

College of Education, Criminal Justice, Human Services, and Information Technology School of Information Technology 250 Teachers/Dyer Complex University of Cincinnati PO Box 210002 Cincinnati, OH 45221-0002 Phone: (513) 556-7967

IT2040C Fundamentals of Web Development Syllabus

Instructor

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Office Location Off campus

Office Hours I do not have set office hours. If you have a question or concern,

please **email me** and we will schedule a time to meet. I am generally available weekdays between 2:15-4:00 (subject to occasional other meetings and commitments). If those times don't work, we will try to find another time to meet. NO meetings will be held on weekends.

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Course Description

This is a foundation course in Web Technology that covers the underpinnings of the technology and a variety of modern standards. The course covers modern web standards, well-formed and valid documents, semantic XHTML/HTML, user-centered design of static web sites, styling and layout of Web documents with CSS, common tools for Web Site development. Emphasis is on coding syntactically correct Web documents which are also visually appealing, and accessible to users using assistive technologies. This course covers material up to the use of scripting which is introduced in the next course in the sequence. You will learn HTML5, CSS3, responsive and user-centric design, XML, and SVG. Hands-on active learning required.

Credit Hours and Course Format

3 credit hours; online

Course Learning Outcomes

Upon completion of this course, the student will be able to:

- 1. Publish locally created web pages to a web server for hosting.
- 2. Create a semantically, correct standards-compliant web pages.
- 3. Use a variety of current Web technologies: HTML5, CSS3, XML, SVG.
- 4. Apply responsive web design for addressing different devices
- 5. Evaluate websites for accessibility and visual appeal.

Course Materials

There is no official textbook. Course materials draw from a number of publicly available sources and materials created by the University of Cincinnati.

Required Technology

- A text editor such as Sublime, NotePad ++ (For Windows), or Brackets (for Mac)
- A screencasting tool such as Kaltura on <u>CECH MediaSpace</u>
- Microsoft Office or similar tools

Course Policies and Grading

Attendance/Participation Expectations

This is a fully online course. As such, I will not be taking attendance, per se. However, there are firm due dates each week for labs, mini research assignments, quizzes, and final project milestones. You are expected to submit assignments in accordance with those deadlines, so it is imperative that you participate regularly in the course. Additionally, there will be several discussion board assignments throughout the course in which you will be required to respond to your classmates as part of your grade. Please pay attention to requirements and due dates.

Communication and Feedback Policy

Email is the best way to communicate with me. Please email me with any questions and concerns you have or to arrange an office hour appointment. You can expect a response within 24 hours during the week. If you email me after 4:00 PM on Friday, you can expect to hear from me after 8:00 AM on Monday. I do not respond to university email on the weekend.

I will post announcements to Canvas semi-regularly, particularly if I need to clarify an assignment or make modifications to assignments or due dates. I recommend that you turn on Canvas notifications so that you don't miss any course announcements.

Late or Missing Assignment Policy

Please make every attempt to submit your assignments on time. Assignments are open a minimum of two weeks before the assignment is due providing plenty of time for you to complete the work. Some assignments will not be accepted late; others have a late work window within which they may be submitted for late credit. See the Course Overview PowerPoint and video posted within the course for more information.

Please note that most assignments are due on Sunday nights, but I generally do not check my email on the weekends. If you wait until Saturday or Sunday to look at and/or complete an assignment, I will not be available to respond to any questions you have at that time. Please make it a habit to look at your assignments early in the week so you have time to reach out for help if you need it.

Assignments:

There are four types of assignments in this course

- Quizzes: 3 total, Modules 1-4, Modules 5-8 and Modules 9-12
- Labs: Typically, one lab per module
- Mini-Research Assignments: These are completed every few weeks.
- **Final Project**: You will complete a final project milestone every few weeks, and the final website will be due during exam week.

Grading Scale

93.00% and above = A

90.00%-92.99% = A-

87.00%-89.99% = B+

83.00%-86.99% = B

80.00%-82.99% = B-

77.00%-79.99% = C+

73.00%-76.99% = C

70.00%-72.99% = C-

67.00%-69.99% = D+

63.00%-66.99% = D

60.00%-62.99% = D-

less than 60.00% = F

Course Schedule

Module 1 Your First Webpage (Web Basics)

Overview: In this module, we will be covering the basic foundational knowledge that web developers need to know. Much of this information is covered in more depth in other courses, so we'll focus on what you need to know within the context of this course. We'll take our first look at HTML and create a very basic webpage.

Module 2 HTML Basics

Overview: In this module, we will be covering the basics of HTML. Later, we'll add in styling using CSS, but for now, focus on getting comfortable with basic HTML syntax. We'll continue to work with elements introduced last week, and continue exploring how to configure the body of our web pages using headings, paragraphs, divs, list, blockquotes, and more. We'll also learn how to test out HTML for valid syntax using the W3C HTML validation tool. This week, we'll begin working on a semester-long case study that will help us practice with elements and attributes introduced in each module.

Module 3 Visual Design and Other Considerations

Overview: In this module we will explore what separates good design from bad design. We'll look into site organization and navigation, the principles of visual design, audience analysis, and web design best practices.

Module 4 Intro to CSS – Graphics and Text Styling Basics

Overview: In this module we will explore Cascading Style Sheets (CSS) and use CSS to configure text, color, and page layout. CSS is used to separate the information on a web page from the presentation style. CSS was introduced in 1996 and the W3C continues to work on updated standards for CSS. The current version of CSS is CSS3, but CSS4 is already in draft form. CSS3 added in features such as rounded-corners, transparency, and embedded fonts.

We'll also begin to explore using CSS to configure your text to work with the images/graphics for your site, and how to create pages that are enhanced by graphical elements, but are not dependent on them.

Module 5 More CSS Basics and Intro to the Box Model

Overview: In this module we'll explore basic page layout techniques, begin working with floating and positioning elements with CSS, use pseudo-classes to add interactivity to hyperlinks, and begin working with the box model.

Module 6 Using CSS to Design Page Layouts

Overview: In this module we'll explore basic page layout techniques, begin working with floating and positioning elements with CSS, and use pseudo-classes to add interactivity to hyperlinks.

Module 7 Responsive Web Design Using Media Queries

Overview: In this module, we will begin to explore designing for multiple browser sizes, such as mobile devices, and using responsive techniques.

Module 8 Responsive Design with CSS Flexible Box

Overview: In this module we'll continue to explore responsive design through CSS Flexible Box, or Flex Box.

Module 9 Responsive Design Using CSS Grid

Overview: In this module we'll continue to explore responsive design through CSS Grid

Module 10 Table & Form Basics

Overview: In this module we will be covering HTML tables and forms, Tables can be used to organize information. In the past, web developers used tables to format webpages. This practice is antiquated and considered inaccessible. In this module we'll focus on the correct way to use tables and how to format accessible tables.

In this module we will also introduce forms. While we will be crafting and styling forms, we will not be creating forms that actually collect or store data, as that would require server side processing, which is outside the scope of this class.

Module 11 Adding Audio and Video & CSS Transitions, Transforms, and Filters

Overview: In this module we will begin working with multimedia, introducing methods to add audio and video to your webpages. We'll also look at ways to add interactivity to your pages using CSS3 transform and transition properties.

Module 12 Web Publishing Basics & An Intro to CSS Frameworks

Overview: In this module we will look at some of the things you'll need to consider if working as a web developer. Including the basics of selecting a web host, search engine optimization, registering domains, and using popular web development frameworks.

Module 13 Additional Web Technologies

Overview: In this module we will begin to explore more advanced areas of Web Development. Your task is to take a "deep dive" into XML, Bootstrap, or jQuery Mobile and design an introductory lab/lesson for your classmates.

Module 14: Final Project

Purpose: To design, develop, and publish a responsive web site using recommended design practices. Your Project will demonstrate mastery of the web development skills and concepts learned in this course.

UC Policies

Attendance: Students at the University of Cincinnati are expected to attend classes in order to meet the learning objectives for the course. Students are expected to follow the class attendance policy as outlined by the instructor. Students participating in official University sponsored activities, where the student is representing the University, will meet with instructor related to absences due to university-sponsored activities. When such absences occur, students need to provide documentation of the event(s), and work with the professor to develop a written plan for completion of missed assignments or other course requirements with as much advance notice as possible.

Communication: All university business must be conducted *using a university assigned email account*. The use of a personal, or non-university assigned email account to conduct university business is strictly prohibited. <u>See full policy here</u>.

Class Cancellation Policy: In the rare case that a class must be cancelled, faculty will post an announcement on the LMS that will be emailed to students. Faculty will attempt to communicate class cancelations with as much advance notice as possible. Students should be sure that their LMS email is current and valid to ensure emails are received. If the University closes due to inclement weather or other emergency situations, there will be an announcement posted on Canvas (LMS) and if possible on the local news channels (TV and radio). Communications related to University closures will also be sent to the student's cell phone number on record through the automatic University emergency text messaging system. Students should notify the University if they change their cell phone number to ensure they will receive these important emergency communications.

Academic Integrity: The University of Cincinnati is committed to academic integrity. A formal articulation of this commitment is articulated in the <u>Student Code of Conduct</u>. The University Rules, including the Student Code of Conduct, and other documented policies of the department, college, and university related to academic integrity will be enforced. Any violation of these regulations, including acts of plagiarism or cheating, will be dealt with on

an individual basis according to the severity of the misconduct. At the least, you should anticipate a zero on an assignment, at the fullest extent, your violation will be reported to the university and the incident will be documented on your permanent record.

Accessibility and Special Needs: The University of Cincinnati is committed to providing all students with equal access to learning opportunities. Accessibility Resources is the official campus office that works to arrange for reasonable accommodations for students with an identified physical, psychological or cognitive disability (learning, ADD/ADHD, psychological, visual, hearing, physical, cognitive, medical condition, etc.) Students are encouraged to contact the Accessibility Resources Office to arrange for a confidential meeting to discuss services and accommodations. Contact should be initiated as soon as possible to allow adequate time for accommodations to be arranged.

Counseling Services: As a UC college student, there may be times when personal stressors interfere with your academic performance and/or negatively impact your daily life. If you or someone you know is experiencing challenges such as strained relationships, increased anxiety, feeling down, difficulty concentrating, lack of motivation, etc., you are not alone; there are people here that can help.

- To schedule: please contact Counseling and Psychological Services (CAPS) at 513-556-0648 to schedule a virtual or in-person appointment with our CAPS CECH embedded counselor, Madeleine Muller, located in the CECH Student Services Center in Suite 360 of the Teachers-Dyer Complex.
- Have questions before committing to an appointment? Check out Let's Talk, a 15-20minute conversation to ask questions about counseling and get to know our <u>CECH</u> <u>counselor</u>.
- After-hours crisis line: 513-556-0648
- **Self-Help:** to access Therapy Assistance Online (TAO), a **free** <u>self-help resource</u> for students.

Diversity, Equity, and Inclusion: The University of Cincinnati embraces diversity, equity, and inclusion as core values that empower individuals to transform their lives and achieve their highest potential. The University of Cincinnati recognizes a very broad and inclusive concept of diversity that includes commonly recognized considerations such as race, ethnicity, gender, age, disability status, socioeconomic status, gender identity and expression, sexual identity, sexual orientation, religion, and regional or national origin. Going forward, we emphasize that UC's concept of diversity will retain the capacity to grow with our understanding. Inclusion authentically brings traditionally excluded individuals and/or groups into processes, activities, and decision/policy making. We are committed to creating and fostering a positive learning and working environment based on open communication, mutual respect, and inclusion.

Religious Accommodation: Ohio law and the University's Student Religious Accommodations for Courses Policy 1.3.7 permits a student, upon request, to be absent for reasons of faith or religious or spiritual belief system or participate in organized activities conducted under the auspices of a religious denomination, church, or other religious or spiritual organization and/or to receive alternative accommodations with regard to examinations and other course requirements due to an absence permitted for the above-described reasons. Not later than fourteen days after the first day of instruction in the course, a student should provide the instructor with written notice of the specific dates for which the student requests alternative accommodations. For additional information about this policy, please contact the Executive Director of the Office of Equal Opportunity and Access at (513) 556-5503 or oeohelp@UCMAIL.UC.EDU

Valuing Student Identity:

The College of Education, Criminal Justice, Human Services, & Information Technology recognizes that gender identity is fluid and respects those that may not identify with the gender binary. Please feel free to share your lived pronouns with the instructors and staff members you may work with, in order to avoid misgendering in the learning space. To learn more about pronoun use, please check out mypronouns.org.

We also understand that names may have some personal, cultural, or familial importance to everyone. If your name is being pronounced incorrectly in class, please make sure to find time to correct me through email or after class.

Title IX: Title IX is a federal civil rights law that prohibits discrimination on the basis of a person's actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also address instances of sexual violence, dating or domestic violence, and stalking. If a student discloses a Title IX issue to a faculty member, the faculty member is required to forward that information to the Title IX Office. The Title IX office will follow up with the student and discuss how the University can take steps to address the impact on the student and the community. They will also inform the student of their rights and direct them to available resources. The priority is to make sure students are safe and successful here at the University of Cincinnati. Students are not required to talk to anyone in the Title IX Office. Students may also directly report any instance of sex or gender-based discrimination, harassment or violence to the Title IX office at 513-556-3349. Students who wish to know more about their rights and resources on campus, they can consult the <u>Title IX website</u> or contact the Title IX office directly at 513-556-3349.

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