

**Central Ohio Technical College**  
**Course Description Listing – Digital Media Design Technology Courses**  
**2009-2010 Academic Year**

**DMD-3819 Graphic Design History**

3 credit hours, 3 contact hours (3 hours lecture and 0 hours lab). Prerequisite: None. Course is graded A-E.

A survey of the historical developments of graphic design communications including pivotal people and events that led to current methods and theories of digital media communication. The student will learn the rich history of graphic communications and how it relates to society

**DMD-3820 Design Fundamentals**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: (DMD-3837 or DMD-3860) or concurrent enrollment in 3860. Course is graded A-E.

This course is an orientation to digital design, with emphasis on the history and the basic principles of digital design using key computer graphics tools.

**DMD-3822 Digital Photography I**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: None. Course is graded A-E.

This course provides an introduction to the techniques and theories of digital photography, with an emphasis on the design of photographic images and learning to “see.” The course covers pre-visualization, composition, image capture, simple digital editing of the image and final digital output. Through group critiques, the student will learn to appreciate and use photography as part of the communication process of design. A digital still camera of at least 3 Megapixels is highly recommended.

**DMD-3824 Fundamentals of Color**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3820 or (concurrent enrollment in DMD-3820 and DMD-3860). Course is graded A-E.

This course provides an introduction to the theory and applications of color and color perception, including hue, saturation and value and both additive and subtractive color as used in design and digital output for screen and print.

**DMD-3825 Digital Photography II**

2 credit hours, 4 contact hours (1 hour lecture and 3 hours lab). Prerequisite: DMD-3822. Course is graded A-E.

This course continues the exploration of digital photography begun in Digital Photography II, expanding into uses of digital software tools to manipulate the image. The student will continue to hone his or her own creative vision in capturing and manipulating photographic images using digital technology. The student will focus on extending the photographic image beyond what the camera can see through the use of filters (physical and software), image compositing and physical deconstruction of the original image.

**DMD-3826 Fundamentals of Typography**

2 credit hours, 4 contact hours (1 hour lecture and 3 hours lab). Prerequisite: DMD-3837 or DMD-3860 or concurrent enrollment in DMD-3860. Course is graded A-E.

This course is an introduction to the history of type and the use of the letterform in digital design. The student will use software tools to develop a creative understanding of and a technical competence in using type as both a holder of content and an integral part of digital design.

**DMD-3828 Digital Video Production I**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3831, and (DMD-3822 or concurrent enrollment in DMD-3822). Course is graded A-E.

This course is an introduction to the creation and editing of digital video. The course covers the history of film and video and explores the various forms of the medium. The student will learn the basic underlying technology of digital video and create their own projects from motion studies to complete non-linearly-edited video stories.

**COTC Course Description Listing – Digital Media Design Technology Courses  
2009-2010 Academic Year****DMD-3829 Digital Video Production II**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3828. Course is graded A-E.

This course continues the exploration of digital video production, and the focus of this course is on non-linear editing and special effects. Topics covered include audio, video, transitional effects, 2-D animation and compositing, and video compression for digital media.

**DMD-3831 Fundamentals of Drawing**

4 credit hours, 8 contact hours (0 hours lecture and 8 hours lab). Prerequisite: None. Course is graded A-E. This course has been approved by the Ohio Board of Regents as meeting the Transfer Assurance Guide (TAG) course [OAH001](#) requirements.

This course explores the basic techniques of drawing, focusing on composition, proportion, perspective and the basic fundamentals of line, shape, contrast, texture, balance, and unity. Projects include studies of figures, nature and interiors with the purpose of developing an understanding of how to rapidly communicate with basic analog tools before using digital media.

**DMD-3832 Multimedia Production I**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3820 and DMD-3831. Course is graded A-E.

This course is exploration into the design and programming of interactive media, with an emphasis on Flash. The student will explore both hand-animated graphics and more complex Actionscript projects.

**DMD-3833 Multimedia Production II**

2 credit hours, 3 contact hours (1 hour lecture and 2 hours lab). Prerequisite: DMD-3832. Course is graded A-E.

This course continues the exploration of interactive media, integrating audio, video, text, graphics and animation into a single program under interactive control. Topics covered include advanced Actionscript and interactive projects.

**DMD-3835 Digital Media Senior Project**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3822, DMD-3824, DMD-3825, DMD-3826, DMD-3828, DMD-3832, DMD-3836, and DMD-3844. Course is graded A-E.

The Digital Media Design Project course completes the study of digital media design with a quarter long project focused on the digital media specialty of the student's choice. The student will choose a project, preferably in partnership with a community business or association, to produce production quality work for his or her portfolio. The student is expected to work closely with the instructor and the project client.

**DMD-3836 Mass Media Communication**

3 credit hours, 4 contact hours (2 hours lecture and 2 hours lab). Prerequisite: None [DMD-3837 or DMD-3860 (or concurrent enrollment in DMD-3860) or DMD-3820 (or concurrent enrollment in DMD-3820) is recommended]. Course is graded A-E.

This course is an introduction to the history and development of mass media, from print to the interactive future. The student will study how communication, in particular marketing and advertising, has developed and will integrate theory with practical exercises in developing communication strategies and implementations. The student will gain experience in creating copy and content for various digital media.

**DMD-3839 Web Design & Development I**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3837 or DMD-3860 (or concurrent enrollment in DMD-3860) or CMP-2596. Course is graded A-E.

This course is an introduction to Web site design and development. The student will be introduced to XHTML, page markup, page layout including tables, frames and layers, and the use of scripting languages.

**COTC Course Description Listing – Digital Media Design Technology Courses  
2009-2010 Academic Year****DMD-3840 Web Design and Development II**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3839. Course is graded A-E.

Building on the concepts and skills learned in 3839, the student will continue to examine website design, using interactive tools. Emphasis switches in this class from the basics of construction to an understanding of the Web visitor. Beginning with usability, the course will alternate with human-centered design and dynamic XHTML/XML, including Cascading Style Sheets, Layers, and Javascript.

**DMD-3841 3-D Design and Animation II**

3 credit hours, 5 contact hours (1 hours lecture and 4 hours lab). Prerequisite: DMD-3844. Course is graded A-E

Continuing the design of 3-D models in software, the course expands on advanced rendering techniques such as radiosity and advanced animation, including inverse kinematics and bones.

**DMD-3842 Digital Media Portfolio**

2 credit hours, 4 contact hours (1 hour lecture and 3 hours lab). Prerequisite: DMD-3822, DMD-3824, DMD-3825, (DMD-3826 or DMD-3873), DMD-3828, DMD-3832, DMD-3836 and DMD-3844.

This is capstone course structured to give the student experience in real world design problem solving. The student will apply skills learned in previous course work to develop several portfolio-level pieces, with an emphasis on design. The student will learn how to create an appropriate resume and portfolio for digital media.

**DMD-3843 Design for Print I**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3831 (or concurrent enrollment in DMD-3831), DMD-3820 or (DMD-3837 or DMD-3860) and concurrent enrollment in DMD-3820. Course is graded A-E.

This course focuses on the layout of printed materials using standard digital page layout software. The student will focus on illustration and layout software while they explore the creation of projects such as brochures, advertisements, newsletters and other printed promotional materials, with an emphasis on the pre-press process and final printed output.

**DMD-3844 3-D Design and Animation I**

3 credit hours, 5 contact hours (1 hours lecture and 4 hours lab). Prerequisite: DMD-3837 or DMD-3860. Course is graded A-E

This course is an introduction to the construction of three-dimensional models and environments with animated movement through those environments.

**DMD-3845 Design for Print II**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3843 and DMD-3826. Course is graded A-E.

This course continues the exploration of the technology, principles and processes of digital publishing and how they relate in application to actual publishing projects. Special emphasis will be given to typography and real-world printing processes.

**DMD-3850 Web Design & Development III**

2 credit hours, 3 contact hours (1 hour lecture and 2 hours lab). Prerequisite: DMD-3840. Course is graded A-E.

This project-based course continues the exploration of Web development, expanding from XHTML with client-side languages, such as Javascript, with an introduction to server-side programming, such as CGI or PHP. The actual programming and scripting languages will remain flexible to reflect the latest industry standards. Emphasis is not on the syntax of programming but on problem solving, specifically as a course for Web designers.

**COTC Course Description Listing – Digital Media Design Technology Courses  
2009-2010 Academic Year****DMD-3852 Motion Graphics**

2 credit hours, 3 contact hours (1 hour lecture and 2 hours lab). Prerequisite: DMD-3828. Course is graded A-E.

This course will focus on advanced projects in video compositing and motion graphics. Building on non-linear editing, the course explores compositing computer graphics and live video, special effects, and design of titles and animated graphics. The work of professional animators will be used to demonstrate techniques.

**DMD-3853 Information Design**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3845. Course is graded A-E.

This course provides an overview of information architecture through static and dynamic projects that emphasize visual problem solving. The student will learn to translate sometimes complex data into clear, visually compelling solutions.

**DMD-3854 Photography III**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3825. Course is graded A-E.

This course is a further exploration into digital photography, with a concentration on portrait photography utilizing natural, studio and strobe lighting. Instruction will include methods by which to create photographs that capture a subject's innermost essence and/or document an event, i.e., a wedding or graduation. It includes shooting outdoors and indoors with both natural/ existing light and professional lighting equipment.

**DMD-3855 Digital Media Internship**

2 credit hours, 12 contact hours per week (0 hours lecture, 0 hours lab, and 12 hours per week internship) for a total of 120 contact hours. Prerequisite: Completion of all basic and level one technical coursework in the first four Plan of Study quarters, plus a grade of "B" (3.00) or better in COM-1535 and COM-1536. Course is graded A-E.

This course provides the student with the practical application of skills in graphic design, Web design, digital video production, interactive development, and/or other digital media design production at a business or agency. The internship correlates academic preparation with professionally supervised work experience.

**DMD-3857 Audio Production**

2 credit hours, 3 contact hours (1 hour lecture and 2 hours lab). Prerequisite: DMD-3836. Course is graded A-E.

This course is an overview of digital audio as a medium of communication. The student will learn the terminology and processes of audio production. The course will further examine theories of communication as they apply to audio production for radio, video, and music recording. The student will have the opportunity to practice the techniques and skills involved in the process of producing digital audio material.

**DMD-3860 Digital Software Fundamentals**

2 credit hour, 4 contact hours (1 hour lecture and 3 hours lab). Prerequisite: None. Course is graded A-E.

This is an overview course covering the background of digital media and an introduction to digital media software tools. The student will explore the layout of the interface for digital software programs most commonly used in digital media in preparation for further classes. This course should be taken before any digital media design course requiring the use of digital software.

**DMD-3862 Introduction to e-Life: the Evolving Web**

3 credit hours, 3 contact hours (3 hours lecture and 0 hours lab). Prerequisite: None. Course is graded A-E.

This course focuses on the recent history of the Internet and the growth of the World Wide Web from a simple broadcast medium into a platform that fosters communities of users, empowering them to create, share, and participate in the virtual community. Topics covered include blogs, wikis, RSS, social bookmarking, video streams, virtual communities for entertainment and education, and browser-based applications.

**COTC Course Description Listing – Digital Media Design Technology Courses  
2009-2010 Academic Year****DMD-3864 Interactive Site Design**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3839. Course is graded A-E.

This project-based course continues the exploration of Web design, focusing on the Document Object Model (DOM) and web tools for developing interactive web sites. The actual design tools will remain flexible to reflect the latest industry standards. Emphasis is less on page design and more on creating the elements that convert a static site into an interactive site.

**DMD-3866 Designing Dynamic Websites**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3840. Course is graded A-E.

This project-based course continues the exploration of Web design, focusing on how the designer works with server-side resources. The design of business-oriented web sites often requires the web designer to plan for accessing, storing, and retrieving information from the server. Emphasis is on integrating the design with current web technology.

**DMD-3870 Critical Studies in Game Design**

3 credit hours, 3 contact hours (3 hours lecture and 0 hours lab). Prerequisite: None. Course is graded A-E.

This course introduces the non-technical study of games, the history of games and the game industry. The course develops a vocabulary for discussing games and tools for analyzing why certain games are successful. The course will also touch on game theory and its application to a variety of disciplines and will introduce the social aspects of games. The student will be expected to provide written critiques of games using the critical approaches presented in the course.

**DMD-3873 Game Design Decisions and Processes**

3 credit hours, 3 contact hours (3 hours lecture and 0 hours lab). Prerequisite: None. Course is graded A-E.

This course is an exploration of the design process from the "management of constraints" and the manipulation of design variables to the planning and execution of the design during the development process. The student will investigate and explore problem-solving methods, writing specifications, creating design documents, game bibles, pseudo-code, and paper prototypes in preparation for programming.

**DMD-3874 Interactive Storytelling**

2 credit hours, 3 contact hours (1 hour lecture and 2 hours lab). Prerequisite: DMD-3873. Course is graded A-E.

This course is about human-media interaction: interactive storytelling, computer game design and more. The essence of this course is on the most basic element: storytelling. This course provides the student with hands-on training in interactive projects developed from their own stories. These projects will include text, images and animation with basic programming using 2D game software.

**DMD-3876 Game Programming I**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3873 or CMP-2596. Course is graded A-E.

This course is an introduction to game programming using C++. Topics include representing game worlds using data structures, pointers, classes, functions, and objects; conditions, arrays, and loops to control the flow of game logic; user input; sprites and graphic display. The student will program a classic 2D game using a simple game library.

**DMD-3877 Game Programming II**

3 credit hours, 5 contact hours (1 hour lecture and 4 hours lab). Prerequisite: DMD-3876. Course is graded A-E.

This course is a continuation of an exploration of game programming using C++. Topics include sprite animation, user interface, construction, 2D asset creation, programming for speed and playability, AI and scripting languages. The student will program computer games using a simple game library.

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**DMD-3878 Game Programming III**

2 credit hours, 3 contact hours (1 hour lecture and 2 hours lab). Prerequisite: DMD-3877. Course is graded A-E.

This course is an overview of 3D game development using a professional-level 3D game engine. Topics include terrain building, character generation, GUI construction, mission building, and animation of multi-boned creatures.