ISCS 375:  
INTRODUCTION TO WEB DESIGN

<table>
<thead>
<tr>
<th>Semester: Fall 2018</th>
<th>Instructor: Dr. Robert Marmorstein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section/Days: M 9:54am-10:35am</td>
<td>E-mail: <a href="mailto:marmorsteinrm@longwood.edu">marmorsteinrm@longwood.edu</a></td>
</tr>
<tr>
<td>9:00am-10:40am</td>
<td>Office: Ruffner 329</td>
</tr>
<tr>
<td>M 11:26am-12:07pm</td>
<td>Office Hours: MWF 2:00 – 4:00pm,</td>
</tr>
<tr>
<td>WF 10:45am-12:15pm</td>
<td>TR 3:15 – 4:00pm and by appointment</td>
</tr>
<tr>
<td>Room/Time: Online</td>
<td>Office Phone: 434-395-2185</td>
</tr>
<tr>
<td>Credit Hours: 3</td>
<td>Website: <a href="http://marmorstein.org/~robert">http://marmorstein.org/~robert</a></td>
</tr>
</tbody>
</table>

### Basic Course Information

#### Required Course Materials:
- **Software:** The course will make extensive use of a Linux server. Our Linux server can be accessed over secure shell from the terminal in Linux or Mac OS X or using a client such as PuTTY in Windows. **You** are responsible for having the appropriate client installed on your system.

You will be submitting programming projects through the course web site. It is **your** responsibility to set up your computer and web browser to properly access the web site and submit system.

- **Canvas:** We will use the Canvas system for online quizzes and other communication. It is **your** responsibility to make sure that you can access the Canvas materials.

#### Recommended Course Materials:
- Students are encouraged to make use of the HTML Dog Website (http://htmldog.com), W3Schools (http://www.w3schools.com/), and the CSS Zen Garden (http://www.csszengarden.com/) for help with projects. **However, be sure to properly cite your sources!**

#### Course Description:
This course provides a basic understanding of the tools and techniques used to develop functional and responsive web sites. It explores the use of HTML5 to provide the underlying structure of the web site and CSS3 to control presentation and layout. The course also investigates the use of JavaScript to control behavior of page elements. Also covered are the use of server-side programming to process web forms the use of files and databases to store program state.

#### Writing Intensive: No
#### Speaking Intensive: No
COURSE STUDENT LEARNING OUTCOMES

Upon completion of this course, students will:

1. Know the elements of an HTTP transaction, including name resolution, from the network layer to the application layer.

2. Use standard web technology such as HTML, CSS, Javascript, and SQL to develop highly interactive web sites and applications.

3. Explain the web design process from needs analysis to final product.

4. Use SQL queries to insert data into a Database and retrieve it from an application.

BSBA DEGREE OUTCOMES

In this course students will:

Gain Core Business Knowledge
Integrate Concepts Across Disciplines
Communicate Effectively
Exercise Sound Ethical Reasoning
Analyze and Interpret Data

OVERVIEW OF COURSE FORMAT

In this class you will watch video lectures and test your knowledge of the content using weekly online quizzes. You should watch the video lectures all the way through and take detailed notes.

You will complete projects roughly every two weeks to further expand your knowledge and put in practice the information you have learned. It is very important to start the projects early. You should start them the day they are assigned and work on them both during class and outside of class. Every project will contain a "glitter" section that requires you to come up with your own creative idea. You should expect to put almost as much time into the glitter as you do the rest of the project.

The culminating experience of the course is a final exam. You should use your notes from the video lectures, your scores on the quizzes, and your feedback on the projects to study for this exam.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignments</th>
<th>Source</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 5 – 7</td>
<td>Basics of HTTP and HTML</td>
<td>Quiz 0: Class Policies</td>
<td>Class Handout</td>
<td>Sept. 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Lectures 1-2</td>
<td>YouTube</td>
<td></td>
</tr>
<tr>
<td>Sept. 10 – 14</td>
<td>Web Page Design using Cascading Style Sheets Site Design</td>
<td>Quiz 1: HTML**</td>
<td>Canvas</td>
<td>Sept. 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Lectures 3-5</td>
<td>YouTube</td>
<td></td>
</tr>
<tr>
<td>Sept. 17 – 22</td>
<td>Web Graphics and Multimedia</td>
<td>Quiz 2: CSS</td>
<td>Canvas</td>
<td>Sept. 17</td>
</tr>
<tr>
<td>(Half Day on the 19th)</td>
<td></td>
<td>Project 1 Due</td>
<td>Portal</td>
<td>11:59 pm Sept. 22</td>
</tr>
<tr>
<td></td>
<td>SVG Graphics in HTML 5</td>
<td>Video Lectures 6-7</td>
<td>YouTube</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Lectures 8 and 18</td>
<td>YouTube</td>
<td></td>
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<tr>
<td>Oct. 1 – 5</td>
<td>Advanced Javascript Programming, The DOM, Working with HTML 5 Canvas</td>
<td>Quiz 4: Javascript Project 2 Due</td>
<td>Canvas</td>
<td>Oct. 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Lectures 9-10</td>
<td>Portal</td>
<td>11:59 pm Oct. 5</td>
</tr>
<tr>
<td>Oct. 10 – 12</td>
<td>The JQuery Library</td>
<td>Quiz 5: Advanced Javascript</td>
<td>Canvas</td>
<td>Oct. 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Lecture 11</td>
<td>YouTube</td>
<td></td>
</tr>
<tr>
<td>Oct. 15 – 19</td>
<td>Introduction to Server-side Programming and HTML Forms</td>
<td>Quiz 6: JQuery Project 3 Due</td>
<td>Canvas</td>
<td>Oct. 15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Lectures 12-13</td>
<td>Portal</td>
<td>11:59 pm Oct. 19</td>
</tr>
<tr>
<td>Oct. 22 – 26</td>
<td>Processing Forms with CGI (Common Gateway Interface) Cookies and Sessions</td>
<td>Quiz 7: Python Project 4 Due</td>
<td>Canvas</td>
<td>Oct. 22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Lectures 14-15</td>
<td>YouTube</td>
<td></td>
</tr>
<tr>
<td>Oct. 29 – Nov. 2</td>
<td>Using a web framework: Flask and Jinja</td>
<td>Quiz 8: Cookies Project 4 Due</td>
<td>Canvas</td>
<td>Oct. 29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Lectures 16-17</td>
<td>Portal</td>
<td>11:59 pm Nov. 2</td>
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</table>
| Nov. 5 – 9 | Working with databases in SQL and Python | Quiz 9: Frameworks  
Video Lecture 19 | Canvas  
YouTube | Nov. 5 |
| --- | --- | --- | --- | --- |
| Nov. 12 – 16 | Advanced Database Programming: Data Definition Language  
Database Security | Quiz 10: SQL  
Video Lectures 20-21 | Canvas  
YouTube | Nov. 12 |
| Nov. 19 | Project Work Day  
Project 5 Due | Quiz 11: Tables and Columns  
Project 5 Due | Canvas  
Portal | Nov. 19  
11:59 pm Nov. 19 |
| Nov. 21 – 23 | Thanksgiving Break | Quiz 12: AJAX  
Video Lecture 23 | Canvas  
YouTube | Dec. 3 |
| Nov. 26 – 30 | NoSQL Databases  
Interactive Web Sites with AJAX | NoSQL Handout  
Video Lecture 22 | Portal  
YouTube | 11:59 pm Nov. 30 |
| Dec. 3 – 7 | Site Administration and Maintenance | Quiz 12: AJAX  
Video Lecture 23 | Canvas  
YouTube | Dec. 3 |
| Dec. 10 – 14 (Exam Week Schedule) | Web Marketing and Business Management | Quiz 13: Site Administration  
Video Lecture 24 | Canvas  
YouTube | Dec. 10 |
| Dec. 17 – 19 | Project Work Week  
Project 6 Due | Quiz 14: Marketing and Management  
Project 6 Due | CANVAS  
Portal | Dec. 17  
11:59 pm Dec. 19 |
| Dec. 20 – Jan. 2 | Winter Break | Video Lecture 25  
YouTube | Canvas  
YouTube | Jan. 7  
11:59pm Jan. 9 |
| Jan. 4 | Authentication and Security | Video Lecture 25  
YouTube | Canvas  
Portal | Jan. 7  
11:59pm Jan. 9 |
| Jan. 7 – 11 | Exam Preparation and Review Week  
Final Exam Review Packet | Quiz 15: Authentication and Security  
Final Exam Review Packet | Canvas  
Portal | Jan. 7  
11:59pm Jan. 9 |
| Jan. 14 | Final Exam* | Final Exam @Longwood | Canvas  
Portal | Jan. 14 |
| Jan. 16 – 18 | Component-Based Interfaces (ReactJS) | Video Lecture 26  
ReactJS Handout | YouTube  
Portal | 11:59pm Jan. 18 |

* Schedule subject to change.  
** All Canvas quizzes due by the end of class.
OVERVIEW OF COURSE FORMAT

Please be sure to read the instructions posted on the course web site for this course. If you have any questions about what is required, you should contact the instructor via email as soon as possible.

For most modules, you will view recorded lectures or presentations, and read texts and other course materials. Modules also include assignments, quizzes, tests or exams to evaluate your mastery of the content.

Additionally, you will be required to complete a series of programming projects to demonstrate your mastery of the lecture material.

STUDENT EVALUATION

<table>
<thead>
<tr>
<th>Points possible</th>
<th>Projects and Handouts</th>
<th>Quizzes</th>
<th>Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>1000</td>
<td>320</td>
<td>100</td>
</tr>
<tr>
<td>Percent</td>
<td>60%</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>1420</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>100%</td>
<td></td>
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</tbody>
</table>

Grading Scale

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
<th>Percent</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>91 – 100</td>
<td>A</td>
<td>79</td>
<td>C+</td>
</tr>
<tr>
<td>90</td>
<td>A-</td>
<td>71-78</td>
<td>C</td>
</tr>
<tr>
<td>89</td>
<td>B+</td>
<td>70</td>
<td>C-</td>
</tr>
<tr>
<td>81 – 88</td>
<td>B</td>
<td>69</td>
<td>D+</td>
</tr>
<tr>
<td>80</td>
<td>B-</td>
<td>65-68</td>
<td>D</td>
</tr>
<tr>
<td>&lt;= 64</td>
<td>F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assignments/Quizzes/Tests/Exam:
- Seven programming projects and three handout packets (60% of your grade)
- Review quizzes (10%)
- Final Exam (30%)

Participation: Students are expected to treat their classmates and the instructor with the utmost respect and professional courtesy.

COURSE POLICIES

**Communication Policy:** You will be required to check your Longwood University email, Canvas, and the course web site on a daily basis (if you do not already do so). Professors will disseminate course information using all three outlets, including announcements, course content, and grades. If you have questions, you should email your professors. Professors will respond to emails in a timely manner, usually within 24 hours. You may also contact your professors by phone. When contacting me you should use your Longwood e-mail account. You should not expect a reply if you use an account from another system. I will respond only to e-mails from students (i.e. not from your parents).

**Code of Conduct:** It is important to recognize that the online classroom is in fact a classroom, and certain behaviors are expected when you communicate with both your peers and your instructors. These guidelines for online behavior and interaction are known as netiquette. In general, when communicating
online “think before you write.” Treat instructors and students with respect, use clear and concise language, use correct spelling and grammar, and avoid slang and texting abbreviations. Keep your discussion board posts on topic, be respectful of others’ opinions, and when you disagree with someone express your differing opinion in a respectful, non-critical way. Be professional in your online communications. Finally, do not share your password with anyone, change your password if you think someone else might know it, and always logout when you are finished using the system.

**Honor Code:** Cheating in any form will not be tolerated in the College of Business and Economics. If the instructor determines that a student has cheated on an assignment, the grade of “F” may be assigned for the entire course. “Cheating” is the use of unauthorized resources and/or the work of another including, but not limited to, homework, tests, papers, presentations, and exams. **Unless specifically instructed otherwise, students are to assume that all coursework is to be the work of the individual student alone.** If a student is unsure as to whether collaboration is permitted, the student should contact the professor *in advance of performing the work.*

**Proper Use of Citations:** Failure to properly cite sources is a violation of the honor code. Whether intentional or not, using someone's work without giving them credit is a serious breech of academic integrity. When citing sources, it is important to consider two important questions:

1. Can a reader tell which material in your document or web page is original and which is not?

2. Can a reader identify the source of the words or ideas which you used to complete an assignment?

If the answer to either of these is “no”, you have not properly cited your source. To avoid infractions of the honor code you should obey the following guidelines whenever you use material from an external source, whether it's a web page, a book, a friend, an online video, or example code:

1. Write down the complete source information, including title, author's name, URL, page number, date, and any other available information at the bottom of the assignment or in a paragraph at the bottom of the web site. Be sure to include enough information so that a reader can find your source and compare it with your document. Give each source a unique number. For example:


2. In every place at which you make use of the source in your document, you must include a footnote or endnote referring to the source number. For example, the following paragraph contains a reference to the source from the previous example:

   Web browsers often wrap lines of text in unexpected ways. Web developers can use line break tags such as `<br>` to explicitly separate lines[1].

3. When possible, you should also use “in-text citations” such as “According to the HTMLDog web site”.
4. When citing something word for word, you MUST place it in quotes or format it as a block quote.

For more information about proper citation, read the Citing Sources Overview at the MIT Library web site: http://libguides.mit.edu/citing

**Attendance Policy:** Students are expected to login to each course module on Canvas before midnight of the first day of that module (the Monday of each week of this class). Students are also expected to participate fully in all discussion boards and other activities in this class.

Traditional notions of attendance have little relevance in the online environment, but if you encounter a situation that will keep you from meeting course deadlines, you should contact the professor as soon as possible. Any request for a deadline extension must be accompanied by documentation. If the situation is due to participation in a University sponsored activity, a clear emergency or serious illness, it will normally be considered an “excused absence,” and the student should coordinate with the professor as soon as possible to make up any missed assignments. Anyone who misses a graded exercise without communicating with the professor in advance, or providing documentation of a **bona fide** emergency, **will not** be allowed to complete the exercise for a grade. Failing to turn in 10% of graded assignments will result in the course grade being reduced by one full letter grade. Failing to turn in 25% of assignments will result in a failing grade for the course.

**Inclement Weather Policy:** Please see www.longwood.edu for the latest announcements regarding whether classes and the university will be open or not due to bad weather. In general, I will only cancel class if the university is closed.

**ADDITIONAL RESOURCES**

**Disability Accommodation:** A student who feels that s/he may require accommodations because of a learning disability should discuss this with the instructor in private and contact The Office of Disability Resources (http://www.longwood.edu/disability/).

**Religious Accommodation:** If an academic requirement conflicts with a student’s religious practices and/or observances, the student may request reasonable accommodations. The request must be in writing, and the instructor or supervisor will review the request. The student and the instructor may also seek assistance from the Dean of Students (http://www.longwood.edu/dos/)

**Writing Center:** All assignments (written or oral) in this course must adhere to the guidelines and standards for professional business and economics communication. For help with these guidelines, please refer to the resources available on the College of Business & Economics Student Guide for Oral and Written Communication which you can access at: http://libguides.longwood.edu/CoBEComm.

For writing help, contact the Writing Center. (http://www.longwood.edu/academicsuccess/15878.htm).

**Technology Help:** If a student has technical issues (hardware/software/passwords) and needs assistance, please contact the Longwood Help Desk at 434-395-HELP (4357) or toll-free at 877-267-7883 or via email at helpdesk@longwood.edu. The Help Desk is open:

- Monday – Friday: 7:45 am – 5:00 pm
Please note the Help Desk is NOT staffed when the University is officially closed. Please visit their webpage (http://www.longwood.edu/usersupport) for additional information.

If you experience problems using Canvas, you may contact the Digital Education Collaborative (DEC). Check their webpage for hours and contact information -- http://www.longwood.edu/dec/49339.htm.

OTHER CLASS POLICIES AND INFORMATION

1. This is a college-level course. In addition to time spent in class, you should expect to spend a minimum of 6 – 8 hours per week outside of class completing the course modules, clarifying your understanding, reading additional material, doing homework, etc.

2. Technology often has a way of going wrong -- just at the wrong moment! Please plan ahead and don't leave assignments for the last minute. The Online@Longwood technical support web page includes some good information regarding having a back-up plan.

3. All assignments must be typed and submitted via the course web site (for projects) or Canvas (for quizzes). No handwritten work will be accepted (except the Final Exam).

4. Let the instructor know as soon as possible if you have problems with material or assignments.

5. Never ask, "Will this be on the test?" or "How would you ask this on an exam?" You are to assume that any and everything related to concept understanding will be asked on every exam.

6. In accordance with Longwood policy, missing more than 10% of scheduled class time may result in loss of one letter grade. Absences for school events or illness may be excused if you make arrangements with me at least 24 hours in advance. Missing 25% of classes for ANY reason (excused or unexcused) may result in a grade of F for the course.

7. You are responsible for making sure that assignments are correctly submitted. There will be no second chances or partial credit for incomplete submissions.

8. I will not respond to any form of communication from parents. This is a college course and I expect you to act like college students. If you have a need or problem, you should contact me directly.

MORE HONOR CODE GUIDELINES

I take Longwood's honor code very seriously. All work in this class should be considered pledged. Infractions of the honor policy will be dealt with harshly and will result in a grade of F in addition to any penalties implied by the honor board.

All homework, quizzes, and exams in this class are to be completed entirely on your own with no help or outside resources except those explicitly permitted in the assignment handout (if any). Projects may be discussed with other students and may be completed using online resources subject to the following restrictions:

1. You MUST give credit whenever you use an external resource. Whenever you use an online site or someone's help, you MUST include a proper citation indicating the original
source and clearly delineating which parts of your submission are derived from that source.

I should be able to tell exactly which lines of code are entirely your own original work and which are not. **Even if you look at a web page just for reference**, you should include a short explanation at the top of your code which explains what material you reviewed. You DO NOT need to cite material provided by the instructor of the course (such as code samples from lecture or material provided as part of the project).

2. Any code you turn in should be code you have personally typed, except as instructed by the professor. You MAY NOT copy/paste code from a web site or other resource. You MAY NOT download code and turn it in as your own. You MAY NOT share code with other students electronically (using flash drives, e-mail, or other electronic communication).

3. **Do NOT copy large blocks of code.** It's okay to look up something you don't know how to do as long as you properly cite it, but the material you turn in should largely be your own original work. A good rule of thumb is that code snippets less than three lines are usually okay, but larger blocks of code usually involve an honor code violation. If in doubt, please e-mail me so that I can review the material (well before the project is due) and help you decide whether incorporating it into your project is appropriate.