations if determined eligible by the appropriate disability services staff at their home institution. Prior to granting disability accommodations in this course, the instructor must receive written verification of a student's eligibility for specific accommodations from the disability services staff at the home institution. It is the student's responsibility to initiate contact with their home institution's disability services staff and to follow the established procedures for having the accommodation notice sent to the instructor.
Syllabus Changes:

The instructor reserves the right to make changes as necessary to this syllabus. If changes are necessitated during the term of the course, the instructor will immediately notify students of such changes both by individual email communication and posting both notification and nature of change(s) on the course bulletin board.

Disclaimer

The information contained in this syllabus is for general information purposes only. While we endeavor to keep this information up-to-date and accurate, there may be some discrepancies between this syllabus and the one found in your online course. The syllabus of record is the one found in your online course. Please make sure you read the syllabus in your course at the beginning of the semester. Questions regarding course content should be directed to your instructor.