CISC-103: Web Applications using Computer Science

Instructor: Debra Yarrington Email: varringt@eecis.udel.edu Web Site: http://www.eecis.udel.edu/~varringt/103 Office: 411 Smith Hall **Class Time:** MWF 10:10 – 11:00 Lab Location: Memorial Hall 028 Lab Times: F 020 11:15 - 12:05pm F 12:20 - 1:10pm 021 022 F 1:25 - 2:15pm

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 HTML 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 HTML, 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 and loops.
- Distinguish 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, and demonstrate a basic understanding of DOM relationships such as parent and child elements through JavaScript code.
- Develop and edit image files using Adobe Photoshop
- Develop and edit web pages using Adobe Dreamweaver

TEXTBOOKS AND EQUIPMENT NEEDED:

- Myers, Mark: **A Smarter Way to Learn JavaScript**
- 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 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.
- Suggested: 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.

CLASS RULES:

- 1. Failing all three exams is automatic failure in this course, regardless of lab scores
- 2. If you don't attend class, don't expect to pass this course
- 3. Failing to remove your lab from University computers will result in losing 25% off your lab.
- 4. All labs and projects must be uploaded to the University's web server and the URL submitted via Sakai (if you don't know what this means, you will after the first week or so of class)

ATTENDANCE POLICY:

- Lab attendance is MANDATORY See Lab section for details.
- Attendance in lecture is expected. You are responsible for anything taught or announced in lecture. In the event that you must miss class, 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.

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.

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, your 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 course material will be posted to the course Web site <u>http://www.eecis.udel.edu/~yarringt/103</u>

Grading.		
<u>GRADING:</u>		<u>Total %Grade</u>
Labs Lab Attendance Homework Web Site JS Project Exam 1 Exam 2 Final Exam	15% 2% 5% 15% 15% 14% 14% 20% 100%	>=95% A >=90% A- >=87% B+ >=83% B >=80% B- >=77% C+ >=73% C >=70% C- >=67% D+ >=63% D
		>=60% D-

Grading:

Week of	Tentative Course Schedule		
Aug 25	Syllabus /Internet Basics Aug 27: First day of classes		
Sept 1	Internet Basics/HTML Template, basic tags, tables (hwk 1, due Sun, Sept 7) Sep 3: Holiday		
Sept 8	HTML: , tables, images, links, forms(hwk 2 due Sun, Sept 14) Sep 10: Last day to add a course		
Sept 15	HTML: forms (hwk 3 due Sun, Sept 21) CSS: Adding CSS, text styling, borders, margins, padding, background images		
Sept 22	CSS: Div, Span, Class, Id, positioning (hwk 4 due Sun, Sept 28)		
Sep 29	Web Site (<i>Due Fri, Oct 3</i>) Intro to JavaScript		
Oct 6	<i>Exam 1 (Wed, Oct. 8)</i> JavaScript: write, variables, prompt, if branching (hwk 5, due Oct 12)		
Oct 13	JavaScript: if branching, random numbers, Arrays, (hwk 6, due Oct 19)		
Oct 20	JavaScript: random numbers Arrays, getElementById, innerHTML, Oct 21: Last Day to withdraw without penalty		
Oct 27	JS getElementById, innerHTML, confirm, comments		
Nov 3	JS comments, debugging, functions, calling Functions		
Nov 10	JS: functions, calling functions, parameters, loops		
Nov 17	Exam 2 (May be any time this week) JS: loops (hwk 6, due Sun, Nov 24)		
Nov 24	JS: loops Nov 26-28: Thanksgiving Holiday, Classes Suspended		
Dec 1	JS: final project Dec 4: Final Project Due		
Dec 8	Finals Dec 12: Last day of Final Examinations		

CISC-103Lab Schedule

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

	Lab	Due Date
Lab 1	Uploading Lab	Sept 4
Lab 2	Photoshop Lab 1	Sept 11
Lab 3	Photoshop Lab 2	Sept 18
Lab 4	Photoshop Lab 3	Sept 25
Lab 5	Photoshop Lab 4	Oct 2
	Optional Web Site Help Lab	
Lab 6	Dreamweaver Lab 1	Oct 16
Lab 7	Dreamweaver Lab 2	Oct 23
Lab 8	Programming Lab 1	Oct 30
Lab 9	Programming Lab 2	Nov 6
Lab 10	Programming Lab 3	Nov 13
Lab 11	Project Lab	Nov 22
Optional	Final Project Help	
	Lab 2 Lab 3 Lab 4 Lab 5 Lab 6 Lab 7 Lab 8 Lab 9 Lab 10 Lab 11	Lab 1Uploading LabLab 2Photoshop Lab 1Lab 3Photoshop Lab 2Lab 4Photoshop Lab 3Lab 5Photoshop Lab 4Optional Web Site Help LabLab 6Dreamweaver Lab 1Lab 7Dreamweaver Lab 2Lab 8Programming Lab 1Lab 9Programming Lab 3Lab 10Programming Lab 3Lab 11Project Lab