CIS 131
WEB PAGE DEVELOPMENT
FALL 2019

Oakton Community College

SCHEDULE

Tutorial #1 - Getting Started with HTML5
Tutorial #2 - Getting Started with CSS3
Tutorial #3 - Designing a Page Layout
Tutorial #4 - Graphic Design with CSS3
Tutorial #5 - Designing for the Mobile Web
Tutorial #6 - Working with Tables and Columns
Tutorial #7 - Designing a Web Form
Tutorial #8 - Enhancing a Website with Multimedia
Tutorial #9 - Getting Started with Javascript

Ross Capaccio, Instructor
Web Page Development

I. Course Prefix/Number: CIS 131/050

Course Name: Web Page Development
Credits: 4 (3 lecture; 1 lab)
Course Instructor: Ross H. Capaccio, MA
Division Telephone Number: (847) 635-1688
Classroom Number: 1836, Des Plaines Campus
Time: 6:00pm – 9:55pm, Tuesday
Office Hours: Tuesday 3:30pm – 5:30pm, Room 2110 (or by appointment).
Email: rcapacci@oakton.edu
Faculty Web Site: www.oakton.edu/~rcapacci

II. Prerequisite
Recommended: CIS111 or concurrent enrollment in CIS111 and ability to manage files and folders using Windows OR consent of instructor or program coordinator.

III. Course (Catalog) Description
Course introduces theoretical and hands-on instruction on the processes needed to create customized and interactive Web pages using HTML and Cascading Style Sheets (CSS). Content includes commands (tags) to create, format, and link documents; tables, graphics, styles, forms, multimedia (audio, video), navigation bar, introduction to scripting, and other features of a Web page and guidelines for designing effective Web pages and Web sites.

IV. Learning Objectives
Upon successful completion of this course, the student should be able to:

- Create Web documents for Internet/intranet/extranet publication, incorporating text, organizational formatting, and design and including hypertext links, tables, graphics, styles, forms, multimedia and other Web page features
- Use Cascading Style Sheets (CSS) commands and techniques to layout and display Web pages
- Demonstrate the use of a document tree and semantic markup
- Demonstrate the use of CSS selectors
- Demonstrate the use of cascade, specificity, and inheritance
- Demonstrate the use of color, numbers, percentages, units of length, URLs and keywords for CSS properties
- Create, modify, and display a Web page using various text editors
- Analyze Web page layouts, design, and navigation
- Explain the relationship between the server operating system and Web pages
- Publish a Web page on the Internet/intranet

“Let’s Build Something Amazing Together!”
• Develop Web site specifications, content, and prototype of a Web page for a client
• Customize, execute, and use a JavaScript
• Demonstrate the use of internal documentation in the HTML coding
• Explain copyright guidelines with reference to Web pages
• Explain new trends in Web page development
• Construct a customized Web site as a final project using the concepts learned in this class

V. Academic Integrity

Students and employees at Oakton Community College are required to demonstrate academic integrity and follow Oakton’s Code of Academic Conduct.

This code prohibits:

• Cheating,
• Plagiarism (turning in work not written by you, or lacking proper citation),
• Falsification and fabrication (lying or distorting the truth),
• Helping others to cheat,
• Unauthorized changes on official documents,
• Pretending to be someone else or having someone else pretend to be you,
• Making or accepting bribes, special favors, or threats, and
• Any other behavior that violates academic integrity.

There are serious consequences to violations of the academic integrity policy. Oakton’s policies and procedures provide students a fair hearing if a complaint is made against you. If you are found to have violated the policy, the minimum penalty is failure on the assignment and, a disciplinary record will be established and kept on file in the office of the Vice President for Student Affairs for a period of 3 years. Details of the Code of Academic Conduct can be found in the Student Handbook.

Students are expected to adhere to the Codes of Student and Academic Conduct, which can be found within the Student Handbook:
http://www.oakton.edu/studentlife/studenthandbook.pdf

Important Links:

If you are not sure what plagiarism is, go to this Oakton College resource:

Plagiarism Questions
http://www.oakton.edu/studentlife/academic_conduct/index.php

Code of Student Conduct
http://www.oakton.edu/studentlife/code_student_conduct/
VI. Outline of Topics

A. World Wide Web Overview
   1. How the Web works
      a. HTTP Server
      b. Browser software
   2. Internet/intranet/extranet relationship

B. Publishing on the Web
   1. Elements of a Web page
      a. Text
      b. Links
      c. Images and multimedia
   2. Markup language - HTML
      a. Structure vs. layout
      b. Tags
   3. Types of HTML editors and converters
   4. Copyright issues
   5. History of HTML and its offshoots

C. What Makes a Good Web page Good

D. Developing a Web presentation
   1. Defining Specifications
      a. Objectives
      b. Audience
      c. Content
   2. Organization of content
   3. Web site mapping

E. Web page design
   1. Style Guides
      a. Text
      b. (Optimizing) Graphics
      c. Navigation

F. Accessibility Standards for the Web

G. Creating Web pages
   1. Overview of tools and techniques
      a. Authoring software
      b. Text editors
      c. View source code
   2. Basics of HTML and document markup
      a. Document Structure
      b. Text Markup
      c. Inserting images
      d. Creating Links
   3. HTML 5.0 Tools and Concepts
      a. Heading levels
      b. Lists
      c. Text styling
      d. Special characters
      e. Inline graphics and thumbnails
      f. Links
      g. Fonts
      h. Web Table Layout

“Let’s Build Something Amazing Together!”
i. Image Maps
j. Deprecated Frame site structure conversion
k. `<div>` and `<span>` tags and create styles
l. Web Forms
m. Multimedia (audio and video)
n. Metatags

4. Cascading Style Sheets
   a. Applying a style sheet (Inline, Embedded, External)
   b. Precedence, Specificity and Inheritance
c. Defining Color
d. Text Properties
e. Holder/Container tags
f. Selector Patterns
g. Backgrounds
h. Absolute vs. Relative Positioning
   i. Drop shadows
j. Rotating an Object
k. Properties

5. Graphics and their use
   a. Graphic formats for the web
   b. Finding and using existing graphics

H. Publishing a Web page
   1. Testing the Web page
   2. P: drive as the Web Server at Oakton
   3. Transferring files
      a. FTP
      b. Oakton Fileway
   4. Changing permissions
   5. Web hosting
   6. Promoting a Web site
      a. Search Engine placement
      b. Other options
   7. Absolute vs. Relative Paths

I. XHTML

J. Java Applets

K. Introduction to JavaScript
   1. Server-Side vs. Client-Side
   2. Programming logic
   3. Syntax
   4. Variables
   5. Script element
   6. Functions

L. Trends and new topics
   1. Web pages for mobile devices
   2. Interactivity & personalization
   3. Database connectivity
   4. Integrating social media tools effects
   5. Blogging on a web site presence
   6. MS tags or QR tags used to attract Web visitors Paths
VII. Methods of Instruction

Class demonstrations, hands-on usage, textbook reading, applicable Web site references, lectures, class discussions, and guest speakers may be used. Course may be taught as face-to-face, media-based, hybrid or online course deducted from your score for each day that it is late. Please be on time with your assignments.

VIII. Course Practices Required

1. Attend class as scheduled
2. Read course materials - textbook and current resources
3. Complete required assignments, quizzes, and exams as determined by the instructor
4. Complete a final project which involves the development of a multi-page Web site
5. Attend and participate in lab as required by the instructor

IX. Instructional Materials Note: Current textbook information for each course and section is available on Oakton's Schedule of Classes.

X. Methods of Evaluating Student Progress

A. Quizzes to be determined by instructor
B. Exams to be determined by instructor
C. Evaluation of lab exercises
D. Evaluation of a culminating multi-page Web site final project
E. Evaluation of other homework assignments

Assigned work evaluated as follows:

4 quizzes (25 points each) ................................................................. 100 points
Plan for your Final Project ............................................................... 30 points
Class participation ............................................................................ 20 points
9 Tutorials placed in your P-Drive ..................................................... 150 points
1 Web Site Final Project .................................................................. 100 points

GRAND TOTAL .................................................................................. 400 points

Late Policy: Tutorials must be accessible on your P-Drive by noon before each class. Two (2) points will be deducted from your score for each day that it is late.

<table>
<thead>
<tr>
<th>Grade/Percent</th>
<th>Point Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A (90%)</td>
<td>360</td>
</tr>
<tr>
<td>B (80%)</td>
<td>320</td>
</tr>
<tr>
<td>C (70%)</td>
<td>280</td>
</tr>
<tr>
<td>D (60%)</td>
<td>240</td>
</tr>
<tr>
<td>F (Below 60%)</td>
<td>Below 240</td>
</tr>
</tbody>
</table>
# Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Text</th>
<th>Topic</th>
<th>Projects</th>
<th>Quiz</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Introduction to Hypertext Markup Language (HTML5) and CSS3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Tutorial 1</td>
<td>Getting Started with HTML5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tutorial 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Tutorial 2</td>
<td>Getting started with Cascading Style Sheets - CSS3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tutorial 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Advanced Cascading Style Sheets (CSS3)</strong></td>
<td></td>
<td>Quiz #1</td>
<td>Tutorials 1 &amp; 2</td>
</tr>
<tr>
<td>5</td>
<td>Tutorial 3</td>
<td>Designing a Page Layout with CSS3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Tutorial 4</td>
<td>Graphic Design with CSS3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Tutorial 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Introduction to Responsive Web Design</strong></td>
<td></td>
<td>Quiz #2</td>
<td>Tutorials 3 &amp; 4</td>
</tr>
<tr>
<td>8</td>
<td>Tutorial 5</td>
<td>Designing for the Mobile Web</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Tutorial 6</td>
<td>Working with Tables and Columns</td>
<td>Due: plan for your final project Web site</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Tutorial 7</td>
<td>Designing a Web Form</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Tutorial 7</td>
<td></td>
<td></td>
<td>Quiz #3 Tutorials 5 &amp; 6</td>
</tr>
<tr>
<td></td>
<td><strong>Managing Digital Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Tutorial 8</td>
<td>Enhancing a Website with Multimedia</td>
<td></td>
<td>Quiz #4 Tutorials 7,8 &amp; 9</td>
</tr>
<tr>
<td>13</td>
<td>Tutorial 9</td>
<td>Getting Started with JavaScript</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>Final project presentations in class</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“Let’s Build Something Amazing Together!”
XI. Other Course Information

A. Disabilities Policy: If you have a documented learning, psychological, or physical disability you may be entitled to reasonable academic accommodations or services. To request accommodations or services, contact the Access and Disability Resource Center at the Des Plaines or Skokie campus. All students are expected to fulfill essential course requirements. The College will not waive any essential skill or requirement of a course or degree program.

B. College Policy on Observance of Religious Holidays: Oakton Community College recognizes the broad diversity of religious beliefs of its student body. To resolve conflicts that could arise from various observances, it is the College’s practice that, when possible, examinations and major assignments should not be scheduled for these times. If exams or assignments must occur on a major religious holiday, students who inform instructors ahead of time of their intended absence will not be penalized. It is the responsibility of the student to inform his or her instructor(s) well in advance of intended absence.

C. RESPONSIBLE USE OF COMPUTERS AND INFORMATION TECHNOLOGY: You may use any of the computer labs at either the Des Plaines or Ray Hartstein (Skokie) campuses to do work outside of the scheduled class time. Rules for computer use are posted in computer labs as well as available in writing in each of the labs. Lab assistants and tutors are available to assist you in the lab regarding software and hardware questions. If you have a question about an assignment, however, you should contact me. You may use your own computer at home or work if you have whichever software package we are working with for that particular assignment. Use of Oakton Information Technology resources is subject to policies and guidelines posted online at http://www.oakton.edu/about/officesanddepartments/info_tech/policies/index.php.

UNDER NO CIRCUMSTANCES ARE ANY OF THE SOFTWARE USED AT OAKTON TO BE COPIED. Our licensing agreement specifically forbids making more than the authorized number of copies; we have already made the maximum number of copies. Besides, due to the nature of Windows software, in nearly all cases it won’t work when copied.

D. HOWEVER, CERTAIN MICROSOFT SOFTWARE IS AVAILABLE: Oakton Community College has partnered with the MSDN (Microsoft Developer Network) Academic Alliance and DreamSpark Premium to provide credit students who are registered for CTIS (CIS and CAB) courses some of Microsoft’s software that you may use to complete your studies. It may not be reproduced, redistributed, sold, rented, leased, or transferred to any third party including contractors, other students, other department’s personnel, other companies, or consultants performing services. Any reproduction or redistribution of the software is prohibited by law, and may result in severe civil and criminal penalties. Currently this software includes MS Visual Studio.NET 2015, Microsoft Office Access 2013, Windows 7, Windows 10, Project Professional 2013, and Microsoft Visio Professional 2013. This service does not provide installation support, nor does Oakton.

Unfortunately, Microsoft Office (other than Access) is not part of this software partnership, so Word, Excel, and PowerPoint are not available. Sorry. BUT, Microsoft Office is available through a separate deal called “Office In Education” found at http://products.office.com/en-us/student/office-in-education - just as with the DreamSpark, Oakton provides NO support for this. I’ll explain what is involved in class. Other non-Microsoft software is not available, but as a student you qualify for academic pricing on many software packages. Check with the Oakton bookstore or search for “academic priced software” in your favorite search engine.

“Let’s Build Something Amazing Together!”
E. TUTORS Faculty tutors and student tutors are available in the Learning Center on both campuses and the 2600 labs on the Des Plaines campus. Check the following Web sites for the days and times when tutors are available:

- Des Plaines: http://www.oakton.edu/resource/iss/tutschdp.htm
- Skokie: http://www.oakton.edu/resource/iss/tutschrhc.htm

If you have a question about any assignment, please ask me. If you have a question about other software applications, please ask me or a tutor.

F. TITLE IX STATEMENT Oakton Community College is committed to maintaining a safe campus environment emphasizing the dignity and worth of all members of the community; and complies with all Title IX requirements by state and federal law.

For pregnancy-related accommodations, please see:
http://www.oakton.edu/about/title_ix_pregnancy_parent/

For resources and support for victim-survivors of sexual misconduct (including sexual harassment, sexual assault/rape, domestic violence, dating/intimate partner violence, and stalking), please see:
http://www.oakton.edu/about/title_ix_sexual_misconduct/

For resources and support for LGBTQ+ students, please see:
http://www.oakton.edu/about/officesanddepartments/access_equity_div/lgbtq/index.php

If you have a name that may appear differently on the roster or have a preference for gender pronouns, please see me after class. This allows the instructor to use correct name and address them based on your preference.

G. eTEXTBOOK On the first day of the course you will have direct access to the eTextbook (i.e., the full electronic textbook) via our course web site. You are charged a DDA (Direct Digital Access) fee upon registration that includes access to the eTextbook. Because you've already paid for it via your tuition/fees bill, you should NOT purchase the textbook via other means. If you want to "opt-out" of the DDA program, or if you need more information, please contact ddaoptout@oakton.edu.

Please note that for you to complete the course successfully you will need to have the Direct Digital Access DDA and not opt out.

Optional print version of the textbook. You also have the option of purchasing a low-cost loose-leaf print version of the text that would accompany your DDA electronic textbook access. You must be in the DDA program to get this printed material, should you want it. In other words, if you want this optional printed version don't "opt-out." The cost is roughly $30. You can secure this printed version via the Oakton bookstore.

“Let's Build Something Amazing Together!”