Course Syllabus

Course Title**:**

Introduction to Website Development

Credits: 3

Contact Hours: 3 Face-to-Face

Course Number:

IS117 001

Instructor**: Dr. Art Hendela**

Class Session: Synchronous

Tue/Thu 1:00 PM-2:20 PM

Prerequisites/Required Background**: None**

Course Website: canvas.njit.edu

Catalog Information: http://catalog.njit.edu/undergraduate/computing-sciences/information-systems/#coursestext

Links to an external site.

Faculty Information

Art Hendela

Office: **GITC 3809**

Office Hours:

Tuesday: 6:30 PM-7:15 PM via Zoom

Thursday: 3:00 PM-3:45 PM

Telephone: **Please Email**

973-596-5841

Email: ahh2@njit.edu

Include Course in Subject: IS117-001

Notes and Articles: in Canvas

Course Materials

REQUIRED: Murach's HTML and CSS, 6th Edition
by Zak Ruvalcaba, Anne Boehm, Mary Delamater

Publisher: Mike Murach and Associates, Inc., 2024
ISBN: 978-1-943873-21-0

OPTIONAL: Where Wizards Stay up Late: The Origins of the Internet

By Hafner, Katie and Lyon, Matthew

Publisher: Simon & Schuster International, 2006.

ISBN-13: 978-0684832678

Hardware Required

Windows-based computer. If you do not have one, then you must use the computers available on campus.

Other supplemental materials:

Code Academy

Code Academy is the best available tool for teaching HTML, CSS, and JavaScript. In this course you are required to complete two code-academy course, HTML and CSS. Upon completion of the courses, the link to the student's profile is submitted to Canvas. The user profile displays badges for completing sections of each course. Students receive credit towards their final grade based on the percent completed

Required Courses:

1. https://www.codecademy.com/learn/learn-html

 Links to an external site.

 https://www.codecademy.com/learn/learn-css

2. Links to an external site.

Use of ChatGPT.

Specific course information

1. **Brief description of the content of the course (Catalog Description)**

This course discusses the concepts and skills required to plan, design and build websites. It will be taught in a lab to ensure hands-on experience with each of these tasks. The course begins with an overview of web technologies. Students learn to plan websites, which includes determining the business and end-user requirements for the site. Design includes learning to develop "mockups" of how the site will look and how people will use it. The major tools for building websites will be industry standard HTML and XHTML to describe web page content, and Cascading Style Sheets

(CSS) for flexibly formatting the content. Using entire site, as well as "future-proofs" a website, allowing it to be viewed on every major web browser (such as Firefox or Chrome) and easily adapt to changes in future browser technology. The course features substantial hands-on projects comprising websites of several interlinked pages and images, enabling students to thoroughly learn the course's important concepts and skills.

1. **Prerequisites or co-requisites:** None

1. **Is this course a required, elective, or selected elective course in the program:** *required*

Course Outcomes

1. Students will be able to create a visual design mockup for a multi-page website that demonstrates visual design concepts. (P3)
2. Students will be able to develop a multi-page website using HTML, CSS, and JavaScript with proper composition, typography, and color (P4)
3. Students will be able to explain how a cookie is used to track Internet users as they go from site to site as well as ethical concerns over the use of cookies. (A12)

Student outcomes versus course outcomes.

Student Outcomes	**Addressed by**
SO 1 Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions	(CO1-P3), (CO2-P4)
SO 2 Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline	(CO1-P3), (CO2-P4)
SO 3 Communicate effectively in a variety of professional contexts	

SO 4 Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles	(CO3-A10)
SO 5 Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline	
SO 6 Support the delivery, use, and management of information systems within an information systems environment	

Topics Covered

1. Students will understand the history behind the development of the Internet.
2. Students will be able to create a multi-page website using HTML, CSS and Javascript.
3. Students will be able to create a website using a structured process that consists of defining requirements, creating a mockup, and coding the final website using the visual design components of Typography, Color, and Composition.
4. Students will be able to select the most appropriate image file format for use online
5. Students will be able to use Linux commands to manage files and folders on a web server
6. Students will be able to use SFTP/FTP to upload and download files to a web server
7. Students will be able to demonstrate website usability concepts by designing a navigation menu for a website.
8. Students will be able to demonstrate information architecture principles by designing a website home page.
9. Students will be able to define basic terminology used by web page analytics tools such as Google Analytics
10. Students will be able to explain the architecture behind the processing of how web pages are accessed and transmitted across the Internet

Grading

Grading Category Weights	**Grading Scale**

Project(s): 25%	**A:** 90 - 100	**C:** 70 - 75
Mid-Term Exam: 25%	**B+: 86-89**	**D:** 60 - 69
Final Exam: 25%	**B:** 80 - 85	**F:** 0 - 59
Homework: 15%	**C+: 76-79**	
Work Participation: 10%		

Incompletes are only given for extenuating and documented medical, or personal issues. Documentation must be provided from the Dean of Students Office and be approved by the Chair of the Informatics Department.

Project Rubric

The project is broken up into four separate parts totaling 25% of your final grade. Each of the four parts is graded on a scale of 0-100. The first three parts are worth 5% of your total grade. The final part is worth 10% of your grade. Make sure you complete and submit all parts on time.

Homework Rubric

You are expected to complete all of your homework assignments. The following grades will be given for each homework assignment

3 – Above Average Performance – Thoughtful Visual Design and/or Technically Advanced. All requirements are met.

2 – Average Performance – Demonstrates all major requirements

1 – Below Average Performance – Submitted with obvious technical and/or visual deficiencies

- **Non-passing Performance** – Assignment submitted but did not meet minimum requirements

Blank in Canvas – no submission. No assignment credit. Work participation grade is also lowered.

Work Participation and Attendance

Attendance will be taken for each class meeting and is important for you to gain the most from this course. This course is offered face to face in order for you to gain the most understanding of the material and to be able to ask questions in real-time. For cases where you miss less than 5 classes, attendance will be used to determine the higher or lower of two grades when you are between grade cutoffs such as above 85 but not fully 86. The more classes you attend, the better chance you have of gaining the higher grade.

Work Participation is worth 10% of your final grade. Many people, including the course instructor, worked for a long time as a consultant that was home-based. Customers only knew me from the

work I handed to them on time. My customers did not accept excuses for late work. In order to better prepare you for the many work places which work on a results basis with flexible hours and attendance policies, I put the weight of this grade into your results, not just sitting in a seat. That said, if you have a life situation that needs to be taken into account for your performance, please see me. Medical excuses must go through the Dean of Students office.

Any missing homework assignments, A01-A11, go against your work participation grade. Missed homework assignments not only get a zero for the assignment but also a lowering of your work participation grade. This is also true for assignments that score a zero for any other reason. This is how I calculate your participation grade:

*(Number of assignments attempted with grade above 0) / Number of total assignments * 10)*

With this formula, the proportion of the work you attempt is considered your participation. Do not miss assignments. They must be on time or no credit is given.

Late Project Policy

All projects and assignments must be turned in on time, or no credit is given.

Extra Credit Policy

There is no extra credit assignments given. You do the assigned work at the time it is given and submit it on time for a grade.

Make Up Policy

There are no make ups for missed assignments or exams. The grade is entered as Zero.

Absence Policy

You are expected to attend every class if you will not attend a class you should notify me that you will not be attending. **MISSING 4 OR MORE CLASSES WILL LOWER YOUR FINAL GRADE BY ONE LETTER GRADE. YOU MUST SIGN YOURSELF IN ON THE ATTENDANCE SHEET TO BE COUNTED. IT IS YOUR RESPONSIBILITY TO MAKE SURE YOU ARE SIGNED IN. SIGNING SOMEONE ELSE IN IS COUNTED AS CHEATING. SEE ACADEMIC INTEGRITY POLICY FOR PENALTY.**

Medical Excuses need to be reported to the Dean of Students and they will decide if it is to be excused or not.

Academic Integrity Policy

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf

***Links to an external site.*.**

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu

My expectation is that each person will complete original work for this course and will not copy from fellow students or tutorials online. It is OK to refer to tutorials online; however, you will be considered in violation of the NJIT honor code by submitting work found online. Any violations of the honor code will be referred to the Dean of Students for investigation and possible disciplinary action.

Every assignment/project is a 'home-mini-exam.' The NJIT Honor Code will be strictly upheld. Students found cheating/collaborating/plagiarizing will be immediately referred to the Dean of Students and the NJIT Committee on Professional Conduct and subject to possible Disciplinary Probation, a permanent marking on the record, possible dismissal and a grade of 'F' in the course. All submitted assignments are carefully checked for similarities, and plagiarism and guilty students will be identified and referred to the Dean of Students for disciplinary action.

Use of file sharing sites such are CourseHero.com is strictly forbidden. Students either posting or using these sites will be referred to the Dean of Students for disciplinary action and/or copyright infringement prosecution.

Use of social media such as Discord to exchange answers is strictly forbidden.

Use of ChatGPT or equivalent is strictly forbidden except where used in assignments at the direction of your professor.

DO NOT share your laptops or any of your files from this semester or from anyone that has taken this course before. If your machine breaks, use the ones on campus in the PC Mall.

This is your only warning. Cheating is not worth it - you may not only fail this course, but also be suspended or expelled from NJIT. THE INSTRUCTOR RESERVES THE RIGHT TO REQUIRE REMOTE EXAM PROCTORING SOFTWARE SUCH AS RESPONDUS.

For more information about the NJIT honor code, you should refer to this document:

http://www.njit.edu/doss/code-student-conduct-article-11-university-policy-academic-integrity/

Links to an external site.

Class Communication Space/Learning Management System

We will be using Canvas, an open source Learning Management System at NJIT, for the posting of projects and class resources and other class announcements are postings. Students having questions on projects, etc., may contact Dr. Hendela directly at ahh2@njit.edu or, if the answer would benefit the class, post the question in the appropriate forum within Canvas. Students are obligated to log into Canvas on a near-daily basis, and to keep current. DO NOT use the Canvas Message feature. It does not give your name or class section. I cannot respond to these messages. Email me instead.

Calendar:

Week	Lecture/ Homework
1a	**1. History of the Internet**
	A01. Create an account on Code Academy
	P1. Project - 1st Step
	P2. Project - 2nd Step
	P3. Project - 3rd Step
	P4. Project – 4th Step
1b	**1b. How the Internet Works**

Week	Lecture/ Homework
	A02. Create a Github Account with Git/Webstorm/Github/Tutorial. Define Terms
	A03. Complete the Code Academy course
2	**Gentle intro to HTML and CSS - Murach Chpt 1**
3	**Linux and Basic HTML & CSS - Murach Chpt 2**
	A04. Edit your first web page
4	**Website design guidelines, methods, and procedures – Murach Chpt 16**
5	**How to use HTML to structure a web page - Murach Chpt 3**
	A05. Enter Home Page HTML (Chpt 3)
6	**How to use CSS to format the elements of a web page - Murach Chpt 4**
	A06. Format Town Hall Home Page (Chpt 4)
7	**How to use the CSS box model for spacing, borders, and backgrounds - Murach Chpt 5**

Week	Lecture/ Homework
	A07. Applying techniques learned using the CSS box model for spacing, borders, and backgrounds (Chpt 5)
8.	**Mid Term Quiz using Respondus Lockdown Browser**
9	**9. How to use CSS for page layout - Murach Chpt 6**
	A08. How to use CSS for page layout (Chpt 6)
10	**10. How to work with lists and links - Murach Chpt 7**
	A09. Add Town Hall Navigation (Chpt 07)
11	**Responsive Web Design, Javascript and Cookies - Murach Chpt 8**
	A10. Create and Display Cookies - Ethics
	A11. Town Hall Responsive Deisgn & Media Queries (Chpt 8)
12	**Images - Murach Chpt 11**
13	**Exam Review**
14	**Final Quiz - In class or remote using Respondus lock down browser with Web cam at Professor's SOLE discretion.**

Week	Lecture/ Homework

Course Summary:

Date	Details	Due
Tue Sep 9, 2025	Assignment A01. Create an account on Code Academy	due by 11:59pm
Sat Sep 13, 2025	Assignment Academic Engagement: Fall 2025	due by 11:59pm
Tue Sep 16, 2025	Assignment P1. Project 1st Step - Part 1/4	due by 11:59pm
Tue Sep 30, 2025	Assignment A02. Create a Github Account with Git/Webstorm or other editor/Github/Tutorial. Define Terms	due by 11:59pm
	Assignment A03. Complete the Code Academy course	due by 11:59pm
Tue Oct 7, 2025	Assignment P2. Project - 2nd Step - Part 2/4	due by 11:59pm
Tue Oct 14, 2025	Assignment A04. Edit your first web page (Chpt 2) (updated 7/29/2025)	due by 11:59pm
Tue Oct 21, 2025	Assignment A05. Submit Home Page HTML (Chpt 3)	due by 11:59pm
	Assignment A06. Format Town Hall Home Page (Chpt 4)	due by 11:59pm
Thu Oct 23, 2025	Quiz IS 117 - Midterm - Fall 2025 -Chpt1-4, 16 - Requires Respondus LockDown Browser + Webcam	due by 2:20pm
Tue Oct 28, 2025	Assignment A07. Applying techniques learned using the CSS box model for spacing, borders, and backgrounds (Chpt 5)	due by 11:59pm
	Assignment P3. Project - 3rd Step - Part 3/4	due by 11:59pm

Date	Details	Due
Tue Nov 11, 2025	Assignment A08. How to use CSS for page layout (Chpt 6)	due by 11:59pm
	Assignment A09. Add Town Hall Navigation (Chpt 07)	due by 11:59pm
Tue Nov 18, 2025	Assignment A10. Create and Display Cookies - Ethics	due by 11:59pm
	Assignment A11. Town Hall Responsive Design & Media Queries (Chpt 8)	due by 11:59pm
Tue Nov 25, 2025	Assignment P4. Class Project-Build Webpages- Part 4/4	due by 11:59pm
Thu Nov 27, 2025	Assignment Work Participation	due by 11:59pm
Thu Dec 4, 2025	Quiz IS 117 - Final Quiz - Fall 2025 - Chpt 5-8 10 + Webcam - Requires Respondus LockDown Browser + Webcam	due by 2:20pm