

Media Arts & Design with a concentration in **Multimedia Arts & Design**

# PROGRAM OUTLINE



# Core Class Descriptions

## Bachelors Degree Program Outline

### Media Arts & Design with a concentration in **Multimedia Arts & Design**

#### **DES-100 I Design Basics I and Lab**

Prerequisite(s): None

This course is an overview of basic design principles and the considerations involved in graphic design/visual communications theory-making meaningful, creative visual messages, presented for information, identification, persuasion and entertainment use. The course introduces techniques of conceptualization, design, and production that can be applied to general visual communication and applications commonly used by professionals in the design industry.

#### **DES-140 I Introduction to Macintosh Computers and Lab**

Prerequisite(s): None

Students learn the operation of Macintosh computers and computer basics such as booting up the computer, mouse functions, and desktop environments. Instruction covers Macintosh operating systems, iLife, Microsoft Office Suite, and the Internet. Focus will be placed on how to set up and manage files, move in and out of various programs, and how to manage memory and extensions. Other topics that will be discussed include scanner operation, disk drives, CD-ROMs, DVDs, sound and movie player operations, and configuration of peripheral devices.

#### **DES-103 I Digital Photography and Composition and Lab**

Prerequisite(s): DES-100; DES-140

The class will explore, but will not be limited to, the digital aspects of photography. Photography is studied for its functional aesthetic values, and for its role in the world of art and design. Emphasis is placed on the creative approach to picture taking and making. Students are introduced to many types of photographic styles and techniques. Hands-on control of photo equipment and techniques, experimentation, problem solving, and portfolio development are critical to the course.

#### **DES-110 I Drawing I and Lab**

Prerequisite(s): None

This course covers perspective drawing and visualization. This course will present 1-, 2-, 3-point perspective as well as basic visualization techniques utilizing traditional drawing instruments. Line and value drawing will also be explored, utilizing models and objects. The elements of design will be emphasized when observing still-life settings and when producing the rendered image.

#### **DES-120 I Digital Illustration I and Lab**

Prerequisite(s): DES-100; DES 110; DES-140, Concurrent Enrollment in DES 110 allowed.

This course will cover the industry standard digital illustration tools used in the visual communications area. The fundamental concepts of professional illustration, logo production and label design are covered. The design and illustration process is emphasized in the construction of portfolio level illustrations.

#### **DES-102 I Typography/Layout and Lab**

Prerequisite(s): DES-110; DES-140

This course introduces students to the basics of layout and typography using the elements and fundamentals of design. The skills necessary to design and produce basic to complex page layouts, whether for print or digital delivery, will be covered. Page composition tools will be used to solve problems encountered in publication design.

#### **DES-111 I Drawing II and Lab**

Prerequisite(s): DES-110

This course will refine the drawing techniques presented in Drawing 1, focusing on compositional organization. Different styles of illustration, different media and new techniques of drawing will be explored to produce various solutions to visual communication problems.

#### **DES-121 I Digital Illustration II and Lab**

Prerequisite(s): DES-111; DES-120

This course covers computer illustration in the vector environment, furthering the knowledge and skills presented in Digital Illustration I. Students will develop aesthetic and communication skills that will be used to create illustrations and visual concepts used in the art and design industry. The course will also study the style and philosophies of other artists and illustrators. The development of a personal style will be encouraged.

#### **DES-130 I Digital Imaging I and Lab**

Prerequisite(s): DES-101; DES-111; DES-120

This course will cover the core, industry standard digital imaging tools used in the visual communications area. The fundamental concepts of professional imaging, the basics of bitmapped image manipulation, and digital output resolution requirements for print and multimedia is also discussed. The design development and production process are reinforced in the construction of a variety of compositions.

#### **DES-200 I Design Concepts and Lab**

Prerequisite(s): DES-102; DES-121; DES-130

This course focuses on the realm of ideas, design problem solving, and creativity enhancement techniques as applied to the media fields. Through both visual and verbal exercises and advanced projects augmented with research, students will be encouraged to evolve their own individuality and unique aesthetics as relevant to their specific career goals.

#### **DES-210 I Animation and Lab**

Prerequisite(s): DES-102, DES-121, DES-130

Background, techniques, and tools of basic animation such as squash and stretch, secondary action, anticipation, exaggeration, timing, staging, arc motion, and perspective. While concentrating on character development, the course also introduces pencil-test/camera recording for animation. Focus includes key frame-based digital animation tools and motion as an expressive design component.

#### **DES-230 I Digital Imaging II and Lab**

Prerequisite(s): DES-102; DES-121; DES-130

Students continue the development of skills and techniques using industry standard digital imaging tools. The course also covers digital imagery as required in real production situations as well as more advanced image manipulation tools in the use of vector graphic, photo retouching, and filters. The design development and production process are reinforced in the construction of Professional compositions. In addition, the course includes detailed coverage of the output of various file formats.

#### **DES-231 I Digital Imaging III and Lab**

Prerequisite(s): DES-200, DES-210, DES-230

This class covers more advanced skills using Adobe Photoshop, focusing on technique and style to produce enhanced digital images. Advanced photo retouching, vector tools and manipulation techniques such as those used to produce professional quality output are also covered. Output for print, motion graphics, and web graphics will be covered as well.

#### **DES-240 I Sound I and Lab**

Prerequisite(s): DES-210; DES-230

Introduction to sound begins as an overview of sound elements, formats and file types. This course provides an opportunity to learn many aspects of audio production through demonstrations and hands on production. Students receive instruction in recording sound, music, voice-over techniques, editing sound, sound effects, and mixing tracks using non-destructive techniques utilizing the most modern professional equipment and software. This course will review many of the compression and decompression techniques and technologies that must be considered for sound production for the web, video and film, and gaming.

#### **DES-250 I Web Authoring I and Lab**

Prerequisite(s): DES-200; DES-210; DES-230

This course introduces students to authoring, web page layout, designing the presentation of information, HTML, web-layout programs, and JavaScript. In addition, students receive an introduction to web based asset management, image file types and optimization for the web, WANs and LANs, and the FTP process. There will be an emphasis on the design and development process of goals, solutions, audience, styles, and the use of media types. Students will devote the course time to building web based exercises and projects.

#### **DES-201 I Logo Design and Lab**

Prerequisite(s): DES-121; DES-200; DES-231

This course offers an introduction to the principles of symbol, trademark, and iconography design. The development of corporate identity systems, color and typographic considerations, and motion/sequential applications will also be covered.

# Core Class Descriptions

## Bachelors Degree Program Outline

### Media Arts & Design with a concentration in **Multimedia Arts & Design**

#### **DES-260 I Interactive Design I and Lab**

Prerequisite(s): DES-231; DES-250; DES-240

Students are given an introduction to motion and animation principles in design of the interactive experience. Techniques and concepts of interactive navigation, graphic user interface, and feedback will be covered. Animation principles such as squash and stretch, secondary action, etc. are further developed. Information, interaction, and presentation design are also explored through practical projects using graphics, sound, and text to enhance animation.

#### **DES-280 I Digital Video and Lab**

Prerequisite(s): DES-231; DES-240

Students are given an overview of video technologies, equipment and production techniques. Students are taught the principles of video production through demonstrations and hands-on production. Students will produce digital video projects to support in-class learning. The production techniques that are explored include the use of the camera, lenses, lighting, and sound equipment. Editing procedures and techniques in the post-production phase are fully examined and practiced. Students gain a thorough understanding of the video and audio formats including some basic video engineering principles as to what constitutes acceptable broadcast and audio levels. Students learn compression and decompression technologies, master video editing software, and learn the basics of copyrighting.

#### **DES-302 I Advanced Typography and Lab**

Prerequisite(s): DES-201

This course is dedicated to both the creative as well as the functional possibilities of letters, words and text in graphic design. Students will be encouraged to build upon their layout skills with the relevant software, and to develop their own unique aesthetic and design sensibility through a series of portfolio-driven projects. Course will also include exercises and analysis of typographic solutions, with in-depth discussions of typographic masters and their work.

#### **DES-350 I Web Authoring II and Lab**

Prerequisite(s): DES-201; DES-260; DES-280

This course covers advanced web page layout, designing the presentation of information, HTML, web-layout programs, and JavaScript. In addition, an introduction to web based asset management, image file types and optimization for the web, WANs and LANs, and the FTP process will be covered. There will be an emphasis on the design and development process of goals, solutions, audience, styles, and the use of media types. Students will devote the course time to building web based exercises and projects.

#### **DES-370 I Motion Graphics I and Lab**

Prerequisite(s): DES-201; DES-280

This course provides instruction in the history, technology and design of motion and the graphic image. Working with scanned images, graphics,

text and video, the process of developing a motion concept will be emphasized to produce complete motion sequences. Projects may include title sequences, commercials, TV bumpers and news graphics and other motion graphic applications. Lab exercises will be conducted to prepare students for the larger portfolio projects.

#### **DES-390 I 3-D Principles I and Lab**

Prerequisite(s): DES-302; DES-370

Concurrent enrollment in DES-370 allowed.

This course covers basic illustration in the three-dimensional environment, including perspective, primitive placement, modeling, lighting, and rendered 3-D imaging.

#### **DES-360 I Interactive Design II and Lab**

Prerequisite(s): DES-302; DES-350; DES-370

Students explore the design of human computer interfaces for the display and control of information on the computer screen, as well as crafting of the tasks of interaction design to create interface orientation, navigation, usability, accessibility, and functionality. Emphasis is placed on the planning and organization of information on the computer screen and on interface designs that provide effective feedback to the user while maintaining consistency, simplicity, and ease of operation.

#### **DES-371 I Motion Graphics II and Lab**

Prerequisite(s): DES-370; DES-390

This course will focus on the communication of type, image and motion. The fundamental skills of using motion-based software will be brought to production level, preparing students for working in the motion graphics industry. Utilizing the design process, students will develop mastery over the industry standard motion software to create portfolio pieces that will illustrate their artistic and storytelling abilities. Hands-on exercises are engineered to teach and support the design and technical aspects of visual communication using motion, sound and light, and time.

#### **DES-391 I 3-D Principles II and Lab**

Prerequisite(s): DES-390

This course builds upon the techniques of 3-D modeling, covering aspects of lighting, camera and animation. This course will also cover object metamorphosis, hierarchical motion description, motion paths, and rendering and exporting animations to other environments.

#### **DES-460 I Interactive Design III and Lab**

Prerequisite(s): DES-360; DES-391

This course covers the scripting language of interactive web and disk-based designs. Interactive design, user interface design, defining the user experience, and the steps to develop multimedia titles are also included, as well as scripting to add interactivity to multimedia presentations.

#### **DES-462 I Interactive Design IV and Lab**

Prerequisite(s): DES-360; DES-391

This course provides context and technical background to previous digital video training to foster a greater insight and expertise in the technologies of digital time-based media. Hands-on experience in challenges of preparing media using different media architectures and file formats for different platforms of delivery will provide a backdrop for the understanding of the variety of media technologies available. Special attention will be placed on emerging trends in digital video technology.

#### **DES-450 I Web Commerce and Lab**

Prerequisite(s): DES-360; MKT-215

This course focuses on a deeper understanding of Web Design technologies by introducing relational database management systems (RDBMS) and their impact on dynamically driven websites. The course will focus on designing web databases and interfacing with the data stored in these tables to present interactive information through a web browser. Hands on lab exercises will include creation of web applications employing a database. Topics include database design, relational tables, database connections, database queries, content management systems (CMS), and an introduction to shopping cart technologies.

#### **DES-461 I Interactive Design V and Lab**

Prerequisite(s): DES-462

Students build on previous skills in interactivity design using event-driven model and scripting language to focus on an exploration of cross-platform application development. Development of projects such as games, education and business applications is explored, and delivery, both on-line and for CD-ROM and Kiosk, is discussed.

#### **DES-411 I Senior Thesis and Lab**

Prerequisite(s): Open to students in their eleventh term or higher.

This course gives seniors the opportunity to apply the skills and knowledge that they have learned in the development of actual professional projects. Evaluation of student or team performance is shared between faculty members and experienced industry representatives.

# Projected Quarterly Schedule

## Bachelors Degree Program Outline

### Media Arts & Design with a concentration in **Multimedia Arts & Design**

**Q01** DES 100 Design Basics I & Lab  
DES 140 Intro to Macintosh Computers & Lab  
ENG 080 Evolving English (if required)  
PDT 115 College Research & Study Skills  
PHL 145 Critical Thinking & Problem Solving

**Q02** DES 103 Digital Photography & Composition & Lab  
DES 110 Drawing I & Lab  
DES 120 Digital Illustration I & Lab  
ENG 135 English Composition  
MTH 080 Technical Mathematics (if required)

**Q03** DES 102 Typography/Layout & Lab  
DES 111 Drawing II & Lab  
ENG 155 Advanced English Composition  
MTH 135 College Algebra

**Q04** DES 121 Digital Illustration II & Lab  
DES 130 Digital Imaging I & Lab  
ENG 250 Mythology  
HUM 235 Art History

**Q05** DES 200 Design Concepts & Lab  
DES 210 Animation & Lab  
DES 230 Digital Imaging II & Lab  
SOC 165 Sociology

**Q06** DES 231 Digital Imaging III & Lab  
DES 240 Sound I & Lab  
DES 250 Web Authoring I & Lab  
MKT 215 Marketing I  
PSY 215 Psychology

**Q07** DES 201 Logo Design & Lab  
DES 260 Interactive Design & Lab  
DES 280 Digital Video & Lab  
HUM 240 History of Graphic Design  
SPH 305 Speech Communication

**Q08** DES 302 Advanced Typography & Lab  
DES 350 Web Authoring II & Lab  
DES 370 Motion Graphics I & Lab  
DES 390 3-D Principles I & Lab

**Q09** DES 360 Interactive Design II & Lab  
DES 371 Motion Graphics II & Lab  
DES 391 3-D Principles II & Lab  
ENG 260 Storytelling

**Q10** BUS 435 Business Planning  
DES 460 Interactive Design III & Lab  
DES 462 Interactive Design IV & Lab  
ME 1 Specialization Elective

**Q11** DES 450 Web Commerce & Lab  
DES 461 Interactive Design V: Director & Lab  
ENG 335 Introduction to Literature  
ME 2 Specialization Elective

**Q12** DES 411 Senior Thesis  
PDT 426 Career Strategies for Media Arts  
PDT 447 Emerging Technologies in Media Arts  
PHL 405 Ethics & Legal Issues