Foundational Courses

TEWG 1010 Introduction to Web and Graphic Design **3 Credits / 90 Clock-Hours**

Introduction to Web and Graphic Design explores how storytelling empowers all effective digital marketing and online communication. Students will evaluate and elevate their online presence by creating professional emails, cover letters, resumes, portfolios, and social media accounts.

Objectives:
• Identify individual students' learning styles and present tools for active learning.
• Define graphic design and web design.
• Define the purpose of web and graphic design in digital marketing.
• Describe the different types of digital marketing channels available.
• Utilize storytelling in digital communication.
• Create a resume, cover letter, professional bio, and personal statement.
• Enhance and edit social media profiles to impress clients/employers.
• Create a digital portfolio.

TEWG 1020 Digital Image Editing with Raster Graphics **3 Credits / 90 Clock-Hours**

Digital Image Editing with Raster Graphics explores fundamental and advanced features of industry-standard image editing software for graphic design. Students will edit, enhance, repair, modify, and combine images with text and shapes to create graphics for web and print.

Objectives:
• Explain the basic concepts associated with raster images, digital color spaces, and file formats.
• Define image composition and its main goals.
• Define and recognize principles of composition in graphics: balance, contrast, motion, emphasis, scale, pattern, unity.
• Edit, alter, enhance, repair, combine, and manipulate digital images.
• Adjust size, resolution, and file formats based off the intended final context (print vs web).
• Use selection tools and shortcut keys.
• Work with and organize layers.
• Create a digital portfolio of completed work.

TEWG 1030 Digital Illustration with Vector Graphics **3 Credits / 90 Clock-Hours**

Digital Illustration with Vector Graphics explores fundamental and advanced features of industry-standard vector illustration software for graphic design. Students will edit, enhance, repair, modify, and combine images with text and shapes to create graphics for web and print.

Objectives:
• Examine the formal elements of design: line, shape, color, and texture.
• Use colors and shapes to design signs and symbols.
• Create illustrations with drawing tools.
• Work with type, layers, gradients, blends, and patterns.
• Use brushes, effects, clipping masks, and graphic styles.
• Explore creating images with distortions, gradient meshes, envelopes, and blends.
• Use design concepts and tools to create branded marketing materials.
• Create a digital portfolio of completed work.

TEWG 1040 Introduction to Web Design with HTML and CSS **3 Credits / 90 Clock-Hours**

Introduction to Web Design with HTML and CSS introduces the latest HTML/CSS techniques to create custom mobile -first responsive websites that automatically scale and adjust their content and layout to fit any screen size.

Objectives:
• Create responsive web pages with HTML5.
• Configure text, color, and page layout with Cascading Style Sheets.
• Configure images and videos on web pages.
• Explore new CSS3 properties.
• Design web pages with best practices.
• Design web pages with accessibility, usability, and search engine optimization considerations.
• Obtain a domain name and a web host.
• Publish web pages to the internet using File Transfer Protocol (FTP).
• Develop a high-quality personal portfolio site.

TEWG 1050 Responsive Web Design with Advanced HTML and CSS **3 Credits / 90 Clock-Hours**

Responsive Web Design with Advanced HTML and CSS introduces the basics of website templating to create a website structure that is easy to maintain. Students will explore advanced CSS techniques and JavaScript libraries to add interactivity and advanced functionality to a website.

Objectives:
• Understand the purpose of a website template and how to create it.
• Utilize CSS3 to style web content.
• Improve workflow with CSS Preprocessors.
• Utilize JSON and JavaScript to organize data.
• Develop a high-quality personal portfolio site.

TEWG 1060 Introduction to UX/UI Design **3 Credits / 90 Clock-Hours**

Introduction to UX/UI Design teaches students the research and design processes necessary to create high-quality user experiences (UX). Students will use industry-standard tools to design and prototype user interfaces (UI) that are intuitive and easy to use.

Objectives:
• Define UX/UI design process from idea to deliverable.
• Define Gestalt Principles.
• Conduct user interviews and data synthesis.
• Explore ideation processes and user empathy.
• Create a storyboard, user flow, and paper prototypes.
• Conduct UI analysis.
• Create wireframes and prototypes.
• Create site maps and effective navigation using information architecture best practices.
• Create design system and UI style guides.
• Understand the value of grids in creating professional designs.
• Create low, mid, and high-fidelity wireframes and prototypes.
• Conduct usability tests and employ an iterative design process.
• Create a case study.

TEWG 1070 Responsive Web Design with CMS **3 Credits / 90 Clock-Hours**

Responsive Web Design with CMS introduces the process for transforming a static site into a dynamic CMS theme. Students will install the CMS locally, modify content, style the site using CSS/JS, and migrate the CMS to a live internet server.

Objectives:
• Setup a development environment.
• Identify the primary components that make up a CMS theme.
• Utilize CSS Preprocessing and JavaScript to add styling and functionality.
• Create a custom child theme.
• Identify and install essential plugins.
• Migrate the site to a live internet server.

Supplemental Courses Varies by Institution

Davis

TEWG 1100 Design with Type **2 Credits / 60 Clock-Hours**

Design with Type introduces the history and principles of using type and words as design elements. Throughout this course, students will study the history of letter forms and fonts as well as various techniques for printing documents.

Objectives:
• Identify and discuss the major technological advances in the history of printing.
• Discuss font styles and families and how they have evolved over time.
• Create wood or potato block letters and use them for printing images.
• Apply typesetting terminology and techniques to documents.
• Design a custom family of font styles.
• Identify the principles of effective typography and font usage.
• Create documents that utilize fonts and letter forms as major design elements.

TEWG 1110 Digital Publishing **3 Credits / 90 Clock-Hours**

Digital Publishing examines the basic features of industry standard software – working with tools and palettes to work to place graphics as well as text. Throughout this course, students will explore how to set up new documents with master pages, work with colors and gradients, import and link graphics, draw with vectors, adjust typography, edit text, create tables, work with XML, export to PDF, and color management. Additionally, students will be introduced to transparencies, blending modes, feathered edges, and drop shadows.

Objectives:
• Identify and work with the workspace.
• Set up a document.
• Work with objects, color, and flowing text.
• Edit text and work with typography and styles.
• Create tables, import and modify graphics, work with transparency.
• Printing and exporting.
• Create PDF files with form fields.
• Create a fixed layout ePub and publish online.

TEWG 1120 Advanced UX/UI Design **3 Credits / 90 Clock-Hours**

Advanced UX/UI Design is designed for students to use the knowledge and skills gained from the Introduction to UX/UI Design course to create applications. Students will use industry-standard tools to design and prototype User Interfaces (UI) that are intuitive and easy to use. Upon course completion, students will have three full case studies for their portfolio.

Objectives:
• Define UX/UI design thinking process.
• Conduct user interviews and data synthesis.
• Demonstrate the skills of user empathy and ideation.
• Create storyboard, user flow, paper prototype.
• Conduct UI analysis.
• Define Gestalt principles.
• Describe information architecture while create site maps and navigation.
• Create Design System and UI style guides.
• Create low, mid, and high-fidelity wireframe and prototyping.
• Conduct usability test and UI iteration.
• Create case study summary and full case study.
• Present projects orally.

TEWG 1130 Digital Video I **3 Credits / 90 Clock-Hours**

Students in this course will develop skills using industry standard software to capture and edit audio and video, add and manipulate transitions and effects, and export in a variety of different formats.

Objectives:
• Set up a project.
• Import and organize media.
• Edit video with essential techniques.
• Work with clips and markers.
• Add video and audio transitions.
• Edit video with advanced techniques.
• Put clips in motion.
• Edit, mix, and improve audio.
• Add video effects.
• Apply color correction and grading.
• Work with composting techniques.
• Create new graphics.
• Export frames, clips, and sequences.

TEWG 1140 Digital Video II **3 Credits / 90 Clock-Hours**

Students in this course will develop skills using industry standard software for digital post-production video effects. Students will practice using 2D and 3D tools to create compositing, animation, and effects as motion-graphics professionals, visual effects artists, web designers, and video professionals.

Objectives:
• Work with the After Effects interface and workspace
• Create basic animation using effects and presets.
• Animate text, layers and multimedia presentations.
• Work with shape layers, masks and keying.
• Distort objects with the puppet tools.
• Correct color.
• Rotoscope with Roto Brush tool.
• Build 3D objects and work with 3D features.
• Work with advanced editing techniques.
• Render and output projects.

TEWG 1150 Foundations of Digital Marketing and E-Commerce **3 Credits / 90 Clock-Hours**

Students will learn to effectively and affordably market products, ideas, and information using online shopping carts, email marketing, social networking, search engine optimization, crowd funding, video marketing, and printed collateral.

Objectives:
• Integrate an eCommerce Shopping Cart into and existing website.
• Create an Email Marketing Campaign.
• Utilize Social Networking Business Pages.
• Optimize a webpage for Search Engines.
• Develop a Crowd Funding Campaign.
• Script a Marketing Video.
• Implement Digital Conversion Metrics/Analytics.

TEWG 1160 Designing for the Real World **3 Credits / 90 Clock-Hours**

Designing for the Real World explores what it is like to work in the customer-focused design industry. Throughout this course, students will develop brand identities (from concept to production) for clients in the fashion, tech, and/or restaurant industries. Students will experience what it is like to work with real customers and practice responding to many of the most common customer requests. Upon completion of this course, students will have two case studies to add to their portfolio along with an intricate understanding of the difficulties that are involved in designing for real world clients.

Objectives:
• Facilitate a client consultation / discovery meeting.
• Create a proposal / quote / contract for client services.
• Manage multiple clients / projects simultaneously.
• Effectively communicate through project management software.
• Define a target audience with user profiles.
• Design business papers and a style guide.
• Create a website to a client's specifications and satisfaction.

TEWG 1170 JavaScript Fundamentals **3 Credits / 90 Clock-Hours**

Students in this course will learn basic JavaScript programming concepts along with the syntax and techniques needed to build and modify simple web applications. Students will also learn to utilize the tools necessary to troubleshoot and debug JavaScript applications. Students will practice and build dynamically functioning applications using JavaScript.

Objectives:
• Define concepts and terms necessary to develop JavaScript applications.
• Identify and apply basic JavaScript concepts including control flow, functions, methods, object literals, the DOM, forms and arrays.
• Use functions and methods.
• Create real-world front-end applications with JavaScript.
• Identify errors in code.

TEWG 1180 Modern JavaScript **3 Credits / 90 Clock-Hours**

Students in this course will learn advanced JavaScript programming concepts along with the syntax and techniques needed to build and modify web applications. Students will practice and build dynamically functioning applications using modern JavaScript techniques. Students will also be introduced to jQuery and learn about its relation to JavaScript.

Objectives:
• Create more advanced real-world front-end applications with JavaScript.
• Create useful JavaScript driven UI components like popups, drop-downs, tabs, tool-tips and more.
• Apply modern, cutting-edge JavaScript features by using modern workflow (Babel and Webpack).
• Use real-time databases to store, retrieve and update application data.
• Use OOP (object-oriented programming) with JavaScript, working with prototypes and classes.
• Explain the basics of jQuery and its relation to the JavaScript library.

TEWG 1190 Advanced JavaScript Frameworks **3 Credits / 90 Clock-Hours**

Advanced JavaScript Frameworks introduces the most popular JavaScript libraries that are used in Front-End Web Development. During this course, students will explore the capabilities of these frameworks and learn how to install, configure, and implement their most common design patterns. Upon completion of this course, students will be prepared to create dynamic web applications full of advanced functionality.

Objectives:
• Recognize the JavaScript framework ecosystem.
• Utilize NPM, Babel, and Webpack.
• Develop highly reusable JavaScript components.
• Manage and update state within an application.
• Build and deploy a web application with a JavaScript framework.

TEWG 1300 Graphic Design Principles **3 Credits / 90 Clock-Hours**

Students in this course will study the principles and processes of graphic design. Students will practice generating design concepts, applying design principles to graphic design formats and disciplines, and using the design elements to create and design for print and screen media. This course aims to build a solid foundation for better graphic design and communication.

Objectives:
• Define graphic design.
• Examine the formal elements: line, shape, color and texture in design.
• Identify and apply visual hierarchy.
• Recognize design principles in graphics: format, balance, visual hierarchy, rhythm, unity, and line of perceptual organization.
• Design with types.
• Identify the 5-phase design process.
• Generate design concepts.
• Use color to design signs and symbols.

TEWG 1310 Creative Branding **1 Credit / 30 Clock-Hours**

Students will develop a comprehensive understanding of the fundamental principles and practical applications of branding in the context of graphic design and marketing. Participants will delve into the anatomy of successful brands through case studies, explore research methodologies, conduct brand analysis, and ultimately apply their knowledge to create and design their unique brand.

Objectives:
• Explain brand components and their impact on consumer perception.
• Analyze and compare existing brands through research methodologies, applying critical thinking skills to identify strengths, weaknesses, opportunities, and threats to propose innovative branding concepts.
• Create a brand identity, demonstrating synthesis and application of the acquired knowledge in a hands-on project encompassing branding basics, research, analysis, and design principles.

TEWG 1320 Social Media Marketing **3 Credits / 90 Clock-Hours**

Students will delve into the intricacies of major social media platforms, learning to leverage them for effective strategic marketing campaigns. Through a comprehensive curriculum, students will gain proficiency in audience analysis, content creation, and campaign optimization. Practical exercises and real-world case studies will empower students to develop a strategic social media marketing plan, ensuring they are well-prepared for the industry's evolving demands.

Objectives:
• Identify the features and functions of major social media platforms for effective marketing.
• Analyze audience characteristics to tailor marketing strategies for specific demographics.
• Apply content creation techniques and optimization strategies across social media platforms.

TEWG 1330 Color Theory Application in Digital Design **1 Credit / 30 Clock-Hours**

This course reviews the principles and applications of color theory in the context of digital design. Students will gain a deep understanding of color terminology, models, harmony, psychology, and their relevance to contemporary design practices. This course equips students with theoretical knowledge and practical skills essential for effective design work by exploring the intersection of color with current trends and technologies in the digital design world. By the end of the course, students will emerge with a solid foundation in color theory and the ability to apply this knowledge in digital design contexts effectively.

Objectives:
• Define the color basics.
• Identify primary, secondary, and tertiary colors.
• Explain the significance of color attributes in design.
• Describe the color models, harmony, and psychology.
• Describe the color in nature and the design industry.
• Select and combine colors for digital design projects.
• Apply color theory principles to create visually appealing compositions.

TEWG 1340 Digital Content Creation **2 Credits / 60 Clock-Hours**

Digital Content Creation explores topics that provide students with experience in AR, 3D, and asset creation to be used in various Adobe software. Students will learn to create and import brushes, materials, shapes, and colors using their phones or other mobile devices. Students will have opportunities to develop AR experiences, 3D models, and other content to enhance their engagement with their work.

Objectives:
• Define Content Creation as both traditional and digital. Digitize real-world objects to use in digital image creation.
• Describe augmented reality and its current and future roles in the design industry.
• Create product mockups to display logos and other design assets.
• Practice the use of Artificial Intelligence in Design.
• Create assets from the real world.
• Implement the 3D environment in design.

TEWG 1350 Introduction to 3D **3 Credits / 90 Clock-Hours**

This course introduces students to 3D modeling and animation using Blender, a powerful open-source 3D creation suite. Students will learn the fundamentals of 3D design, including modeling, texturing, lighting, and animation while exploring the interface and tools within Blender. Throughout the course, students will complete hands-on projects to create basic 3D models, animations, and render scenes, gaining practical and technical skills in digital artistry. By the end of the course, students will have a good foundation in 3D design principles and the ability to produce their own 3D assets and simple animations.

Objectives:
• Navigate Blender’s interface and customize workspace layouts for efficient workflows.
• Describe the basic principles of 3D modeling, including polygonal modeling, extrusion, and subdivision surfaces.
• Create and manipulate 3D models using Blender's mesh tools and sculpting features.
• Apply textures, materials, and shaders to models for realistic or stylized rendering.
• Set up and adjust lighting in 3D scenes to achieve various visual effects.
• Animate 3D objects and characters using keyframes and timeline editing in Blender.
• Render still images and animated sequences using Blender’s built-in rendering engines.
• Export 3D models and animations in various formats for other applications or 3D printing.
• Troubleshoot and solve common issues encountered in 3D workflows.
• Develop a personal project demonstrating the skills learned throughout the course.

TEWG 1900 Web and Graphic Design Externship **2 Credits / 90 Clock-Hours**

The Web and Graphic Design externship experience helps students transition from a student into a professional role by allowing them to demonstrate the knowledge, skills, and professional attributes learned in the program while working in a professional setting. Students will gain professional exposure to the nature of new media and essential concepts of visual communication learned throughout the program.

Objectives:
• Observe the day-to-day routines of a professional facility.
• Develop and enhance professional skills and responsibility.
• Improve research and design skills.
• Acquire new knowledge and skills of digital media design process and practice.

Ogden-Weber

TEWG 1170 JavaScript Fundamentals **3 Credits / 90 Clock-Hours**

Students in this course will learn basic JavaScript programming concepts along with the syntax and techniques needed to build and modify simple web applications. Students will also learn to utilize the tools necessary to troubleshoot and debug JavaScript applications. Students will practice and build dynamically functioning applications using JavaScript.

Objectives:
• Define concepts and terms necessary to develop JavaScript applications.
• Identify and apply basic JavaScript concepts including control flow, functions, methods, object literals, the DOM, forms and arrays.
• Use functions and methods.
• Create real-world front-end applications with JavaScript.
• Identify errors in code.

TEWG 1130 Digital Video I **3 Credits / 90 Clock-Hours**

Students in this course will develop skills using industry standard software to capture and edit audio and video, add and manipulate transitions and effects, and export in a variety of different formats.

Objectives:
• Set up a project.
• Import and organize media.
• Edit video with essential techniques.
• Work with clips and markers.
• Add video and audio transitions.
• Edit video with advanced techniques.
• Put clips in motion.
• Edit, mix, and improve audio.
• Add video effects.
• Apply color correction and grading.
• Work with composting techniques.
• Create new graphics.
• Export frames, clips, and sequences.

TEWG 1140 Digital Video II **3 Credits / 90 Clock-Hours**

Students in this course will develop skills using industry standard software for digital post-production video effects. Students will practice using 2D and 3D tools to create compositing, animation, and effects as motion-graphics professionals, visual effects artists, web designers, and video professionals.

Objectives:
• Work with the After Effects interface and workspace
• Create basic animation using effects and presets.
• Animate text, layers and multimedia presentations.
• Work with shape layers, masks and keying.
• Distort objects with the puppet tools.
• Correct color.
• Rotoscope with Roto Brush tool.
• Build 3D objects and work with 3D features.
• Work with advanced editing techniques.
• Render and output projects.

TEWG 1300 Graphic Design Principles **3 Credits / 90 Clock-Hours**

Students in this course will study the principles and processes of graphic design. Students will practice generating design concepts, applying design principles to graphic design formats and disciplines, and using the design elements to create and design for print and screen media. This course aims to build a solid foundation for better graphic design and communication.

Objectives:
• Define graphic design.
• Examine the formal elements: line, shape, color and texture in design.
• Identify and apply visual hierarchy.
• Recognize design principles in graphics: format, balance, visual hierarchy, rhythm, unity, and line of perceptual organization.
• Design with types.
• Identify the 5-phase design process.
• Generate design concepts.
• Use color to design signs and symbols.

Salt Lake

TEDG 1020 Digital Literacy **1 Credit / 30 Clock-Hours**

In this course, students will learn to effectively use digital technologies, such as computers and the internet, to find, evaluate, create, and communicate information. Students will demonstrate their ability to complete basic computing tasks such as working with an operating system, creating and managing files and folders, and effectively utilizing internet searches and resources. Students will also be introduced to common terminology and file types that they will encounter in various digital media industries.

Objectives:
• Demonstrate proper file management including the use of cloud storage.
• Demonstrate basic knowledge of the operating system.
• Describe important facts about the internet and how it works.
• Demonstrate the ability to use various browsers and their development tools.
• Explain the various languages used for building websites and how they interact.
• Describe the tools used for web design/development.
• Explain the various tools commonly used by web and graphic designers.

TEWG 1200 Design Principles **2 Credits / 60 Clock-Hours**

Design principles are fundamental guidelines that help designers to make informed decisions about how to create effective and aesthetically pleasing designs. These principles are based on fundamental principles of visual perception, human behavior, and design theory. This course familiarizes students with the principles of design including the use of color, typography, and layout techniques. After completing the course students will be able to use the design principles and elements to effectively communicate a message or fulfill a specific goal.

Objectives:
• Demonstrate understanding of the design process.
• Describe the principles of design.
• Describe primary design elements.
• Use design tools and software to create and manipulate digital designs.
• Develop effective layouts using various layout techniques.
• Analyze and critique designs using visual vocabulary.

TEWG 1210 Introduction to JavaScript **3 Credits / 90 Clock-Hours**

In this course students will learn to the fundamentals of JavaScript, including its syntax and how to work with its major components, such as variables, data types, operators, functions, control structures, objects, and events. Students will also learn to utilize the tools necessary to troubleshoot and debug JavaScript code. After completing this course students will be able to incorporate JavaScript into a website to create interactive user experiences and simple web applications.

Objectives:
• Explain the key features of the JavaScript syntax.
• Demonstrate proper use of JavaScript syntax such as variables, data types, operators, control structures, functions, objects, and events.
• Use JavaScript to interact with the Document Object Model (DOM)
• Troubleshoot and validate JavaScript code using debugging specific tools and methods.
• Incorporate JavaScript into websites.

TEWG 1220 Web Animation **3 Credits / 90 Clock-Hours**

The Web Animation course introduces students to a variety of elements involved in website animation—more specifically animations created using HTML, CSS, JavaScript, and JavaScript libraries.
Emphasis is placed on the proper use of these scripting and web languages and creating a variety of graphic objects that improve visual styling and interactivity to a website.
Also covered in this course is identifying and developing quality web page content such as navigation buttons and dynamic text effects that will enhance and add polish to your web design portfolio.

Objectives:
• Demonstrate an understanding of the principles of animation, such as timing, spacing, and easing.
• Create animations using web animation tools and technologies, such as CSS, JavaScript, and JavaScript libraries.
• Integrate animations into web design.