

- 1. Course number and name**
CptS 489: Web Development
- 2. Credits and contact hours**
3 credits, 3 lecture hours
- 3. Instructor's or course coordinator's name**
Chris Hundhausen
- 4. Textbook, title, author, and year**
No textbooks used.
Other supplemental materials
Online course textbook: <w3schools.com>.
Instructor provides curated resources from web for each course topic.
- 5. Specific course information**
 - a. *Catalog description:* Web development using markup languages, style sheet language, and scripting languages; developing and consuming web services; testing web applications.
 - b. *Prerequisites or corequisites:* CptS 322 with C or better; certified major in CptS, CE, EE, or SE.
- 6. Specific goals for the course**

By the end of the course, students will be able to

 - Design, implement, and evaluate responsive web apps to meet a given set of requirements (2a, 2c, 2d, 2e, 2g)
 - Communicate effectively in a simulated job interview for a web developer position (3a, 3b, 3c, 3f)
 - Function effectively as a member of a web development team (5a 5b, 5d, 5f, 5g)
 - Design web apps that that enable users to complete supported tasks quickly and easily (6a, 6b, 6c)
 - Design web apps that are coded according to existing conventions and standards (6a)
 - Use appropriate learning strategies to acquire and apply new knowledge needed to solve web programming problems (7a - 7g)
- 7. Brief list of topics to be covered**
 - Setting up a development environment for web development
 - HTML
 - CSS
 - JavaScript
 - jQuery
 - jQuery UI
 - jQuery Forms
 - jQuery UI

- React.js
- Development of web apps using Google Apps Script framework
- Consumption of web services using GET, POST, and AJAX protocols
- Modular web application design using file includes
- User-friendly and responsive web application design using navigation bars, side menus, bottom menus, and floating action buttons
- Client-side debugging techniques using pop-up alert boxes built-in browser tools
- Server-side debugging techniques using server log messages and server logs
- Development of web services and server-side programs using Google Apps Script