

WEB Web Development

WEB 110 Internet Fundamentals (2-2) 3 crs.

Introduces the fundamental skills and knowledge needed to use the Internet and build basic web pages. Students will learn and understand introductory functions of the web, Internet communications, and project management concepts. Social networking tools and the use of multimedia on the web will be explored. Industry career opportunities will be discussed.

WEB 140 Mobile Apps (2-2) 3 crs.

Introduces students who are new to coding, to build mobile apps for Apple mobile devices using the language and tools, Swift and Xcode. With MobileMaker.edu technologies, students will build an app, analyzing error in code, and problem solve. Students complete the class with a portfolio of apps and collection of skills that align with a professional workplace.

WEB 150 Web Foundations (2-2) 3 crs.

Introduces the foundational skills needed to create web pages utilizing HyperText Markup Language (HTML), Cascading Style Sheets (CSS), and an overview of the JavaScript language. Topics include Web design best practices, web site hosting, Internet protocols, graphics, media and security. Students utilize the skills learned to create a business-oriented web site project. IAI MC 923

Recommended: WEB 110 or CIS 106 or GRA 101 are strongly recommended courses in preparation prior to WEB 150.

WEB 170 Web UX Fundamentals and Prototyping (2-2) 3 crs.

Provides the understanding of UX (user experience) and UI (user interface) fundamentals, and the needs for user research, journey maps, personas, usability testing, and workflow mapping. Emphasizes techniques of sketching to develop digital wireframe to create an interactive prototype of a business-oriented website. Uses current prototyping tools to match industry standards.

Prerequisite: WEB 110 or WEB 150 with a grade of C or better, or concurrent enrollment in WEB 150.

WEB 180 Web Multimedia (2-2) 3 crs.

Introduces the nature and attributes of motion graphics in this project-based course. Through hands-on activities, students will learn to generate, manipulate, and embed still and motion graphics for their website design and other media delivery systems.

Prerequisite: WEB 150 with a grade of C or better.

WEB 190 Web Authoring Tools (2-2) 3 crs.

This course is only offered in the fall term.

Utilizes current industry frontend frameworks and advanced Cascading Style Sheets (CSS) techniques to create responsive websites. This course is project-based and students demonstrate skills by creating a business-oriented web site.

Prerequisite: WEB 150 with a grade of C or better.

WEB 200 Web Scripting Foundations (2-2) 3 crs.

Introduces the JavaScript programming language and its capabilities for developing user-centric websites in this project-based course. Through hands-on exercises, students will create web pages with interactive components and dynamically update data. Students demonstrate skills by creating a business-oriented web site.

Prerequisite: WEB 150 with a grade of C or better AND math placement in MTH 101 or higher. <https://www.harpercollege.edu/testing/mathplacement.php>

WEB 210 Web Accessibility (2-2) 3 crs.

This course is only offered in the spring term.

Builds on web foundation skills taught in WEB 150 with a focus on development of useable and accessible web sites. Topics include Section 508 Accessibility compliance, the Web Accessibility Initiative guidelines, usability testing, and applications that test for adherence to coding syntax and accessibility recommendations.

Prerequisite: WEB 150 with a grade of C or better.

WEB 235 Interactive Scripting (2-2) 3 crs.

This course is only offered in the spring term.

Builds on scripting skills taught in WEB 200 with a focus on advanced JavaScript techniques which include current libraries and frameworks to create highly functional web pages. Students utilize the advanced skills taught to create a business-oriented web site.

Prerequisite: WEB 200 with a grade of C or better.

WEB 240 E-Commerce Strategies and Technologies (2-2) 3 crs.

This course is only offered in the fall term.

Provides the student with a foundation in the fundamentals of electronic commerce development. Software security, payment systems, promotion, and support strategies are considered. Website design and navigation considerations for shopability, sales, shipping/costs, etc., and marketing touch points are introduced to understand search engine optimization (SEO). Ad words, social media/email marketing and tools such as Google analytics, customer conversion, are understood. Identifying top ecommerce platforms and understanding the pros and cons are explored. Understanding basic web skills and WordPress/WooCommerce is necessary.

Prerequisite: WEB 145 and WEB 150 with grades of C or better.

WEB 250 Server-Side Scripting (2-2) 3 crs.

This course is only offered in the spring term.

Provides an introduction to server-side scripting and web data access using a currently popular server application platform and database. Includes variables, control structures, functions, arrays, files, and databases. Students utilize the advanced skills taught to create a business-oriented data-driven web application that uses data query language to access and update information.

Prerequisite: CIS 143 and either CIS 106 or WEB 200 with grades of C or better.

WEB 285 Topics in Web Development (1-0 to 3-6) 1-6 crs.

Studies selected topics in the Web design and development field. The specific course content will vary depending on industry alignment and the material to be studied. A syllabus or course outline containing additional information will be available each time the course is offered. This course may be repeated up to a maximum of 6 credit hours.

WEB 299 Web Design Capstone (2-2) 3 crs.

This course is only offered in the spring term.

Develops an understanding of industry expectations of a portfolio and interview skills. Provides hands-on experience to showcase their web design and development work along with creating self-branding assets. Communication strategies will be taught through mock presentations and interviews that demonstrate skills of many program requirements. Previous work will be reviewed and critiqued for portfolio use.

Prerequisite: WEB 200 with a grade of C or better.