# **CISC-103: Web Applications using Computer Science**

**Instructor:** Debra Yarrington Email: yarringt@udel.edu Web Site: https://www.eecis.udel.edu/~yarringt/103 Office: 411 Smith Hall Class Location: 112 McDowell Class Time: TR 9:30-10:45 Lab Location: 028 Memorial Hall Lab Times: 020 F 11:15-12:05 021 F 12:20-1:10 F 022 2:30-3:20

#### Prerequisites: None

#### **COURSE DESCRIPTION**

This course teaches basic Web Applications using computer science. In this course you will learn basic computer science principles through the use of HTML5 and CSS and by programming in JavaScript. This course also offers a basic introduction to Adobe Photoshop and Adobe Dreamweaver.

#### COURSE OBJECTIVES:

By the end of course, you should be able to do all of the following.

- Create simple web pages by hand editing HTML5, CSS and JavaScript files.
- Identify the syntax and semantics of the most important HTML elements.
- Explain various aspects of validation of web documents, including:
  - the benefits of writing "valid" HTML
  - identifying and avoiding common validation errors in sample HTML code
- Explain basic techniques for making web pages accessible to users with different disabilities
- Use various syntax features of the CSS language.
- Explain the difference between static and dynamic web pages.
- Demonstrate an understanding of basic programming skills in JavaScript, including:
  - writing functions
  - using variables
  - using arrays
  - using control structures including if/else if/else
  - controlling flow of code by looping.
  - distinguishing between array values and array indices.
- Distinguish between a web client and a web server
- Demonstrate why and how to include comments in HTML, CSS and JavaScript code.
- Explain what an object is in JavaScript
- Develop and edit image files using Adobe Photoshop
- Create a basic web page using Adobe Dreamweaver

## SUGGESTED EQUIPMENT:

- A jump/flash memory drive. You'll want to save a copy of each lab. If you are using the University's computers, I suggest bringing a flash drive to lab certain labs are too large for many email programs.
- A laptop that you can bring to class. In this class you will be working with a partner for many in-class assignments. At least one of you must have a fully-charged laptop that you can and will be expected to bring to class regularly. Get used to it. Not bringing your laptop is not an excuse not to work, or to leave class.

#### **CLASS RULES:**

- 1. Failing all three exams is automatic failure in this course, regardless of lab scores
- 2. All labs, projects and homeworks must be uploaded to the University's web server and the url submitted via Canvas (if you don't know what this means, you will after the first week or so of class). Failure to submit your labs/projects/homeworks through Canvas will result in an automatic 0 on the assignment.
- 3. Failing to remove your lab from University computers will result in losing 25% off your lab.

#### ATTENDANCE POLICY:

- Lab attendance is MANDATORY See Lab section for details.
- Attendance in lecture, though not mandatory, is expected. You are responsible for anything taught or announced in lecture. If you choose not to come, it is your job to coordinate with your partner and find out what is going on without extra help from me. **This includes class notes!** If you need extra help, I expect to see you in office hours.

#### EMAIL:

Email is the only consistent method of communication I have with the entire class. It is imperative that you know that you are receiving mail from the class list. Anything mailed at least 24 hours prior is considered your responsibility to know. It may be very helpful to check email before, during or after any unusual event (i.e. power outages, snow, tests, holidays) Check the UD Homepage for any University wide cancellations.

#### LABS:

You may need to complete the lab assignments outside of class time; if you do not have the necessary software on your computer, you may either come in and use a free machine in your lab or use another PC lab on campus that has compatible software.

#### Learn your Section number and the name and email address of your TA!

#### Lab session attendance:

#### Lab attendance is REQUIRED!

Lab session attendance is mandatory. If you cannot make your lab session, you can upload your completed lab to Sakai **prior** to the lab session (NOT the lab's due date). If you do this you will still receive credit for lab attendance.

A place is reserved for you during lab time. It is the only time you can be GUARANTEED access to a machine, the lab materials, the software and the Teaching Assistant (TA). To receive full credit for attendance, you must attend the lab session until you have COMPLETED the lab being worked on that day, NOT the one that is due. If you leave early without turning in that day's lab, it will be considered an absence.

Keep your TA informed about planned absences. Send email just prior to or immediately after any absence from LAB, even if you've told the TA ahead of time. This makes record keeping so much easier.

You are allowed 3 absences from lab. If you miss more than 3 labs, you will receive a 0 for lab attendance. You are still required to turn in the lab assignment by the due date. Notes attesting to visits to the infirmary will <u>NOT</u> result in an excused absence from lab.

NOTE: Lab instructions are specifically for the version of Adobe the University has installed on its lab computers. If you have a different version, you may need to use the University's computers to complete your labs, or figure out how to complete various options on your own.

#### Lab assignments:

#### Labs are due Thursday at midnight unless otherwise instructed.

Labs turned in after the due date are considered late. For each day late, you will lose an additional 10%. Labs will not be accepted after 7 late days.

#### IMPORTANT - Keep all labs available until the end of the semester as proof in case there is a problem.

#### EXAMS:

Attendance is MANDATORY for all exams. Exams cannot be taken later. If you have an excused absence, the exam will not be included in the computation of the final grade and the other exams will be weighted extra. If an exam is missed because of an unexcused absence a score of 0 will be included in the computation of the final grade.

The Final Exam is **cumulative**. Final Exam Schedules are not known until halfway into the course. *Do not plan to leave before the end of exam period*. This class has often had its final on the last possible day.

### ACADEMIC DISHONESTY:

Collaboration with others in the class is ENCOURAGED for any in-class work. Copying anyone's work is considered Academic Dishonesty and will be prosecuted.

Collaboration of any kind is PROHIBITED during Exams.

Copying any other person's work (off the Internet, for example) without proper acknowledgment is plagiarism, a serious offense, and the one most common to computer science courses.

Anyone that aids another student in copying or with work that is expected to be done without collaboration is as guilty as the person who seeks help. Both will be prosecuted. It is strongly recommended that you familiarize yourself with the University's Policy of Academic Dishonesty.

Please be advised that the University of Delaware Academic Honesty & Dishonesty Policy is taken seriously by this Instructor and NOTE WELL that it will be followed in the conduct of this course. This policy covers all forms of

- Plagiarism, including "copying, or allowing another student to copy, a computer file that contains another student's assignment, and submitting it, in part or in its entirety, as one's own";
- Fabrication, including "submitting as your own any academic exercise (e.g., written work, printing, sculpture, etc.) prepared totally or in part by another";
- Cheating, including "copying from another student's test paper, allowing another student to copy from a test paper, collaborating on a test, quiz, or other project with any other person(s) without authorization"; and
- Academic Misconduct, including "other academically dishonest acts such as ... taking part in obtaining or distributing any part of an unadministered test".

#### **Course Assignments:**

All reading assignments, homeworks, and labs will be posted to the course Web site (<u>https://www.eecis.udel.edu/~yarringt/103</u>).

#### Grading:

GRADING:		Total %Grade
Uploading /Adobe Labs/HTML-CSS-Homework	11%	>=95% A
Web Site	13%	>=90% A-
Lab Attendance	2%	>=87% B+
JS Labs/Project/Homework	25%	>=83% B
Exam 1	14%	>=80% B-
Exam 2	15%	>=77% C+
Final Exam	20%	>=73% C
		>=70% C-
TOTAL POSSIBLE	100%	>=67% D+
		>=63% D
		>=60% D-

Week of	Tentative Course Schedule			
Feb 5	Syllabus /Internet Basics/HTML Template			
Feb 12	HTML Template, basic tags, tables, images, links (hwk 1, due Mon Feb 19)			
Feb 19	HTML: images, links, forms (hwk 2 due Mon, Feb 26)			
Feb 26	HTML: forms (hwk 3 due Sun, Mar 4) CSS: Adding CSS, text styling, borders, margins, padding, background images			
Mar 5	CSS: bg images, div, Span, Class, Id, positioning (hwk 4 due Mon, Mar 12)			
Mar 12	CSS: div/span/class/id/positioning Web Site due Fri, March 16			
Mar 19	Introduction to JavaScript (write, variables, prompt, if branching) <b>Exam 1 (Thurs, Mar 22)</b> (Mar 23 – Freshman Midterm Grades Due)			
Mar26	Spring Break: No classes			
April 2	JavaScript: if branching, random numbers Arrays (hwk 6, due Apr 12)			
April 9	JavaScript: random numbers Arrays, getElementById, innerHTML April 9:Last day to withdraw without penalty			
April 16	JS getElementById, innerHTML, confirm, comments			
April 23	JS comments, debugging, functions, calling Functions Exam 2 (Tentative)			
Apr 30	JS: functions, calling functions, parameters, loops			
May 7	JS: loops			
May 14	May 15: Last Day of Classes Final Project Due May 16: Reading Day (no classes or exams)			
May 21	<b>Final Examination (currently unknown date)</b> May 24: Last day of finals			

# CISC-103Lab Schedule

# (Do not remove any graded work until after the semester and you know your final grade!)

Date		Lab	Due Date
Feb 9	Lab 1	Uploading Lab	Feb 15
Feb 16	Lab 2	Color Lab	Feb 22
Feb 23	Lab 3	Photoshop Lab 1	Mar 1
Mar 2	Lab 4	Photoshop Lab 2	Mar 8
Mar 9	Lab 5	Photoshop Lab 3	Mar 15
Mar 16		Optional Web Site Help Lab	
Mar 23		No lab	
Mar 30	No Lab	Spring Break	
Apr 6	Lab 7	Programming Lab 1	Apr 13
Apr 13	Lab 8	Programming Lab 2	Apr 20
Apr 20	Lab 9	Programming Lab 3	Apr 27
Apr 27	Lab 10	Programming Lab 4	May 4
May 4	Lab 11	Project Lab	May 11
May 11	Optional	Programming Help	