

# CS 343: Web Interface Development

Spring 2025

"A user interface is like a joke. If you have to explain it, it's not that good."

- Martin LeBlanc

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## Course Information

Learning to work with the tools and technologies that are used to build and create web sites is both empowering and fun. With these tools, you can build your own web sites and customize the experience of those you visit. You can also create interactive applications for storing and manipulating personal or enterprise data. And you can dynamically generate images and graphics to help visualize data sets.

The goal of this course is to explore these technologies - HTML, CSS, and Javascript - that define the structure, presentation, and interactions for modern web development. In addition to covering the basics of how to use these tools, we will explore guidelines to ensure the sites we create are accessible for a variety of users, including users with disabilities. After completing this course, you will have a solid foundation to continue learning more advanced web development techniques.

Website:

<https://w3.cs.jmu.edu/kirkpams/343/>

Time:

M/W/F 9:10 - 10:00 AM

Location:

King Hall 236

Textbook:

*Fundamentals of Web Development, 3rd Edition*

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## Detailed Course Objectives

Following the successful completion of this course, students will be able to:

1. Summarize the key steps and processes for retrieving and displaying a web page.
2. Structure text documents as HTML and publish them on a server.
3. Apply accessibility standards to web documents.
4. Create and adapt CSS style sheets for consistent web site presentation and styling.
5. Use a web framework to create a modern, responsive web site.
6. Generate HTML content dynamically with Javascript.
7. Create handlers to detect and respond to user input events.
8. Store and retrieve data in client-side storage.
9. Build images dynamically using provided data.

10. Learn to consult a web framework documentation and tutorials for additional help.

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## Lab Descriptions

The lab descriptions are available at the following links:

- [Lab 1](#)
  - [Lab 2](#)
  - [Lab 3](#)
  - [Lab 4](#)
  - [Lab 5](#)
  - [Lab 6](#)
  - [Lab 7](#)
  - [Lab 8](#)
  - [Lab 9](#)
  - [Lab 10](#)
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## Course Catalog Description

Projects or topics in computer science which are of interest to the lower division student. May be repeated for credit when course content changes. Topics may vary. *Prerequisite: Fully admitted Computer Science majors or minors only and students should consult the instructor prior to enrolling for the course.*

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