

ISCS 375: INTRODUCTION TO WEB DESIGN



Semester: Fall 2016 Section/Days: MWF 9:30am-10:45am MWF 10:50am-12:05pm Room/Time: Online Credit Hours: 3	Instructor: Dr. Robert Marmorstein marmorsteinrm@longwood.edu, 434-395-2185 (http://marmorstein.org/~robert) Office Hours: MWF 12:20-12:50 (Ustream)
Basic Course Information	
Required Course Materials:	<p><u>Software:</u> 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 installing the appropriate client for your operating system.</p> <p>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.</p> <p><u>Canvas:</u> 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.</p>
Recommended Course Materials:	<p>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. Be sure to properly cite your sources!</p>
Course Description:	<p>This course provides a basic understanding of the tools and techniques used to develop functional and responsive web sites. It explores the use of HTML to provide the underlying structure of the web site and cascading style sheets 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 HTTP protocol, and issues in web security.</p>
Writing Intensive:	No
Speaking Intensive:	No

Tentative Course Schedule				
Date	Topic	Assignments	Source	Due
Sept. 7-9	Basics of HTTP and HTML	Video Lectures 0-2	YouTube	11:59pm Sept. 9
Sept. 12-16	Web Page Design using Cascading Style Sheets	Quiz 1: HTML	Canvas	11:59pm Sept. 12
		Video Lectures 3-4	YouTube	11:59 pm Sept. 16
Sept. 19-23	SVG Graphics in HTML 5	Project 1 Due	Portal	11:59 pm Sept. 19
		Video Lecture 5	YouTube	11:59pm Sept. 23
Sept. 26-30	Programming in Javascript	Quiz 2: CSS	Canvas	11:59 pm Sept. 26
		Video Lectures 6-7	YouTube	11:59 pm Sept. 30
Oct. 3-7	Advanced Javascript Programming, The DOM, Working with HTML 5 Canvas	Project 2 Due	Portal	11:59 pm Oct. 3
		Video Lectures 8-9	YouTube	11:59 pm Oct. 7
Oct. 10-14	The JQuery Library	Video Lecture 10	YouTube	11:59 pm Oct. 14
Oct. 17-21	Introduction to Server-side Programming and HTML Forms	Quiz 3: Javascript	Canvas	11:59 pm Oct. 17
		Video Lectures 11-12	YouTube	11:59 pm Oct. 21
Oct. 24-28	Processing Forms with CGI (Common Gateway Interface)	Project 3 Due	Portal	11:59 pm Oct. 24
		Video Lectures 13-14	YouTube	11:59 pm Oct. 28
Oct. 31-Nov. 4	Using a web framework: Flask and Jinja	Video Lectures 15-16	YouTube	11:59 pm Nov. 4
Nov. 7-11	Working with databases in SQL and Python	Quiz 4: Python	Canvas	11:59 pm Nov. 7
		Video Lectures 17-18	YouTube	11:59 pm Nov. 11
Nov. 14-18	Advanced Database Programming: Data Definition Language	Video Lectures 19-20	YouTube	11:59 pm Nov. 18

Nov. 21	Project Work Day	Project 4 Due	Portal	11:59 pm Nov. 21
Nov. 23-25	Thanksgiving Break			
Nov. 28-Dec. 2	Interactive Web Sites with AJAX	Quiz 5: SQL	Canvas	11:59 pm Nov. 28
		Video Lectures 21-22	YouTube	11:59 pm Dec. 2
Dec. 5-9	Project Work Week			
Dec. 12-16	Cookies and Sessions	Project 5 Due	Portal	11:59 pm Dec. 12
	Ethical Issues in Web Programming	Video Lectures 23-24	YouTube	11:59 pm Dec. 16
Dec. 19-30	Winter Break			
Jan. 2-6	Authentication and Security	Video Lectures 25-26	Portal	11:59 pm Jan. 6
Jan. 9	Web Security: Cross-site Scripting and the Same Origin Policy	Quiz 6: Final Review	Canvas	11:59 pm Jan. 9
		Video Lecture 27	Portal	11:59 pm Jan. 9
Jan. 11		Final Exam	@Longwood	
Jan. 16	Martin Luther King Jr. Day			
Jan. 18-20	Database Security: SQL Injection	Video Lecture 28	Portal	11:59 pm Jan. 20
Jan. 23-27 (Exam Week)	Project Work Week	Project 6: Battleship Game	Portal	11:59 pm Jan. 27

* Schedule subject to change.

COURSE OBJECTIVES

Upon completion of this course, students will:

1. Be able to describe the elements of an HTTP transaction.
2. Create simple web pages using HTML and Cascading Style Sheets.
3. Develop back-end software for processing information from web forms.
4. Be able to identify potential security vulnerabilities in a web site.

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

Points possible

	<i>Points</i>	<i>Percent</i>
Projects	300	60%
Quizzes	50	10%
Final Exam	150	30%
Total	500	100%

Grading Scale

<i>Percent</i>	<i>Grade</i>	<i>Percent</i>	<i>Grade</i>
91 – 100	A	79	C+
90	A-	71-78	C
89	B+	70	C-
81 – 88	B	69	D+
80	B-	65-68	D
		<= 64	F

Assignments/Quizzes/Tests/Exams:

- Six programming projects (60% of your grade)
- Six review quizzes (10%)
- One 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.

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 breach 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:

[1] “Paragraphs”, HTMLDog tutorial, Accessed on July 16th, 2016,
<http://htmldog.com/guides/html/beginner/paragraphs/>

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 `
` 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/CoBECComm>.

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 – Thursday: 7:45 am – 7:00 pm
- 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. You should expect to spend a **minimum** of 3-4 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 or Canvas. No handwritten work will be accepted.
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. 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. 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). You **MAY** copy/paste code provided to you by the instructor.

3. Do **NOT** copy large blocks of code. It's okay to look up something you don't know how to do, 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 generally okay, but larger blocks of code may involve an honor code violation. If in doubt, please e-mail me so that I can review the material and help you decide whether incorporating it into your project is appropriate.

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.