Web Technologies (WEB)

WEB 110. Web Development Fundamentals. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-3.0. Work-0.0
This course introduces World Wide Web Consortium (W3C) standard markup language. Topics include creating web pages, responsive design, file transfer, deployment, accessibility, and other related W3C topics. Upon completion, students should be able to deploy a hand-coded website created using the HyperText Markup Language (HTML) and Cascading Style Sheet (CSS) standards.
Prerequisites: Take CTI 110, minimum grade of C

WEB 115. Web Markup and Scripting. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-3.0. Work-0.0
This course introduces Worldwide Web Consortium (W3C) Internet programming using JavaScript. Topics include basic syntax, object-oriented programming, functions, variables, events, arrays, validation, accessibility, and web standards. Upon completion, students should be able to write, debug, maintain well-formed and well documented interactive web content using JavaScript code.
Prerequisites: Take WEB 110, minimum grade of C

WEB 120. Introduction to Internet Multimedia. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course introduces the creation of rich media for the Internet. Topics include the design, production and delivery of interactive content, rich media, digital video, and digital audio. Upon completion, students should be able to create multimedia projects incorporating graphics, text, video, and audio using industry standard authoring software or web standards.

WEB 125. Mobile Web Design. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course introduces students to web design for mobile devices. Topics include planning an effective mobile Web site, industry standard Mobile Markup Language, CSS3, multimedia, m-commerce, social media, testing and publishing. Upon completion, students should be able to plan, develop, test, and publish Web content designed for mobile devices.
Prerequisites: Take WEB 110, minimum grade of C

WEB 140. Web Development Tools. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-3.0. Work-0.0
This course provides an introduction to web development tools.Topics include creating websites using web development tools and web standards. Upon completion, students should be able to create small web sites and upload files to a web server.
Prerequisites: Take WEB 110, minimum grade of C

WEB 141. Mobile Interface Design. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course covers current design standards and emerging approaches related to the design and development of user interfaces for mobile devices. Emphasis is placed on research and evaluation of standard and emerging practices for effective interface and user experience design. Upon completion, students should be able to design effective and usable interfaces for mobile devices.

WEB 151. Mobile Application Development I. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course introduces students to programming technologies, design and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems, and programming for mobile applications using an OS Software Development Kit (SDK). Upon completion, students should be able to create basic applications for mobile devices.

WEB 210. Web Design. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course introduces intermediate to advanced web design techniques. Topics include customer expectations, advanced markup language, multimedia technologies, usability and accessibility practices, and techniques for the evaluation of web design. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web sites.
Prerequisites: Take WEB 110, minimum grade of C

WEB 214. Social Media. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-3.0. Work-0.0
This course introduces students to social media for organizations. Topics include social media, marketing strategy, brand presence, blogging, social media analytics and technical writing. Upon completion, students should be able to utilize popular social media platforms as part of a marketing strategy, and work with social media analytics tools.

WEB 215. Advanced Markup and Scripting. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-3.0. Work-0.0
This course covers the advanced programming skills required to design Internet applications and interactive web content.Emphasis is placed on the programming techniques required to develop Internet applications, interactive web content, frameworks, and using libraries. Upon completion, students should be able to design, code, debug, and document Internet-based programming solutions to various real-world problems.
Prerequisites: Take WEB 115, minimum grade of C

WEB 220. Advanced Multimedia. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This is the second of two courses covering internet multimedia. Topics include use of advanced internet multimedia applications. Upon completion, students should be able to create interactive Internet multimedia presentations.
Prerequisites: Take WEB 120

WEB 250. Database Driven Websites. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards.
Prerequisites: Take DBA 120, minimum grade of C

WEB 251. Mobile Application Development II. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course covers advanced applications and custom programming to develop applications for mobile devices. Topics include device capabilities, OS specific Software Development Kits (SDK), scripting for functionality and designing interactivity. Upon completion, students should be able to demonstrate effective programming techniques to develop advanced mobile applications.
Prerequisites: Take WEB 151, minimum grade of C

WEB 260. E-Commerce Programming. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-3.0. Work-0.0
This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include application and server software selection, securing transactions, use and verification of credit cards, publishing of catalogs, documentation, and site administration. Upon completion, students should be able to setup a working e-commerce Internet web site.
Prerequisites: Take WEB 140 and CTS 115, minimum grade of C

WEB 289. Internet Technologies Project. 3.0 Credits. Class-1.0. Clinical-0.0. Lab-4.0. Work-0.0
This course provides an opportunity to complete a significant Web technologies project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete an Internet project from the definition phase through implementation.
Prerequisites: Take CTI 110 CTI 120 CTS 115, minimum grade of C