CIS 207   Introduction to Web Development

I. CIS 207 Introduction to Web Development– 3 Semester Hours

II. Course Description
This course introduces basic Web page development techniques. Topics include HTML, scripting languages, and commercial software packages used in the development of Web pages. At the conclusion of this course, students will be able to use specified markup languages to develop basic Web pages.

III. Prerequisite
CIS 130 or equivalent background

IV. Textbook
Textbook: New Perspectives on HTML & CSS, 6th Edition Comprehensive
Publisher: Course Technology
Author: Carey

V. Course Objectives
1. Develop Web pages that incorporate a variety of features found in private and commercial applications.
2. Use a specified markup language to develop a Web page containing basic HTML tags.
3. Create a Web page that includes various types of hyperlinks.
4. Design a Web page that incorporates specified colors and graphics.
5. Design a Web page that incorporates tables.
6. Design a Web page that incorporates forms with specified elements.
7. Design a Web page that incorporates cascading style sheets.
8. Design a Web page that incorporates JavaScript.

VI. Course Outline of Topics
1. Develop Web pages that incorporate a variety of features found in private and commercial applications.
2. Use a specified markup language to develop a Web page containing basic HTML tags.
3. Create a Web page that includes various types of hyperlinks.
    a. Creating hypertext documents
    b. Web page structure
        i. Linear
        ii. Hierarchical
        iii. Mixed
    c. Creating links
    d. Linking to other documents
    e. Linking to documents on the Internet
    f. Displaying linked documents in a new window
    g. Linking to other Internet objects
    h. Creating anchors
4. Design a Web page that incorporates specified colors and graphics.
    a. Colors
        i. Working with colors in HTML
            1. Names
            2. Values

        ii.   Specifying color schemes

        iii.   Modifying text with <font>tags
           1. Size
           2. Color
           3. Face Specifying color
   b. Graphics
        i.   GIF files
           1. GIF controversy
           2. Transparent
           3. Animation
        ii.   JPEGs
        iii.   Controlling image placement and size
           1. Alignment
           2. Spacing
           3. Image size
        iv.   Using the "alt" attribute

5. Design a Web page that incorporates tables.
   a. Creating text tables
   b. Defining a table structure
        i.   Table - <table>
        ii.   Table row - <tr>
        iii.   Table data - <td>
        iv.   Table header – <th>
        v.   Identifying the table heading, body, and footer
        vi.   Table captions
   c. Modifying tables
        i.   Borders
        ii.   Cell padding and spacing
        iii.   Frames and rules
        iv.   Table and cell size
        v.   Aligning tables and content
        vi.   Spanning rows and columns
        vii.   Color schemes of tables
   d. Controlling page alignment with tables
        i.   Outer
        ii.   Nested
        iii.   Outer and Inner

6. Design a Web page that incorporates forms with specified elements.
   a. CGI scripts
   b. <form> tags
   c. Form elements
        i.   Input boxes
        ii.   Radio buttons (option buttons)
        iii.   Selection lists
        iv.   Check boxes
        v.   Text areas
        vi.   Submit button
        vii.   Reset button
        viii.   Hidden fields
   d. "Mailto" option
   e. Tab order
   f. Access key

7. Design a Web page that incorporates cascading style sheets.
   a. Introduction to cascading style sheets

b. Type
   i. Inline style sheets
   ii. Embedded
   iii. External
c. Resolving style precedence
d. Style inheritance
   i. Parent and descendant elements
   ii. Contextual selectors
e. Using external CSS to control HTML appearance
   i. Font and text attributes
   ii. Families and size
   iii. Color and background
   iv. Aligning text
   v. List styles
   vi. Formatting hypertext links
   vii. Container elements
   viii. Block-level element boxes
f. IDs and Classes

8. Design a Web page that incorporates JavaScript.
   a. Server-side and Client side programs
   b. Development of Java and Java script
   c. Running JavaScript
      i. <script> tag
      ii. Hiding script
   d. Sending output to a Web page
   e. Variables and data
   f. Dates
   g. Expressions and operators
      i. Arithmetic
      ii. Assignment
      iii. Comparison
      iv. Logical
   h. JavaScript functions
   i. Conditional statements
   j. Basic use of loops and arrays
   k. Form validation
   l. JavaScript objects
      i. Objects and object names
      ii. Document object model
      iii. Object collections
   m. Object properties
      i. Modifying values
      ii. Assigning property values to variables
      iii. Conditional expressions
   n. Managing events
      i. Event handlers
      ii. JavaScript commands as hypertext links
      iii. Initiating events
   o. Creating a calculated field
   p. Working with a selection list
   q. Radio buttons
   r. "this" keyword

VII. **Evaluation and Assessment**
Evaluation and assessment will be determined by the instructor and specified on the instructor's class syllabus. Grades will be based upon following scale: A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

VIII. **Attendance**
Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. **Statement on Discrimination/Harassment**
The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

X. **Americans with Disabilities**
The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. The ADA Accommodations Office is in FSC 305 (205-856-7731).