

Digital Media Web Design Development (DWDD)

DWDD 1400. Digital Design Essentials. (3 Credits)

Teaches fundamentals of digital layout for web development and how to properly create engaging interfaces for digital media. Addresses technical challenges for digital mediums to deliver effective digital experiences. Introduces basic content creation and sprint thinking independent of software platforms.

Lab access fee of \$45 applies.

DWDD 1410. Interaction Design Essentials. (3 Credits)

Prerequisite(s): DWDD 1400

Implements creative development layouts into interactive designs. Focuses on integration with industry development tools. Introduces basic overview of product development, pattern libraries, layout and development standards using interaction and industry practices for digital experiences.

Lab access fee of \$45 applies.

DWDD 1420. Communicating Digital Design WE. (3 Credits)

Prerequisite(s): DWDD 1400

Focuses on the development of highly creative and visual design documentation; how to communicate both written and visual information in meaningful ways in a highly technical field. Covers why communicating a particular design challenge is just as important as the design itself, and why writing, layout, and visual clarity is critical to mastering UX and Digital Product Design. Sets the foundation for all documentation assignments in the Web Design and Development degree.

Lab access fee of \$45 applies.

DWDD 1430. Principles of Digital Design. (3 Credits)

Prerequisite(s): DWDD 1400

Teaches principles of visual design, how to properly create engaging interfaces for digital media, and practice good integration with industry development tools. Addresses the complexity of designing rich media experiences around digital devices ranging from computer screens to personal information devices.

Software fee of \$15 applies.

Lab access fee of \$45 for computers applies.

DWDD 1600. Web Essentials. (3 Credits)

Provides the fundamentals necessary to plan, design, develop, deploy, and critique a web site which includes images, sound, video, forms, and separates content from presentation. Focuses on the fundamentals of web programming languages. Examines various ways to build an accessible web page.

Lab access fee of \$45 for computers applies.

DWDD 1720. Scripting for Internet Technologies. (3 Credits)

Prerequisite(s): DWDD 1600

Introduces the fundamentals of computer programming and problem solving using the current industry standard scripting languages. Emphasizes the fundamentals of structured and object-oriented programming, syntax, semantics, control structures, arrays, file I/O, testing/debugging, implementation, and the construction of graphical user interfaces. Applies these concepts to manipulate digital images, sound, movies, text, and web pages that are heavily used as digital media.

Laptop Required.

Lab access fee of \$45 for computers applies.

DWDD 2410. Interaction Design. (3 Credits)

Prerequisite(s): DWDD 1410

Focuses on strategies and principles used in digital media development to enhance the user experience. Teaches how to understand stakeholder goals, identify and specify user needs and requirements through user research and design documentation, engage in interactions with target audiences through interviews, observation, and discussion, as well as create and test prototypes. Deals with solving real-world problems faced by consumers using products in the market.

Software fee of \$15 applies.

Lab access fee of \$45 for computers applies.

Course Lab fee of \$30 applies.

DWDD 241R. Interaction Design Practicum. (2 Credits)

Prerequisite(s): DWDD 2410

Instructs in the design and production of a fully-featured digital media project, including concept, design, content creation and acquisition, testing, revision, mastering, and publication with hands-on guidance. May be repeated for a maximum of 4 credits toward graduation.

Lab access fee of \$45 applies.

Course Lab fee of \$30 for equipment applies.

Software fee of \$15 applies.

DWDD 2420. Media Formats and Outputs. (3 Credits)

Prerequisite(s): DWDD 1400

Focuses on the digital workflow and management of still images, video, audio and digital effects media assets. Addresses use of codecs and format types for use in mobile media use scenarios. Introduces the proper handling of assets in various development platforms and user experience design best practices when using assets on touch-based devices.

Lab access fee of \$45 for computers applies.

DWDD 2510. Interactive Media Production. (3 Credits)

Prerequisite(s): DWDD 1410

Focuses on the use of digital visual effects in mobile publishing environments. Includes multi-layer effects in known mobile layouts, creation of digital mattes and parallax for unique visual user engagement, as well as integration techniques according to development platforms.

Lab access fee of \$45 for computers applies.

DWDD 2520. Digital Product Experiences I. (3 Credits)

Prerequisite(s): DWDD 1410

Focuses on the development of engaging mobile apps for distribution on a myriad of devices. Teaches the fundamental building blocks of publishing digital media experiences of all types and may include interactive guide, catalogs, brochures, training manuals, kiosks, and exhibits. Covers the development of apps for touchscreen 'native' content and feature real-time updates.

Laptop & Device Required.

Lab access fee of \$45 for computers applies.

DWDD 2530. Immersive Experiences I. (3 Credits)

Prerequisite(s): DWDD 1410

Focuses on the application of media technologies that possess the ability to create rich immersive experiences for distribution on optical media such as CD, DVD-ROM, and over the Internet. Introduces participants to a variety of authoring systems and development techniques when creating Digital Media experiences.

Laptop Required.

Software fee of \$22 applies.

Course fee of \$18 applies.

Lab access fee of \$45 for computers applies.

DWDD 2590. Portfolio Workshop. (3 Credits)

Prerequisite(s): DWDD 1420 with a B- or higher

Teaches students how to prepare a portfolio that includes case studies, resume, cover letter, and links to their work. Provides experience doing presentations, client pitches, and mock interviews.

DWDD 2610. Principles of Web Languages. (3 Credits)

Prerequisite(s): DWDD 1720

Focuses on solving various Web design and coding problems using current Internet technologies. Emphasizes solving unique coding problems using HTML, CSS, and jQuery that arise when implementing a Web design.

Lab access fee of \$45 for computers applies.

DWDD 2620. Web Tools and Frameworks I. (3 Credits)

Prerequisite(s): DWDD 1600

Introduces the necessary frameworks and tools needed to build structured, maintainable, and scalable web pages common in the industry. Incorporates project-based learning to help students gain solid web development experience through hands-on programming and problem solving a real world project.

Software fee of \$15 applies.

Lab access fee of \$45 for computers applies.

DWDD 2720. Web Languages I. (3 Credits)

Prerequisite(s): DWDD 1720

Examines client-side languages that allow viewers to interact with the content of Web pages. Extensively uses methods for creating highly interactive web sites without the use of authoring tools. Teaches how to make the static content within a typical webpage more dynamic, interesting, and most importantly, useful. Culminates with a final project to design and create materials for use in a well-designed interactive web site.

Software fee of \$15 applies.

Lab access fee of \$45 for computers applies.

DWDD 301R. Digital Lecture Series. (1 Credit)

Prerequisite(s): University Advanced Standing

Uses guest speakers who lecture on current topics in digital media. May be repeated for a maximum of 3 credits toward graduation.

DWDD 3410. Interaction Design Colloquium. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Provides advanced students with unique and current industry perspectives on interaction design through seminar discussions, workshops, and industry on-site experiences.

Lab access fee of \$45 for computers applies.

DWDD 3430. Adaptive Media Experiences. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Investigates methods to capture, create, use, and adapt digital content in appropriate and meaningful ways. Examines distribution channels for media such as desktop, mobile, smart appliances, and automobile markets.

Laptop Required.

Lab access fee of \$45 for computers applies.

DWDD 3520. Digital Product Experiences II. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Focuses on the development of engaging mobile apps for distribution on a myriad of devices. Covers advanced development of publishing digital media experiences of all types and includes techniques for coding immersive experiences beyond standard practices. Prepares students to develop for touchscreen 'native' content and feature real-time updates.

Laptop and Device Required.

Lab access fee of \$45 for computers applies.

DWDD 3530. Immersive Experiences II. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Focuses on advanced application of media technologies and design paradigms when creating rich immersive experiences for distribution as a net-based desktop or mobile application. Uses unique and emerging technologies that are critical for digital media majors to understand.

Laptop required.

Lab access fee of \$45 for computers applies.

Software fee of \$22 applies.

DWDD 3620. Web Tools and Frameworks II. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Investigates advanced techniques for delivering exceptional Internet applications using existing frameworks. Teaches advanced scripting fundamentals, how to deliver content through server-side database connectivity, and engaging the audience through highly interactive experiences.

DWDD 3720. Web Languages II. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Covers server-side web development and database interaction. Offers the skills and knowledge necessary to produce web sites in a professional environment. Covers current technology and design standards for websites that are database driven using current languages and platforms.

Demonstrates how database interaction can enhance a multimedia website. Includes lectures, demonstrations, and weekly projects.

DWDD 3770. Rich Internet Application Development I. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Describes various Rich Internet Application development technologies. Investigates RIA development and delivery technologies such as JavaScript frameworks, API usage, and developer productivity tools with a special emphasis on the integration of Digital Media into Internet applications. Teaches the design and development workflow for interactive, media-rich applications delivered via networked browser, computer desktops, and mobile devices.

Lab access fee of \$45 for computers applies.

DWDD 3780. Rich Internet Application Development II. (3 Credits)

Prerequisite(s): DWDD 3770, Portfolio Review Acceptance, and University Advanced Standing

Describes various Rich Internet Application development technologies with a focus on utilizing server-side resources. Investigates a wide variety of RIA technologies including cloud services, API development, and dynamic data stores. Teaches how to design and develop RIAs using a variety of tools, code frameworks, and delivery clients. Requires creation of interactive and useful media-rich web experiences for end users.

Lab access fee of \$45 for computers applies.

DWDD 4240. Experience Design Process. (3 Credits)

Prerequisite(s): DWDD 2410 and University Advanced Standing

Focuses on advanced strategies and principles used in digital product development to enhance the user experience. Focuses on strategy and research methodologies for production-level digital product design through advanced user research, and engages in product interactions with target audiences.

Software fee of \$15 applies.

Course Lab fee of \$30 applies for computers.

DWDD 4430. Adaptive Media II. (3 Credits)

Prerequisite(s): DWDD 3430 and University Advanced Standing

Focuses on the advanced application of media technologies that possess the ability to create adaptable content media experiences. Focuses primarily on the ability to curate and realign rich content assets through Internet-based Apps. Teaches principles of distribution that can be applied to desktop, mobile, and advancing technologies in the home or automobile markets with a specific focus on dynamic retrieval and adaptation of content.

Laptop Initiative Requirement.

Lab access fee of \$45 for computers applies.

DWDD 4520. Digital Product Design Studio. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Covers advanced development techniques of Product Design fused with User Experience Design / User Interface Design. Highlights problem solving and effective communication. Focuses heavily on how digital designers can influence the user experience, and participatory outcomes of such experiences, through well-planned interactions, digital layout, and adaptation to the physical hardware.

Lab access fee of \$45 for computers applies.

DWDD 4560. Designing Voice Experiences. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Teaches fundamentals of Voice Experience design and development for verbal digital interfaces. Addresses technical challenges for verbal and conversational digital experiences in real world applications. Introduces basic content creation and verbal logic theory for varying artificial intelligence platforms.

Lab access fee of \$45 applies.

DWDD 4630. Web Content Management. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing

Instructs students on how to create a site that is content rich, dynamic, and meaningful to site visitors. Teaches participants how to effectively plan, develop, and arrange content through the use of information design principles, content management systems, and analysis tools. Culminates with students building a live site for a real-world client where students must solve real design, development, and delivery issues.

Lab access fee of \$45 for computers applies.

DWDD 490R. Senior Capstone. (3 Credits)

Prerequisite(s): Portfolio Review Acceptance and Senior Class Standing

Provides a capstone experience working in digital media. Develops individual real-world projects in consultation with a faculty advisor. May be repeated for a maximum of 6 credits toward graduation.

Course Lab fee of \$30 applies. Software fee of \$15 applies.