

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 150 Web Foundations (2-2) 3 crs.

Introduces the foundational skills needed to create web pages utilizing HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). 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 Graphics and Prototyping (2-2) 3 crs.

Emphasizes techniques of sketching to develop digital wireframes and mockups to create an interactive prototype of a business-orientated website with the focus on user experience and interface design. Uses current prototyping tools to match industry standards. Explores utilization and best practices of web graphics. Examines usability testing.

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

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.

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/registration/testing/pdf/Math_Placement_Grid.pdf

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

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.

Builds on scripting skills taught in WEB 200 with a focus on advanced JavaScript techniques which include jQuery and Ajax 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/Technologies (2-2) 3 crs.

Provides the student with a foundation in the fundamentals of electronic commerce development. Software, hardware, security, payment systems, promotion and support strategies, Electronic Data Interchange, web auctions, international issues, legal implications, ethical issues, and taxation are among topics covered in a lecture and lab-based format. Recommended preparation: CIS 101 or equivalent experience.

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

Provides an introduction to server-side scripting and web data access using a currently popular server application platform and relational 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 Structured Query Language (SQL) to access and update information.

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

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

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: Prior or concurrent enrollment in WEB 235 with a grade of C or better.