Schedule and Instructors:

Lecture: Mon., Wed. 6-7:30 pm  
STH B19  
745 Comm. Ave., lower level

Instructor: Susan Worst, sworst@bu.edu  
Department of Computer Science  
Office hours in PSY 228A  
64 Cummington Mall, 2nd floor

Lab: 3 sections, all in EMA 304  
730 Comm. Ave., 3rd floor

• Thu 9-10 am (section A2)  
• Thu 10-11 am (section A3)  
• Thu 1-2 pm (section A4)

Teaching fellow: Qiaobin Fu  
Department of Computer Science  
Office hours in EMA 302  
730 Comm. Ave., 3rd floor

Course website: https://learn.bu.edu/

The Computer Science Department tutors can also help with labs; see the schedule at  
http://www.bu.edu/cs/resources/tutoring/

Course Description:

CS 103 is an introduction to the World Wide Web. We will learn Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS), two fundamental languages of the Web, and introduce two popular Web programming languages, JavaScript and PHP. Each student will create his/her own website over the term. As we learn new techniques and technologies, we will explore issues of accessibility, usability, findability, performance, and security for each.

CS 103 has no prerequisites; it is intended for non-technical students interested in the web as well as computer-savvy students interested in deepening their knowledge. CS 103 earns math/computer science Divisional Studies credit.

Preliminary Lecture Outline:

1. Web fundamentals
   a. Domain names and web hosting
   b. Web usability and accessibility
   c. Internet security
   d. Copyright and Creative Commons licenses
2. Static web pages
   a. HTML: the language of the web
   b. CSS: applying style and layout
   c. Character encoding: the global web
   d. New developments: HTML5, CSS3, and responsive design
3. Dynamic web pages:
   a. What makes a web page dynamic?
   b. Web programming languages
   c. Content management systems
4. Web influence and group behavior:
   a. The Bow-Tie structure of the web
   b. PageRank: the original Google algorithm
   c. Search engine optimization

Boston University Department of Computer Science  
CAS CS 103: Introduction to Internet Technologies and Web Programming  
Fall 2015 Syllabus
Required Course Materials:

1. CS 103 does not have a paper textbook. We will draw heavily on these online resources:

   Readings from these resources and others will be posted on the Assignments page of the CS 103 Blackboard site (https://learn.bu.edu) each week.

2. Each student must purchase a domain name and web hosting that meets WordPress requirements. We recommend HostGator (http://www.hostgator.com/) as a relatively inexpensive WordPress-compatible option. You can buy 6 months of web hosting including a domain name (e.g., “yournamehere.com”) for $60-$75 total. Each student is responsible for purchasing his/her own domain name and web hosting; we will review how during the first lab.

3. We will use the TurningPoint Student Response System for polling during class. Each student must either purchase a clicker and a license from the BU Bookstore or install the ResponseWare software on his/her phone, purchase a license online, and bring the charged phone to every class. See the Course Information page of the CS 103 Blackboard site (https://learn.bu.edu) for detailed instructions.

4. The computers in the Undergraduate CS General Lab (EMA 302, 730 Commonwealth Avenue), which is open daily except on University holidays, have all software necessary to complete lab assignments. See http://www.bu.edu/cs/resources/laboratories/undergraduate-lab/ for the lab hours.

   Because the Undergraduate CS General Lab has all of the software you need, you do not need to work on your own computer to complete assignments. Information about optional free software will be provided on the Course Information page of the CS 103 Blackboard site (https://learn.bu.edu).

Lab Schedule:

<table>
<thead>
<tr>
<th>Lab Date</th>
<th>Topic</th>
<th>Lab Assignment Due</th>
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</thead>
<tbody>
<tr>
<td>Thurs Sep 3</td>
<td>Lab 0, part 1: Domain name registration and web hosting</td>
<td>See below</td>
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<tr>
<td>Thurs Sep 10</td>
<td>Lab 0, part 2: Working with web hosting; WordPress</td>
<td>Wed Sep 16, 1 pm</td>
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<tr>
<td>Thurs Sep 17</td>
<td>Lab 1: Intro to Hypertext Markup Language (HTML), part 1</td>
<td>Wed Sep 23, 1 pm</td>
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<td>Thurs Sep 24</td>
<td>Lab 2: Introduction to HTML, part 2 (images and tables)</td>
<td>Wed Sep 30, 1 pm</td>
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<tr>
<td>Thurs Oct 1</td>
<td>Lab 3: Introduction to Cascading Style Sheets (CSS)</td>
<td>Wed Oct 7, 1 pm</td>
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<td>Thurs Oct 8</td>
<td>Lab 4: Introduction to Web page layout</td>
<td>Wed Oct 14, 1 pm</td>
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<td>Thurs Oct 15</td>
<td>Lab 5: Web page layout with CSS</td>
<td>Wed Oct 21, 1 pm</td>
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<td>Thurs Oct 22</td>
<td>Lab 6: Firebug and CSS templates</td>
<td>Wed Oct 28, 1 pm</td>
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<tr>
<td>Thurs Oct 29</td>
<td>Lab 7: Building a site in WordPress</td>
<td>Wed Nov 4, 1 pm</td>
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<td>Thurs Nov 5</td>
<td>Lab 8: Project peer reviews: Attendance is mandatory.</td>
<td>Wed Nov 11, 1 pm</td>
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<td>Thurs Nov 12</td>
<td>Lab 9: JavaScript Utilities: Lightbox and Forms</td>
<td>Wed Nov 18, 1 pm</td>
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<td>Mon Nov 16 – Fri Nov 20</td>
<td>Lab 10: One-on-one project review</td>
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<tr>
<td>Thurs Nov 26</td>
<td>Lab does not meet (Thanksgiving)</td>
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<tr>
<td>Thurs Dec 3</td>
<td>Open lab with Qiaobin for work on projects</td>
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<tr>
<td>Thurs Dec 10</td>
<td>Lab does not meet (final project presentation week)</td>
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Homework and Lab Assignments

CS 103 includes one homework assignment and one lab assignment every week. These are posted on the Assignments page of the course website with due dates.

Homework assignments are due at the start of lecture (6 pm) on Mondays. Late homework assignments will not be accepted. If you must be absent from class, email your homework to Professor Worst before it is due.
Lab assignments are due at 1 pm on Wednesdays. A late penalty of 10% will be assessed for labs turned in up to 24 hours late, and 20% for labs turned in between 24 and 48 hours late. Labs turned in more than 48 hours after the due date will not be accepted.

**Exams**

CS 103 will include two in-class exams during the semester and one comprehensive final exam during the exam period. All exams will be given in our usual classroom. All are closed book and closed notes and must be completed independently. No calculators or other devices are allowed.

Exam 1: Tuesday, October 13, 2015 (a BU Monday) 6-7:30 pm
Exam 2: Monday, November 16, 2015 6-7:30 pm
Final Exam: Wednesday, December 16, 2015 (tentative) 6-8 pm

Please put these exam dates on your calendar now, and wait to make your end-of-semester travel plans until the final exam date is confirmed.

There are no make-up exams. If you cannot take an exam on the assigned date, you must email Professor Worst at least one week in advance to arrange to take the exam in advance.

**Final Project**

The final project is due on Wednesday, December 9 and includes three components:

- A website built by each student over the course of the semester
- An essay describing the website
- A short presentation of the website to the rest of the class.

You will present your project to your classmates on Monday, December 7 or Wednesday, December 9 during the usual lecture time. **You must be present for both days of presentations.** Absences from either day will result in deductions to your project grade.

**Course Grade**

The final course grade will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
<td>(after dropping lowest grade)</td>
</tr>
<tr>
<td>Lab assignments</td>
<td>20%</td>
<td>(after dropping lowest grade)</td>
</tr>
<tr>
<td>Exams 1 and 2</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Final project (website + writeup)</td>
<td>20%</td>
<td></td>
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<tr>
<td>Final exam</td>
<td>15%</td>
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<tr>
<td>Class participation</td>
<td>5%</td>
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To receive the maximum number of class participation points, you must have excellent attendance and do at least two of the following:

- Make useful posts to the Discussion Board on the course website (in addition to those required by homework)
- Make a presentation on Show and Tell Day (Monday, November 23)
- Participate in lab in a way that is exceptionally helpful to the class (e.g., asking questions, assisting others)
- Take other actions that enhance learning by the class.

Class participation points will be deducted for:

- An excessive number of absences
- Not responding to clicker questions
- Frequent lateness
- Not participating in, or being unprepared for, class discussion
- Other actions that detract from learning by the class.
Other Policies

You are responsible for reading course-related email from the instructor, teaching fellow, and graders, which will be sent to your bu.edu email address. Note that emails sent from Blackboard begin with "CS103 A1 Introduction to Internet Technologies and Web Programming (Fall 2015)" in the subject line.

The Discussion Board on the course website is the first place to go with questions about course material. Useful posts to the Discussion Board—both questions and responses—will contribute to the class participation part of your grade. Useful responses are ones that do not provide answers to homework questions directly, but help other students figure out the answers for themselves.

Notify Professor Worst by email (sworst@bu.edu) in advance if you will be absent from class. Include "CS 103" in the subject line of all course-related email messages.

Use laptops and other devices for note-taking only. Please turn off cell phones at the start of class.

Please write or type the following on homework assignments submitted on paper:

• Your name
• The date
• The course number (CS 103)
• The homework number
• Page numbers, if the homework is more than one page.

If the homework has multiple pages, please staple them.

You are expected to know and understand the provisions of the Boston University Academic Conduct Code (http://www.bu.edu/academics/policies/academic-conduct-code/). You are encouraged to work together to understand general concepts, but your homework assignments, lab assignments, and exams must represent your own work.

You are responsible for retaining all papers and exams that have been graded and returned.