

## Digital Media (DGM)

### DGM 1061

#### Digital Cinema Editing I

3:3:1 Fall, Spring, Summer

Introduces the interface, tools, techniques, and operations of a variety of Non-Linear Editing (NLE) software programs. Introduces standard editing concepts and practices necessary for the creation and completion of Digital Cinema projects made for various distribution channels. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 1062

#### Animation for the Internet

2:1:3 On Sufficient Demand

Introduces the interface, tool set, tweening techniques, and operations of an animation software package for online use. Requires creation of an interactive project with sound, video, and motion. Introduces basic scripting. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 1063

#### Image Editing

2:1:3 Fall, Spring

Introduces students to the interface, fundamental set of tools, techniques and operations of Photoshop. Requires creation and modification of digital images. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 1110

#### Digital Media Essentials I

4:4:0 Fall, Spring, Summer

Beginning course designed to give students an in-depth introduction and well-grounded understanding of the digital media way of thinking, opportunities in the field, various tools, and introduction to development techniques. Topics include: audience assessment, digital imaging, compression algorithms, ethical dilemmas, message design through text, audio, images, animation, and digital video. May be delivered online. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 1220

#### Digital Design Essentials

3:3:0 Fall, Spring

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 for computers applies.

### DGM 1230

#### Interaction Design Essentials

3:3:0 Fall, Spring

\* Prerequisite(s): DGM 1220

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 for computers applies.

### DGM 1240

#### Communicating Digital Design

3:3:0 Fall, Spring

\* Prerequisite(s): DGM 1230

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. Teaches 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 for computers applies.

### DGM 1500

#### Intro to Digital Cinema

1:1:0 Fall

Offers an overview of the Digital Cinema major and industry. Teaches students the expectations and timetables required of them as they progress through the major. Develops a broad understanding of the various aspects of the filmmaking process and how training for these various aspects is conducted at UVU. Emphasizes industry standards of safety and professionalism. Should be taken in the first semester of classes in the program. Lab access fee of \$45 for computers applies.

### DGM 1510

#### Film Production Analysis

3:1:6 Fall, Spring

Film Production Analysis is a foundation class for those interested in the digital media and motion picture business. Analyzes the various technologies and production techniques that make up motion picture communication. Involves viewing a motion picture each week of class and analyzing how the producer and director incorporated production and structural techniques to produce a compelling story. Covers the eight sequence structural elements of motion picture storytelling, how each crew member of the production team contributes to the overall impact, how scripting is used to direct the team to create a strong cinematic effect, and how the three act eight sequence structure guides the entire team through the pre-production, production and post-production process. Software fee of \$15 applies. Course fee of \$18 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

### DGM 1520

#### Digital Cinema Production I

3:2:2 Fall, Spring, Summer

Introduces professional video production techniques used for non-narrative digital cinema projects. Covers production processes such as working with clients, storytelling, camera techniques, basic lighting techniques, production management and basic non-linear editing techniques. Requires participation in a high-quality semester project that will take a non-narrative project through the entire pre-production, production and post-production process. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 1600

#### Scripting for Internet Technologies

3:3:0 Fall, Spring

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. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 1610

#### Scripting for Animation and Games I

3:3:0 Fall, Spring

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. Lab access fee of \$45 for computers applies.

### DGM 1620

#### Survey of Animation

3:2:3 Fall, Spring, Summer

Introduces animation principles and studio processes used in the contemporary animation industry. Emphasizes the synthesis of technology and aesthetics in the production of an animated title. Includes an introduction to animation milestones and personalities. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

# Digital Media

## DGM 1660

### Introduction to 3D Modeling and Surfacing 3:3:0

Covers the 3D pipeline which includes pre-production (rough placeholder art), production (finished art), and post production (composite and effects). Instructs students to develop 3D models, UV maps, and 2D textures. Teaches how to integrate models into a realtime rendering engine. Lab access fee of \$45 for computers applies.

## DGM 210R

### Special Topics in Digital Media 1 to 4:0 to 4:0 to 12 On Sufficient Demand

Designed for students interested in specific digital media tools and concepts. Includes relevant and changing topics and tools used in production. Emphasizes hands-on experience along with lectures and demonstrations. This class may be taken for a total of nine credits, but curriculum may vary from one semester to another. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 2110

### Digital Cinema Production II 3:2:2 Fall, Spring, Summer \* Prerequisite(s): DGM 1520

Presents professional digital cinema production techniques used in narrative filmmaking. Addresses problem-solving issues related to pre-production, production and post-production. Serves as a Production Assistant Certification course recognized by the Utah Film Commission. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 2120

### Web Essentials 3:3:0 Fall, Spring, Summer

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. May be delivered hybrid and/or online. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 2130

### Digital Audio Essentials 3:2:3 Fall, Spring, Summer \* Prerequisite(s): MAT 1010

Reviews basic sound principles, cable types, microphone types, and basic techniques of use. Teaches recording of basic sounds and musical instruments into a Digital Audio Workstation. Introduces multi-track audio, editing, EQing, mixing, and mastering a 3-minute piece with voice and music. Includes a final project consisting of a multi-track music project designed for use in film, commercial radio, or other multimedia applications. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 2140

### Electronics for Media 3:2:3 Fall

Covers connectors and cable wiring standards and soldering techniques used in this field. Emphasizes electronic equipment and circuits used with electrical safety in media. Includes basic DC/AC theory such as voltage, current, resistance, power dissipation, batteries, and magnetism. Introduces the basic construction and theory of operation of circuits used in media containing electronic components, resistors, capacitors, inductors, transformers, diodes, transistors, electron tubes, operational amplifiers, and linear ICs. Designed for Digital Media students. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 220R

### Special Topics in Digital Design 1 to 4:0 to 4:0 to 12 On Sufficient Demand

Designed for students interested in specific authoring tools and concepts used in digital media processes. Includes relevant and changing topics and tools used in digital authoring. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Course fee of \$10 for materials applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 2210

### 3D Modeling and Animation Essentials 4:3:3 Fall, Spring, Summer \* Prerequisite(s): Portfolio Acceptance

Addresses the basics of 3D modeling, rigging, texturing, animation, and rendering. Demonstrates how to utilize these techniques in a production pipeline for games and animation. Includes basic techniques and theories used in a 3D animation pipeline. Software fee of \$15 applies. Course fee of \$19 for equipment applies. Lab access fee of \$45 for computers applies.

## DGM 2211

### Rigging and Animation Essentials 3:2:3 Spring \* Prerequisite(s): Portfolio Acceptance

Introduces fundamental rigging for a typical 3D character and simple 3D performance motion for animated films and games. Software fee of \$15 applies. Lab access fee of \$45 applies.

## DGM 221R

### Interaction Design Practicum 1:0:3 Spring \* Prerequisite(s): DGM 2250

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 3 credits toward graduation. Lab access fee of \$45 for computers applies.

## DGM 2221

### Game Essentials 3:2:3 Fall

\* Prerequisite(s): Portfolio Review Acceptance

Provides a foundation for basic game development pipeline. Covers low poly count modeling in a variety of software packages and use of 3D models in an industry-standard game development engine. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 2240

### Interaction Design 3:3:0 Fall, Spring \* Prerequisite(s): DGM 1230

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.

## DGM 2250

### Principles of Digital Design 3:3:0 Fall, Spring \* Prerequisite(s): DGM 1220

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. May be delivered online. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 2260

### Immersive Authoring I 3:3:0 Fall \* Prerequisite(s): DGM 1230

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. May be delivered online. Software fee of \$15 applies. Course fee of \$18 applies. Lab access fee of \$45 for computers applies.

**DGM 2270****Digital Publishing I****3:3:0****Fall**

\* Prerequisite(s): DGM 1230

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 May be delivered online. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 2271****Digital Media Design I****3:3:0****Fall, Spring**

\* Prerequisite(s): DGM 2120

Introduces students to the underlying design and development principles that create favorable circumstances for user-centered digital media experiences. Establish the development techniques and processes required for Web and mobile apps, which may include native OS and Web Apps as well as interactive digital publication Apps. Further introduces topics such as responsive design, use of grids and layout patterns according to platform, as well as underlying development considerations such as content inventory and Information Design. Offers students a greater appreciation for good design and the basic skills necessary to produce world-class media experiences. May be delivered online. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 2280****Digital Effects I****3:3:0****Fall, Spring**

\* Prerequisite(s): DGM 1230

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. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 230R****Special Topics in Digital Graphics****1 to 4:0 to 4:0 to 12 On Sufficient Demand**

Designed for students interested in specific graphic tools and concepts currently used in digital media production. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. This class may be taken for a total of nine credits, but curriculum may vary from one semester to another. Course fee of \$10 for materials applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 2320****Digital Photography and Compositing I****3:3:0****Fall, Spring**

Introduces digital image acquisition and manipulation. Teaches the mechanics of the digital camera, and introduces lighting, white balance, color temperature, digital ISO and electronic image stabilization. Discusses image compositing, EXIF data analysis and archiving. Software fee of \$15 applies.. Lab access fee of \$45 for computers applies.

**DGM 2340****Output and Color for Digital Cinema I****3:2:2****Fall, Spring**

\* Prerequisite(s): DGM 1061

Introduces digital workflow management of digital still and cinema camera assets. Addresses codecs, asset backup, management, transcoding, preparation of assets for the NLE workflow and final asset output for various digital distribution channels. Introduces color correction and color grading techniques, principles and concepts in a variety of professional software platforms. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 2341****Digital Output for Interactive Media****3:3:0****Fall, Spring**

\* Prerequisite(s): DGM 1220 or instructor approval

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. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 240R****Special Topics in Digital Audio****1 to 4:0 to 4:0 to 12**

\* Prerequisite(s): DGM 1110

Designed for students interested in specific audio tools and concepts currently used in digital audio production. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Software fee of \$15 applies. Lab access fee of \$45 for computers, applies.

**DGM 2410****Core Recording Principles****3:3:0**

\* Prerequisite(s): DGM 2130

Teaches mic choice and placement, acoustic positioning, in-line signal processing, level matching, impedance matching, phase error elimination, pre-mixing and recorded stems, DAWs, Pro-Tools intermediate skills, project budgeting, and artist and client relations. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 2430****Core Mixing Principles****3:3:0**

\* Prerequisite(s): DGM 2410

Teaches the science and art of audio mixing, centering on a broad range of musical and media post-production material. Covers initial mix plan, signal flow, and fix, fit and feature skills for all signal processors, including equalization, compression, limiting, delay, reverb, distortion, doubling, phase, flange, chorus, other modulation effects, characteristics of algorithms (digital, solid state, transformers, rectifiers, tube, electro-optical, convolution). Also, teaches mix room acoustics, treatments and workarounds. Lab access fee of \$45 for computers applies.

**DGM 2440****Sound for Film and Television****3:3:0****Spring**

\* Prerequisite(s): DGM 2130

Teaches the basics of gathering sound for use in film and video productions. Covers proper boom miking and wireless mic techniques, and acoustics preparation to record dialogue and sound effects on location and on sound stages. Examines the processes utilized in editing audio of multimedia productions, including the balancing of artistic relationships, mixing and mastering of music, sound effects tracks and Foley. Offers practical experience in audio-only productions as well as audio-video relationships. Culminates in a digital cinema mixing session. Primarily a lab class, may couple with another video class to gather the sound for a cohesive project. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 2460 (Cross-listed with: COMM 2560)****Radio Production****3:3:0****Fall**

Teaches the history of radio, and the structure of typical radio stations, from management to programming and sales, and production and promotion. Covers method of producing radio promos, radio shows, commercials and news segments, as well as features and interviews. Examines the use of Digital Audio Workstations to produce several radio segments of the student's choosing. Includes lectures, demonstrations, and guest lecturers from radio stations in the community. Software fee of \$20 applies. Lab access fee of \$45 for computers applies.

# Digital Media

## DGM 2481

### Digital Audio Restoration

3:3:0

Fall

\* Prerequisite(s): DGM 2130

Teaches the value and use of various tools to restore, preserve, and archive audio from a variety of sources, including vinyl records, tapes, film soundtracks, etc. Additional topics include removal of ambient noise (fans, AC, etc) from class film projects, impulsive noise (clicks and pops), periodic noise (hum and buzz), and random noise (spectral subtraction of ambient noise). In addition, some attention will be given to the subject of audio forensics, or restoring audio for intelligence or law enforcement applications. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 2490

### Digital Audio Workstation Training I

3:2:3

\* Prerequisite(s): DGM 2130

Teaches proficiency in the use of a Digital Audio Workstation at the beginning level. Implements the first half of AVID Corporation's "ProTools User Level" certification, and successful completion of this course, together with its follow-on course, DGM 2491, will earn students their AVID ProTools certification at the "User" level. Lab access fee of \$45 for computers applies.

## DGM 2491

### Digital Audio Workstation Training II

3:2:3

\* Prerequisite(s): DGM 2130, DGM 2490

Teaches proficiency in the use of a Digital Audio Workstation at the intermediate level. Implements the second half of AVID Corporation's "ProTools User Level" certification, and successful completion of this course, together with its preceding course, DGM 2490, will earn students their AVID ProTools certification at the "User" level. Lab access fee of \$45 for computers applies.

## DGM 250R

### Special Topics in Digital Cinema

1 to 4:0 to 4:0 to 12 On Sufficient Demand

\* Prerequisite(s): DGM 2110

Designed for students interested in specific video tools and concepts currently used in digital media processes. Includes relevant and changing topics and tools used in industry. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Lab access fee of \$45 for computers applies. Software fee of \$15 applies. Course fee of \$10 for equipment applies.

## DGM 2510

### Visual Effects for Digital Cinema I

3:2:3

Fall

\* Prerequisite(s): DGM 1061

Introduces a variety of professional Visual Effects software used in conjunction with NLE (Non-Linear Editing) software in current industry use. Establishes a foundation of understanding of cinematic post-production workflows utilized by professional visual effects houses. Lab access fee of \$45 for computers applies.

## DGM 2540

### Cinematography I

3:2:3

Fall, Spring

\* Prerequisite(s) or Corequisite(s): DGM 1520

Introduces the basic concepts of lighting, grip/electric work, and beginning cinematography. Teaches a full understanding of lighting instruments, power distribution, lighting support, rigging, dollies, and production equipment. Teaches how to work as a member of a team/department applying on-set protocols to meet the needs of production objectives. Software fee of \$15 applies. Lab access fee of \$45 for computers applies. Course fee of \$46 for equipment applies.

## DGM 2545

### Virtual Reality for Digital Cinema

#### Storytelling

3:2:2

Fall, Spring

\* Prerequisite(s): DGM 1061, DGM 1510, DGM 1520

Introduces the technical foundations of virtual reality for cinema production including capture, image stitching, editing, and output. Discusses potential narrative and documentary applications for the use of virtual reality as a storytelling vehicle. Allows students hands-on practice as they create various VR projects. Discusses current and evolving distribution and delivery channels for VR filmed content. Lab access fee of \$45 for computers applies.

## DGM 2570

### Storytelling for Digital Media I

3:2:2

Fall, Spring

\* Prerequisite(s): DGM 1510

Focuses on traditional three-act structure and character-driven storytelling. Introduces dramatic and persuasive writing for filmed media content including short narrative films and documentaries. Applies cinematic storytelling approaches to emerging technologies such as interactive media, gaming, and virtual reality. Lab access fee of \$45 for computers applies.

## DGM 2600

### The Animated Image

3:3:0

Fall

\* Prerequisite(s): ENGL 1010 or ENGH 1005

Chronicles the development of Animation as a medium dependent on both aesthetics and technology from its inception in the late 19th century through contemporary scientific and entertainment venues. Introduces key international personalities and industry benchmarks. Discusses animation both as a means of self-expression and as a commercial enterprise. Includes film screenings and research assignments. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 260R

### Special Topics in Animation and Game Development

1 to 4:0 to 4:0 to 12

Designed for students interested in specific animation tools and concepts currently used in digital animation production. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Lab access fee of \$45 for computers applies. Software fee of \$15 applies. Course fee of \$12 for equipment applies.

## DGM 2610

### Game Design I

3:2:3

Spring

\* Prerequisite(s): DGM 2221 and Portfolio Acceptance

Explores video and computer gaming from historic, economic, and production perspectives. Introduces game theory, analysis, design documentation, and development. Lab access fee of \$45 for computers applies.

## DGM 2620

### Principles of Animation I

3:2:3

Fall

\* Prerequisite(s): Portfolio Review Acceptance

Explores and applies animation pipeline practices. Emphasizes the study of objects in motion and the communication of key ideas in the development of a second-year animation project. Lab access fee of \$45 for computers applies. Software fee of \$15 applies. Course fee of \$18 for software and plug-ins applies.

## DGM 2640

### Character Development

3:2:2

Spring

\* Prerequisite(s): DGM 2210 and DGM 2620 and Portfolio Review Acceptance

In-depth study and application of 3D character development for animation and games. Requires a firm understanding of 3D modeling, basic rigging, basic texturing, and principles of animation. Students will design, model, rig, and animate 3D characters following industry processes. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 2660****Digital Storyboarding for Animation****3:3:0** **Fall, Spring**

\* Prerequisite(s): Portfolio Review Acceptance

Introduces contemporary storyboarding practices, both linear and non-linear, key to communicating information clearly, and consistently in a cost effective manner. \*Laptop Required. Lab access fee of \$45 for computers applies. Software fee of \$15 applies. Course fee of \$12 for software and plug-ins applies.

**DGM 2661****Visualization for Digital Cinema-Pre-Directing****3:3:0** **Fall, Spring**

\* Prerequisite(s): DGM 1510

Introduces concepts of visualizing filmed media content during the pre-production process from storyboarding and shot design to production design. Focuses on the role of the director to communicate lighting, character movement, camera movement, camera angles and framing to key motion picture production departments to enhance and support cinematic story. Lab access fee of \$45 for computers applies.

**DGM 2670****Scripting for Animation and Games II****3:3:0** **Spring**

\* Prerequisite(s): Portfolio Review Acceptance

Focuses on the basic elements of scripting languages in modern 3D applications. Develops a firm understanding of basic scripting concepts in a 3D environment, including: libraries, expressions, arrays, conditionals, loops, and functions. Discusses simplification of complex user operations and the development of basic user interfaces. Utilizes industry standard applications such as Maya, Houdini, and Unity3D. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 270R****Special Topics in Web Design and Development****1 to 4:0 to 4:0 to 12**

Designed for students interested in specific web design tools and concepts currently used in multimedia creation. Includes relevant and changing topics and tools used in multimedia. Emphasizes hands-on experience along with lectures and demonstrations. Completers should be able to use the web design tools to create a typical multimedia project. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits toward graduation. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 2740****Principles of Web Languages****3:3:0** **Fall, Spring**

\* Prerequisite(s): DGM 2120, DGM 2250

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. May be delivered online. Software fee of \$15 applies. Course fee of \$18 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

**DGM 2760****Web Languages I****3:3:0** **Fall, Spring**

\* Prerequisite(s): DGM 1600

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. May be delivered online. Software fee of \$15 applies. Course fee of \$18 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

**DGM 2780****Web Tools and Frameworks I****3:3:0** **Fall, Spring**

\* Prerequisite(s): DGM 2740

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. Course fee of \$18 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

**DGM 281R****Internship****1 to 8:1 to 8:0** **Fall, Spring, Summer**

\* Prerequisite(s): Departmental Approval

For Digital Media majors only. Provides a transition from school to-work where learned theory is applied to actual practice through a meaningful on-the-job experience. Includes student, employer and coordinator evaluations, on-site work visits, and written assignments. Completers should obtain experience in establishing and accomplishing individualized work objectives that improve work performance. Internship is intended for entry level DGM students who are working at that level. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May be repeated for a maximum of 16 credits towards graduation. May be graded credit/no credit.

**DGM 296R****Seminar****1 to 3:1 to 3:0 to 9** **On Sufficient Demand**

Provides short courses, workshops, and special programs in information management or current administrative topics. Curriculum may vary from one semester to another. May be repeated for a maximum of nine credits.

**DGM 301R****Digital Lecture Series****1:1:0** **Fall, Spring**

\* 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.

**DGM 302R****Digital Cinema Production Lecture Series-CineSkype****1:1:0** **Fall, Spring**

\* Prerequisite(s): (DGM 1520 or CINE 2150 or THEA 1023) and University Advanced Standing

Presents a series of feature-length films and the opportunity to discuss the challenges that went into their creation with the individual filmmaker(s). Introduces participants to directors, screenwriters, producers, and editors currently working in the industry. May be repeated for a maximum of three credits toward graduation. (Note: Some films screened may be considered controversial and carry an "R" rating.)

**DGM 3061****Professional NLE Certification****3:1:6** **Fall, Spring**

\* Prerequisite(s): DGM 1061 and University Advanced Standing

Provides guidance and materials allowing participants to certify in Non-Linear Editing software on various platforms. Focuses on certification on the User-level and Pro-level of Avid Media Composer. Extensively covers technical editing consideration including workflows, media management, color, sound, output, and scripting. Lab access fee of \$45 for computers applies.

**DGM 3110****Corporate Issues in Digital Media****3:3:0** **Fall, Spring, Summer**

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

Covers business and legal issues in multimedia. Reviews good business practices for the multimedia industry. Studies universal marketing and sales principles and mastery, as well as e-commerce fundamentals. Teaches copyright laws and procedures, obtaining permissions, creating and using contracts, protecting corporate assets, standards, security and privacy issues, and other legal issues regarding multimedia communication. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

# Digital Media

## DGM 312G

### Digital Media for Intercultural Communication

3:3:0 Fall, Spring, Summer

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

Explores issues, concepts, and practices for making digital media accessible to people from diverse cultures and people with disabilities. Covers design considerations and techniques for the Web and other digital technologies. Presents methods for understanding and comparing different cultures and ways of approaching and enhancing intercultural interactions. Addresses accessibility standards, guidelines, and laws important for digital media developers to know and implement. May be delivered online. Lab access fee of \$45 for computers applies. Software fee of \$15 applies. Course fee of \$10 for equipment applies.

## DGM 320R

### Advanced Topics in Digital Media Design 1 to 4:0 to 4:0 to 12 On Sufficient Demand

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

Intended for advanced students with an interest in digital design and authoring. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of \$45 for computers applies. Software fee of \$15 applies. Course fee of \$10 for equipment applies.

## DGM 3220

### Digital Media Project Management

3:3:0 Fall, Spring

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

Teaches the foundational management principles that contribute to both the quality and profitability of digital media products. Introduces technical project management skills to help with budgeting and scheduling as well as critical soft skills, such as how to manage product design, make good decisions, communicate effectively, and build productive work relationships. Also, teaches about different types of project documents that enable and support effective, successful projects. May be delivered online. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3240

### Interaction Design Colloquium

3:3:0 Spring

\* 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. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3260

### Immersive Authoring II

3:3:0 Spring

\* 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. This course is designed to be highly adaptable to enable infusion of 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 \$15 applies. Course fee of \$19 for software and plug-ins applies.

## DGM 3261

### Authoring Virtual Reality Experiences

3:3:0 Fall

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

Explores the use of technology for photographing locations for Virtual Reality experiences. Covers how to develop Virtual Reality content for digital screens. Addresses the use of Virtual Reality environments in real world applications to remotely tour college campuses, museums, shops, sports venues, plan events at locations; show real estate, influence travel to vacation getaways; and create historical documentation. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3270

### Digital Publishing II

3:3:0 Spring

\* Prerequisite(s): DGM 2270 and University Advanced Standing, and University Advanced Standing

Focuses on the development of engaging mobile apps for distribution on a myriad of devices. Teaches advanced development of publishing digital media experiences of all types and includes techniques for coding immersive experiences beyond standard practices. Such apps will be developed for touchscreen 'native' content and feature real-time updates. \*Laptop & Device Required. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3271

### Digital Product Design

3:3:0 Spring

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

Teaches advanced development techniques of Product Design fused with User Experience Design / User Interface Design, which can create more robust experiences, through 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. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3280

### Authoring Adaptive Experiences I

3:3:0 Spring

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

Focuses primarily on the ability to curate and realign rich content assets through internet-based Apps. Focuses on the application of media technologies that possess the ability to create adaptable content media experiences. Focuses primarily on the ability to use/reuse content in meaningful ways through unique and highly efficient distribution means. Describes how distribution can be to desktop, mobile, and advancing technologies in the home or automobile markets. Laptop Required. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3290

### Developing Digital Media for Instruction and Training

3:3:0 Fall

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

Teaches the lifecycle of training and development in a business setting. Uses the Instructional System Design (ISD) process, which includes identifying performance deficiencies and appropriate interventions, developing objectives, selecting appropriate learning technologies, developing course content, selecting effective instructional aids, delivering training, and evaluating training effectiveness. Reviews basic educational principles in teaching adult learners and managing classroom dynamics. Examines legal issues, cross-cultural preparation, and workforce diversity as they relate to training and development. Provides hands-on training experiences. Completers should be prepared to apply basic principles to training and development opportunities. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 330R

### Advanced Topics in Digital Media Graphics 1 to 4:0 to 4:0 to 12 On Sufficient Demand

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

Intended for advanced students with an interest in digital graphics and design. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3320****Digital Photography and Compositing II****3:3:0** Fall, Spring

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

Builds on skills acquired in Digital Photography and Imaging I. Uses photo imaging tools like Photoshop, Light Table, and Aperture in the creation and manipulation of digital images for use in a broad range of output specific formats. Teaches advanced image manipulation, and compositing and asset management to deliver finished digital image deliverables for such things as the web, DVD media, print, billboard, and wrap advertising media. Lab access fee of \$45 for computers applies.

**DGM 340R****Advanced Topics in Digital Audio****1 to 4:0 to 4:0 to 12**

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

Intended for advanced students with an interest in digital audio. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3410****Audio Engineering for the Studio I****3:3:0** Fall

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

Reviews basic sound principles (standing waves, studio acoustics, psycho-acoustics), microphone types and techniques of use. Covers theory and application of mixers, signal processors, and effects. Outlines proper construction and grounding of a recording studio. Introduces one or more digital audio workstations, which will be used to record a band or classical project. Requires the completion of a mixdown of a multi-track project. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3420****Studio Recording II****3:3:0** Spring

\* Prerequisite(s): DGM 3410, Portfolio Review Acceptance, and University Advanced Standing

Reviews principles of good audio engineering covered in the introductory class, but in greater depth, including, cable types, microphone types, mixers, and techniques of use. Emphasis will be on miking techniques for each individual instrument involved in the recording. Covers in-depth theory and application of mixers, signal processors, and effects. Addresses advanced stereo miking techniques and focuses on several key instruments, including piano and drums. Continues further in-depth topics on impedance matching, power requirements, and use of the decibel. Includes acoustic properties and sound transmission loss of common studio surface materials. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3430****Recording Studio Design Principles and Practices****3:3:0** On Sufficient Demand

\* Prerequisite(s): DGM 3410, Portfolio Review Acceptance, and University Advanced Standing

Addresses many issues found in the design, construction and maintenance of a recording studio. Explores the physics, mathematics, electronics, and practical issues to properly design and build a successful recording studio. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3440****Sound for Games****3:3:0**

\* Prerequisite(s): Portfolio Review Acceptance and University Advanced Standing; Laptop capable of running the Unreal Developer's Kit and Unity.

Teaches sound design and implementation for video games using both the Unreal Developer's Kit (Unreal Engine) and the Unity Game Engine. Includes visual and text-based scripting, signal flow, resource allocation and preservation, priority, layering, mastering for end-format, computer-based, console-based, and mobile-targeted development, and whole-project planning and execution. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3460****Live Sound Reinforcement****3:3:0** Spring

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

Teaches fundamental sound concepts: propagation, absorption, reflection, transmission, frequency response, effective manipulation of the decibel in calculations of loudness, power, and voltages. Covers intelligent use of microphone patterns, and loudspeaker and monitor placement. Investigates indoor sound vs. outdoor sound. Teaches proper cabling and connections, speaker crossovers, and theory of bi-amplification. Covers mixer diagrams and basic electronics. Incorporates practical experience acquired in giving technical support to UVU theater, music department, or public relations functions. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3481****Advanced Audio Restoration and Forensics****3:3:0** Fall

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

Covers advanced principles and practices for digitally restoring difficult audio specimens, and includes forensic audio restorative and reconstructive techniques important to historical, investigative, and criminological fields as well. Also covers, in more depth, the cylinder recording period at the turn of the century. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3490****Digital Audio Workstation Training III****3:2:3**

\* Prerequisite(s): Portfolio review acceptance; DGM 2490, DGM 2491, and University Advanced Standing

Teaches proficiency in the use of a Digital Audio Workstation at the advanced level. Is the UVU implementation of the first half of AVID Corporation's "ProTools Operator Level" certification, and successful completion of this course, together with its follow-on course, DGM 3491, will make AVID ProTools certification at the "Operator" level available. Lab access fee of \$45 for computers applies.

**DGM 3491****Digital Audio Workstation Training IV****3:2:3** Fall, Spring, Summer

\* Prerequisite(s): Portfolio review acceptance, DGM 3490, and University Advanced Standing

Teaches proficiency in the use of a Digital Audio Workstation at the expert level. Currently, this is the UVU implementation of the second half of AVID Corporation's "ProTools Operator Level" certification, and successful completion of this course, together with its preceding course, DGM 3490, will make AVID ProTools certification at the "Operator" level available. Lab access fee of \$45 for computers applies.

# Digital Media

## DGM 350R

### Advanced Topics in Digital Motion Picture Production

1 to 4:0 to 4:0 to 12 On Sufficient Demand

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

Includes relevant and changing topics and tools used in digital motion picture industry. Emphasizes hands-on experience. Uses digital cinema and production management and development tools to create a typical digital media project. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 351R

### Digital Broadcasting

3:1:6 On Sufficient Demand

\* Prerequisite(s): DGM 2110, Portfolio Review Acceptance, and University Advanced Standing

Teaches planning, management and execution of live video productions integrating multiple cameras. Teaches the roles of the broadcast production team. Studies digital standards for broadcast equipment. Includes multiple 10 hour hands-on broadcast production labs. May be repeated for a maximum of 12 credits toward graduation. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3520

### Digital Cinema Production III

3:2:2 Fall, Spring

\* Prerequisite(s): DGM 2110 and University Advanced Standing

Teaches skills to produce a micro-budget film. Introduces practical production techniques including paperwork for the Screen Actors Guild and for standard distribution deliverable requirements. Involves the completion of various finished short films both in groups and as individuals. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3530

### Digital Cinema Production Management

3:3:0 Fall, Spring

\* Prerequisite(s): (Portfolio review acceptance or consent of instructor) and University Advanced Standing

Teaches the foundational principles which contribute to both quality and profitability in digital cinema projects that range from micro to mega budgets. Reviews team dynamics such as the relationship between producer and other production team members. Introduces industry standard budgeting and scheduling software tools, which can be used as management tools to guide multiple projects. Focuses on video/film workflow, from development and budgeting to pre-production, production and post-production. Requires the submission of an industry standard production book at the end of the semester. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3540

### Cinematography II

3:2:3 Fall, Spring

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

A "hands-on" class that covers the role of the Director of Photography (DP) and Gaffer in drama-based broadcast television and digital cinematography. Teaches continuity of lighting, visual story telling, implied script subtext though light quality and color, continuity in direction, use of lenses and shot blocking for fixed and moving camera. Covers advanced grip and lighting equipment use and setups. Covers working with a producer, director, production designer, set decorator, boom operator and editor and on-set protocol. Software fee of \$15 applies. Lab access fee of \$45 for computers applies. Course fee of \$46 for equipment applies.

## DGM 3545

### Advanced Editing for Mixed Reality Content

3:2:2 Spring

\* Prerequisite(s): DGM 2545 and University Advanced Standing

Provides advanced training and practice in editing in multiple platforms for use of Mixed Reality content (including virtual and augmented reality, etc). Explores new and emerging technologies for stitching, editing, combining visual-image with immersive sound, and delivery in multiple formats. Lab access fee of \$45 for computers applies.

## DGM 3550

### Producing I

3:3:0 Fall, Spring

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

Examines the process of motion picture development and distribution with focus on the role of the producer in identifying, evaluating, developing, financing and securing distribution. Software fee of \$15 applies. Lab access fee of \$45 for computers applies

## DGM 3560

### Digital Cinema Editing II

3:3:1 Fall, Spring

\* Prerequisite(s): DGM 1061, Portfolio Review Acceptance, and University Advanced Standing

Develops an understanding of how editing can shape cinematic storytelling using content from a variety of media and in various styles. Provides further practice in hands-on application on a variety of professional Non-Linear Editing platforms. Course fee of \$13 for software and plug-ins applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3570

### Storytelling for Digital Media II

3:2:2 Fall, Spring

\* Prerequisite(s): DGM 2570 or THEA 2742, Portfolio Review Acceptance and University Advanced Standing

Teaches advanced writing for cinema, television and emerging media. Includes writing assignments each week that will be read and analyzed according to the structure and execution of a goal. Discusses a specific scriptwriting subject each week such as finding the idea, researching, outlining and rewriting. Course fee of \$13 for software and plug-ins applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 3571

### Animation Story Development Workshop

3:2:3 Spring

\* Prerequisite(s): ENGL 2010 and Portfolio Review Acceptance and University Advanced Standing

Covers short themed preproduction and development for animated and interactive titles. Includes research, outlining, writing using the iterative process, and preparation for story reel production. Lab access fee of \$45 for computers applies.

## DGM 3580

### Digital Cinema Directing Workshop I

3:2:3 Fall, Spring

\* Prerequisite(s): DGM 1510, DGM 1520, DGM 2110, Portfolio Review Acceptance and University Advanced Standing

Offers an advanced workshop format class structure. Utilizes project-based opportunities to apply and hone skills in digital cinema direction, editing scripts, casting, rehearsing and performing a scene. Includes polishing concept for shooting, then shooting and editing for presentation and critique. Course fee of \$13 for software and plug-ins applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.



**DGM 3590****Documentary I****3:2:2 On Sufficient Demand**

\* Prerequisite(s): (DGM 1061, DGM 1510, DGM 1520, portfolio review acceptance or instructor approval) and University Advanced Standing

Presents intermediate viewing and discussion of selected documentaries and instruction in various production skills necessary to create video documentaries. Explores the diversity of documentary styles and approaches including interview, archival, observational, etc. Focuses on character driven stories using traditional three act structures. Requires the completion of various exercises from conceptualization through post-production, culminating in production of short documentary project. Lab access fee of \$45 for computers applies.

**DGM 360R****Advanced Topics in Animation and Games 1 to 4:0 to 4:0 to 12**

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

Intended for advanced students with an interest in digital animation. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Course fee of \$12 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3610****Game Design II****3:2:3 On Sufficient Demand**

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

Continues the study of game theory, analysis, and design documentation. Emphasizes game development using a game development engine. A laptop computer is required for this course. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3620****Technical Direction and Design for Animated Applications****3:2:3 Fall**

\* Prerequisite(s): DGM 2221, DGM 2620, DGM 2670, Portfolio Review Acceptance, and University Advanced Standing

Introduces industry standard technical direction problem solving practices. Includes project management, aesthetic development, and game play design. Software fee of \$15 applies. Course fee of \$20 applies. Lab access fee of \$45 for computers applies.

**DGM 3621****Hard Surface Modeling****3:2:3 On Sufficient Demand**

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

Teaches theories, tools, and principles of current industry modeling trends, specifically for video games and short animated films. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3641****Game Level Design****3:2:3**

\* Prerequisite(s): DGM 2610, Portfolio Review Acceptance, and University Advanced Standing

Provides an advanced treatment of a three step process in level/environmental design: Research and analysis, concept and prototype development, and testing and comparative metrics. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3650****Animation and Game Project I****3:1:6 Fall**

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

Emphasizes industry pipeline processes. Covers the application of lighting and rendering in 3D animation and game environments. Includes composition, technical lighting, layer-based rendering, and texture baking. A junior-level group project will be completed in the course of the semester. Lab access fee of \$45 for computers applies.

**DGM 3660****Advanced Rigging and Character Effects****3:2:3 Spring**

\* Prerequisite(s): DGM 2211, Portfolio Review Acceptance, and University Advanced Standing

Studies the process of rigging, and the motion of characters and objects in games and animation. Includes full character, muscle, facial, and dynamic rigs. Reinforces principles of animation. Lab access fee of \$45 for computers applies.

**DGM 3670****Scripting for Animation and Games III****3:2:3 Fall**

\* Prerequisite(s): DGM 2670, Portfolio Review Acceptance, and University Advanced Standing

Provides in-depth training in advanced scripting concepts and practices in 3D video game development. Focuses on the application of advanced technical topics as they impact game development. Addresses networking and distributed systems issues, including scalability and latency compensation techniques, for designing games for online multi-player environments. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3680****Animation and Game Project II****3:1:6 Spring**

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

Devoted to the pre-production of a multi-semester team project for gaming and animation students. Includes research, writing, scripting, designing, storyboarding and pre-visualization of a client-driven project. Software fee of \$15 applies. Course fee of \$19 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

**DGM 370R****Advanced Topics in Web Design and Development****1 to 4:0 to 4:0 to 12**

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

Intended for advanced students with an interest in Internet authoring. Includes relevant and changing topics and tools. Emphasizes hands-on experience along with lectures and demonstrations. Curriculum may vary from one semester to another. May be repeated for a maximum of 9 credits toward graduation. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 3740****Web Content Management****3:3:0 Spring**

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

Instructs students on how to create a site that in 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. Software fee of \$15 applies. Course fee of \$19 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

**DGM 3750****Media Traffic and Analytics****3:3:0 Fall**

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

Provides students access to all the leading and most effective traffic techniques, ranging from organic search traffic and all aspects of SEO, through paid traffic of all kinds, and on to free, direct traffic methods. Includes Web and Mobile traffic techniques and analytical tools. Covers all the concepts involved in these areas of traffic and analytics, and will have experience actually generating traffic to a real web page (and may even make money), and using analytical tools to evaluate their results. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

# Digital Media

## DGM 3760

### Web Languages II

3:3:0

Fall

\* 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. May be delivered hybrid. Software fee of \$15 applies. Course fee of \$19 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

## DGM 3780

### Web Tools and Frameworks II

3:3:0

Spring

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

Participants learn advanced techniques for delivering exceptional Flash based Internet applications. Teaches advanced scripting fundamentals, how to deliver content through server-side database connectivity, and engaging the audience through highly interactive experiences. Software fee of \$15 applies. Course fee of \$19 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

## DGM 3790

### Rich Internet Application Development I

3:3:0

Fall

\* 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. Software fee of \$15 applies. Course fee of \$19 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

## DGM 4000

### Writing for Digital Media

3:3:0

Fall, Spring

\* Prerequisite(s): ENGL 2010, Portfolio Review Acceptance, and University Advanced Standing

Teaches the role of the written word in the digital arena and the writing skills for students to become effective communicators within the various forms of multimedia including web pages, digital animation, audio, video and cinema. Lab access fee of \$45 for computers applies.

## DGM 4261

### Mixed Reality Studio

3:3:0

Spring

\* Prerequisite(s): DGM 3261, Portfolio Review Acceptance, and University Advanced Standing

Applies knowledge and skills from previous mixed reality courses to assemble and publish highly interactive mixed reality experiences to multiple platforms. Represents the culmination of previous mixed reality courses in which projects will be hands-on practical application of technologies preparing students for senior capstone projects. Lab access fee of \$45 for computers applies.

## DGM 4280

### Authoring Adaptive Experiences II

3:3:0

Spring

\* Prerequisite(s): DGM 3280 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. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 4290

### Designing Voice Experiences

3:3:0

Fall

\* 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 for computers applies.

## DGM 4310

### Senior Capstone I

3:1:6

Fall

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

For senior Digital Media students. Provides a capstone experience working in digital media. Develops individual real world projects in consultation with a faculty advisor. Encourages team work. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 4410

### Senior Capstone II

3:1:6

Spring

\* Prerequisite(s): DGM 4310, Portfolio Review Acceptance, and University Advanced Standing

Conclusion of DGM 4310. Concludes the capstone experience for digital media students. Addresses post production issues such as testing, packaging, and documentation. Offers the opportunity to present projects to students, faculty, sponsors, and potential employers or clients. Course fee of \$10 for equipment applies. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 4420

### Applied Digital Media Technology

3:3:0

On Sufficient Demand

\* Prerequisite(s): University Advanced Standing

For educators and general public interested in technology integration. Examines the ever-expanding array of options available to educators, business personnel and government agencies for creating and distributing rich media based materials. Explores what new technologies and creative practices are available and how to implement them into their present workflow. Focuses on getting the most out of Digital Media technology. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

## DGM 4430

### Audio Mastering

3:3:0

Fall

\* Prerequisite(s): DGM 3420, Portfolio Review Acceptance, and University Advanced Standing

Deals with the final step in any audio production--Mastering. Covers the art of final EQ and Compression. Explores the issues of bit depth, sampling rates, dither, jitter, EQ techniques, and Dynamic Range manipulation (expanders and compressors). Looks into analog and digital signal processors, including reverb, and the final step of putting an album together with a brief discussion on vinyl pre-mastering. Teaches the use no fewer than 15 different compressors, both analog and digital for comparative listening tests. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 450R****Story Editing for Digital Media****3:2:3** Fall, Spring, Summer

\* Prerequisite(s): DGM 1510 and University Advanced Standing

\* Prerequisite(s) or Corequisite(s): DGM 2570 or THEA 2742

Teaches necessary skills for working with writers and producers preparing scripts for production through various media technologies. Uses Daniel Methodology to analyze stories in all stages from early concept to production scripts, identify strengths, diagnose weaknesses, and find possible solutions to strengthen the scripts. Teaches consulting techniques for working with writers and producers to communicate clearly and in a way that encourages and empowers them to suit their storytelling plan to the appropriate technologies. May be repeated for a maximum of 6 credits toward graduation. Lab access fee of \$45 for computers applies.

**DGM 4510****Visual Effects for Digital Cinema II****3:2:3** Spring

\* Prerequisite(s): DGM 2510 and University Advanced Standing

Provides an advanced practicum in a variety of professional Visual Effects software used in conjunction with NLE (Non-Linear Editing) software in current industry use. Further develops on the foundation of understanding of cinematic post-production workflows utilized by professional visual effects houses. Overviews a broad survey of types of visual effects in use today and the evolution of various programs and their shifting capabilities. Lab access fee of \$45 for computers applies.

**DGM 4511****Film Production Analysis II****3:1:6** Fall, Spring

\* Prerequisite(s): (DGM 1510 or instructor approval) and University Advanced Standing

Immerses participants in the theory and practice of effective storytelling through digital media. Features films and Daniel Methodology analysis as a foundation, then branches into applying Daniel Methodology to other media, including television series, documentaries, animation, gaming, interactive design and virtual reality. Prepares students for the rigorous requirements of the digital media industry in key creative professional roles, including writing, directing, producing and editing. Lab access fee of \$45 for computers applies.

**DGM 4530****Special Topics-Cinematography****Masterworks****3:2:3** Fall

\* Prerequisite(s): DGM 1510, DGM 1520, DGM 2540, and University Advanced Standing

Surveys selected cinematographers and their works. Looks at each cinematographer's films in chronological order from their earliest to more recent and analyzes their progression throughout their career. Evaluates individual technique and style in depth, breaking down films, scene by scene. Lab access fee of \$45 for computers applies.

**DGM 454R****Cinematography III****3:2:3** Spring

\* Prerequisite(s): DGM 3540 and University Advanced Standing

Offers an advanced workshop format class structure. Utilizes project-based opportunities to apply and hone advanced professional skills in composition, lighting and camera movement. May be repeated for a maximum of 9 credits toward graduation. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 4550****Producing II****3:3:0** Spring

\* Prerequisite(s): DGM 3550

Implements the advanced process of motion picture development and distribution with focus on the role of the producer in identifying, evaluating, developing, financing and securing distribution. Lab access fee of \$45 for computers applies.

**DGM 4560****Output and Color for Digital Cinema II****3:2:2** Fall, Spring

\* Prerequisite(s): DGM 1061, DGM 2340, Portfolio Review Acceptance or instructor approval, and University Advanced Standing

Focuses on advanced digital post-production workflow, digital output, and color grading for digital cinema productions. Furthers training in professional industry standard software used for color grading, output and compression. Prepares students for a career in post-production with emphasis on the careers of the Digital Imaging Technician and Color Grader. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

**DGM 456R****Digital Cinema Editing III****3:2:2** Fall, Spring

\* Prerequisite(s): DGM 3560, Portfolio Review Acceptance, and University Advanced Standing

Presents an advanced practicum in Digital Cinema editing and craft. Prepares students for employment as professional editors and assistant editors in a variety of work environments on a variety of types of media. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of \$45 for computers applies.

**DGM 457R****Storytelling for Digital Media III****3:2:3** Fall, Spring, Summer

\* Prerequisite(s): DGM 1510 and (DGM 2570 or THEA 2742), University Advanced Standing

\* Prerequisite(s) or Corequisite(s): DGM 450R

Focuses on advanced writing for longform media projects including feature narrative films, documentary projects, episodic television series, experimental new media, interactive games, etc. Introduces participants to the process, discipline and format necessary to outline, write and refine a character-driven media script that will ultimately have a running-time of greater than forty-five minutes. May be repeated for a maximum of 9 credits toward graduation. Lab access fee of \$45 for computers applies.

**DGM 458R****Digital Cinema Directing Workshop II****3:2:3** Fall, Spring

\* Prerequisite(s): DGM 3580 and University Advanced Standing

Offers a professional level workshop format class structure for students interested in feature film and television direction, as well as other narrative screen-based content. Focuses include approaches to evaluating story and screenplays, directing actors, staging and blocking scenes, and approaches to visual/cinematic storytelling. May be repeated for a maximum of nine credits toward graduation. Lab access fee of \$45 for computers applies.

**DGM 459R****Documentary II****3:2:3** On Sufficient Demand

\* Prerequisite(s): DGM 1520, DGM 3590, and University Advanced Standing

Presents advanced viewing and discussion of selected documentaries and instruction in various production skills necessary to create video documentaries. Explores the diversity of documentary styles and approaches including interview, archival, observational, etc. Requires the completion of various exercises from conceptualization through postproduction, culminating in the production of professional level documentary project. May be repeated for a maximum of nine credits toward graduation. Lab access fee of \$45 for computers applies.

## Digital Media

### DGM 4610

#### Designing Technology based Training

**3:3:0 On Sufficient Demand**

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

Provides shadowing opportunities in an educational or business setting where students can see basic principles of training and development in action and gain insights into training design, development, implementation, and evaluation. Uses the course map content from the DGM 3290 course to pre-author a technology-based training program, which includes creating a course navigation map (flowchart) to determine course sequence and navigational paths, designing storyboard frames with multimedia elements, and generating the navigation map and storyboards into an authoring tool. Completers should be prepared to apply shadowing experiences, discussion insights, and pre-authoring computer skills to future training opportunities. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 4620

#### Producing Technology based Training

**3:3:0 On Sufficient Demand**

\* Prerequisite(s): DGM 4610 and University Advanced Standing

Builds on information taught in DGM 3290 and DGM 4610. Generates story boards from a computer design tool into an authoring tool. Teaches basic principles of building and editing frames with text and multimedia elements. Provides practice and feedback, remediation as needed. Addresses individual learner needs and evaluation of program effectiveness. Uses program objectives to evaluate final program product. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 4621

#### Performance Animation

**3:2:3 On Sufficient Demand**

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

Teaches basic animation principles, such as: flexibility, timing and spacing, overlapping action, the successive-breaking-of-joints, and overlapping action. Covers theatrical performance animation, emotional facial, phoneme, and dialoged animation. Explores expressive character enactment, representative of life. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 4630

#### Technical Direction for Animation and Game Development I

**3:3:0 Fall**

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

Focuses on the production of digital special effects and compositing in 2D and 3D environments. Includes multi-layer effects, green screen, digital mattes, and grading. Tools may include visual effects editing and particle generation software. Software fee of \$15 applies. Course fee of \$19 for software and plug-ins applies. Lab access fee of \$45 for computers applies.

### DGM 4640

#### Technical Direction for Animation and Game Development II

**3:3:0 Spring**

\* Prerequisite(s): DGM 4630, Portfolio Review Acceptance, and University Advanced Standing

Focuses on the use of digital special effects in a three-dimensional environment including high-end particle effects, digital fluids, and advanced simulation. Tools include industry standard Maya and Houdini. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 4790

#### Rich Internet Application Development II

**3:3:0 Spring**

\* Prerequisite(s): DGM 3790, Portfolio Review Acceptance, 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. Software fee of \$15 applies. Lab access fee of \$45 for computers applies.

### DGM 481R

#### Internship

**1 to 8:1 to 8:0 Fall, Spring, Summer**

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

For Digital Media majors only. Provides a transition from school to-work where learned theory is applied to actual practice through a meaningful on-the-job experience. Includes student, employer and coordinator evaluations, on-site work visits, and written assignments. Completers should obtain experience in establishing and accomplishing individualized work objectives that improve work performance. Internship is intended for senior DGM students who are working at that level. Credit is determined by the number of hours a student works during the semester and completion of individually set goals. May be repeated for a maximum of 16 credits towards graduation. May be graded credit/no-credit.

### DGM 497R

#### Independent Study

**1 to 3:0 to 3:0 to 9 Fall, Spring, Summer**

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

For bachelor's degree students and other interested persons. Offers independent study as directed in reading or in individual projects; offered at the discretion and approval of the department chairperson. May be repeated for a maximum of 6 credits toward graduation.