Course Description: Skill development in web page programming including mark-up and scripting languages.

Objectives: The objective of this class is instruction in designing and developing web pages that incorporate text, graphics, client-side scripting and multimedia using Cascading Style Sheets (CSS), HTML, JavaScript and jQuery.

Overview: Instruction in Internet Web page programming and related graphic design issues including mark-up language, Web sites, Internet access software, and interactive topics. The primary focus of this course is creation of interactive web pages using Javascript.

Prerequisites: There are no required prerequisites for this course. However, students should already be familiar with basic web page creation using HTML and CSS.

Required Textbook:

*JavaScript & jQuery, the missing manual, Second Edition*
by David Sawyer McFarland.
O'Reilly Media, Inc.
ISBN: 978-1491947074s

Instructor:

Mark Bench  
Phone: 214-677-6393  
eMail: mbench@dcccd.edu  
Office hours: by appointment

Learning Outcomes:
Successful completion of this course will enable the student to:

- Create web sites utilizing a markup language  
- Design, develop, and evaluate interactive web sites  
- Learn JavaScript programming including loops, functions, arrays, variables and event-handling  
- Create JavaScript scripts that execute within a Web page  
- Use JavaScript to create rollovers, slide shows and other dynamic image effects within a Web page
• Work with frames and windows dynamically
• Validate and process form data
• Dynamically handle mouse and keyboard events within a Web page
• Add, delete and modify cookies
• Create dynamic Web pages
• Learn how to use simple AJAX techniques

Program Objectives:

• Produce graphics, layout elements and applicable code for a web site.
• Perform web programming including HTML, CSS, JavaScript, PHP, CMS or other technologies to develop a website

Course Outline:

• Week 1: Orientation, Syllabus; HTML/CSS Review, Introduction to JavaScript
  Lab 1
• Week 2: Built-in functions, data, variables, arrays
  Lab 2
• Week 3: Conditional Statements, Loops, Functions
  Lab 3
• Week 4: Strings, numbers, Date and Time
• Week 5: Project 1
  Exam 1
• Week 6: Introduction to jQuery
  Lab 6
• Week 7: Events
  Lab 7
• Week 8: Animations and Effects
• Week 9: Advanced jQuery
  Exam 2
  Project 2
• Week 10: Images and Navigation
  Lab 10
• Week 11: Enhancing Web Forms
  Lab 11
• Week 12: jQuery UI
  Lab 12
• Week 13: Forms Revisited
  Project 3
• Week 14: Introducing Ajax
• Week 15: To-Do List Application
• Week 16: Lab 13/14
  Exam 3
GRADING PROCEDURES

You will accumulate course points for work done as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Maximum Points</th>
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<tbody>
<tr>
<td>3 Exams @ 50 points each</td>
<td>150</td>
</tr>
<tr>
<td>10 Lab Assignments @ 55 points each</td>
<td>550</td>
</tr>
<tr>
<td>3 Projects @ 100 points each</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1000</strong></td>
</tr>
</tbody>
</table>

Your final course grade will be determined as shown:

<table>
<thead>
<tr>
<th>Points Earned</th>
<th>Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>900-1000</td>
<td>A</td>
</tr>
<tr>
<td>800-899</td>
<td>B</td>
</tr>
<tr>
<td>700-799</td>
<td>C</td>
</tr>
<tr>
<td>600-699</td>
<td>D</td>
</tr>
<tr>
<td>000-599</td>
<td>F</td>
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</tbody>
</table>

Student Participation:

Students are expected to read and follow the examples in the textbook, review the lecture notes and complete all assignments and exams as outlined in the course schedule.

Late Points:

A late penalty of 5 points per week will be assessed on any assignment that is turned in late. Late work will be accepted up to 1 month past the due date or the final course date whichever is sooner. After that time, a grade of 0 will be recorded.

COMMUNICATION WITH YOUR INSTRUCTOR  I try to review and grade all newly posted material within 2-3 days. Also, you can expect me to respond to your e-mails normally within 24 hours. Be aware that while this is my general and intended practice, it is subject to the changes and chances of life.

Syllabus Addendum - Institutional Policies (http://www.brookhavencollege.edu/about/vpi/Pages/Syllabus-Addendum.aspx)

Go to http://www.brookhavencollege.edu/onlinesvcs/students/ to learn about all the student services that are available.