

**COMPUTER ANIMATION (AN)** | TBA, Certificate Advisor

Building an animated movie frame by frame takes a specific skill set. In this program, students gain the expertise needed to create original 2D and 3D animated stories as they practice their abilities in concept design, character animation and the use of computer-based tools, and complete projects that lead to the assembly of a portfolio show reel. Whether they plan to animate graphics, characters or games, students acquire the confidence vital to pursue careers in this evolving and expanding industry.

REQUIRED COURSES	PREREQUISITES	SEMESTER	HOURS
<b>Foundation Level</b>			
Digital Design for the Screen	None	All	36
Storyboarding: Ideas Into Motion	None	W, SU	18
Computer Animation Studio	<i>Digital Design for the Screen</i>	F, SP	36
Adobe Photoshop I	<i>Digital Design for the Screen</i>	All	36
Flash I: Web Animation + Interactivity	<i>Digital Design for the Screen</i>	All	36
<b>Level One</b>			
Basic Maya: Modeling for 3D Design + Animation	<i>Digital Design for the Screen</i>	F, SP	36
Special Effects with Adobe After Effects	<i>Adobe Photoshop I</i>	F, SP	36
<b>Level Two</b>			
Flash II: ActionScripting	<i>Flash I</i>	F	36
Narrative Animation Studio	<i>Level One</i>	F	36
Burn This! DVD Studio Pro	<i>Digital Design for the Screen</i>	W, SU	18
Preliminary Portfolio Review	<i>All above courses</i>	*	
<b>Portfolio</b>			
Final Projects Studio: Computer Animation	<i>All above courses</i>	SP	36
Final Portfolio Review	<i>All above courses</i>	SP	
<b>Electives</b>			
Courses designated AN-E (varies by semester) totaling 72 contact hours		All	72

\* Individually scheduled.

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total contact hours: **432**

## COMPUTER ANIMATION (AN)

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### FOUNDATION LEVEL

#### **Digital Design for the Screen**

DFOU-3542

The screen is the entryway through which we view our digital world. This introductory but fast-paced course begins with the real hardware assets (processors, monitors, memory) needed for digital design work, and from there moves on to the software tools and protocols that impact what can be viewed on the screen – QuickTime, HTML and the components of Adobe's Creative Suite of software tools. All the elements can be daunting, but once explained, we're well on the way to digital fluency which, in turn, leads to original and unexpected visual solutions. This 12-session course enables students to better understand computer aided design and digital workflow, as we gather, preserve, modify and combine images, text and information until they comprise examples of well considered design.

#### **Storyboarding: Ideas Into Motion**

ANIM-2232

Why storyboard? Storyboards can be used to discuss ideas, describe a sequence, visualize a "look" and create a blueprint for implementing an animation, saving time by facilitating experimentation and exploration before the real animation begins. Professionals also use storyboards to communicate ideas to creative teams, clients or potential employers. In class, students translate their story ideas into visual images and accompanying text, describing the action, mood, setting and timing of the story. Storyboard conventions are covered, along with narrative development, production and presentation techniques. Students also learn how to choose the appropriate type of storyboard for their audience, as well as how to set and manage client expectations. A variety of film and animation projects are presented for discussion so that students emerge with brand new tools for successful animation project planning.

#### **Computer Animation Studio**

ANIM-2506

What makes an animation compelling? Strength of storytelling, character design and development, quality of motion, and the ability to work with animation software are all key factors that make one animation stand out from others. In this course, students use Flash to perform basic exercises in animation and then go on to explore a variety of more sophisticated techniques. They also learn how to plan and create storyboards so as to better organize their animation ideas. By the end of the course, students produce short animation projects that match their unique ideas to the most appropriate methods of production.

## **Adobe Photoshop I**

DFOU-2533

Whether images are scanned, photographed or digitally drawn, Adobe Photoshop is the industry-standard program for manipulating them. This introduction to Photoshop focuses on combining, retouching and modifying images through class exercises and projects in which students work with Photoshop tools like the airbrush, paintbrush, cloning and pattern stamps, eraser and crop tool. By the end of the course, students understand Photoshop's capabilities and are able to handle basic file formats and layers, combine images, and create effects using grayscale, color and filters.

## **Flash I: Web Animation + Interactivity**

WEB-2582

Flash injects excitement and dynamism into a website by moving beyond the ordinary. It incorporates interactivity and sound into web pages, whether using scanned images or its extensive palette of vector drawing tools. Its animation capabilities, features for minimizing and monitoring file size, and use of streaming technology have revolutionized web design. In this course, students learn to develop an animated, interactive website with objects or text, including complex buttons, menus and special effects. Participants also become familiar with control buttons and movie clips, and are introduced to the basic elements of ActionScripting. The course concludes with discussion of distribution options for the web and CD.

## LEVEL ONE

### **Basic Maya: Modeling for 3D Design + Animation**

ANIM-2571

This course introduces Maya, Autodesk's award-winning 3D animation software package whose advanced architecture offers unmatched system speed and streamlined workflow. Maya has been used to create spectacular film effects in the movies *Shrek* and *Monsters, Inc.*, as well as the sentinels in *The Matrix*. While students learn the basics of the Maya interface and 3D modeling, they are also introduced to photorealistic methods of rendering. Participants soon see how Maya's versatility facilitates meeting a variety of production requirements. *Note: This course is usually taught on a Windows platform.*

### **Special Effects with Adobe After Effects**

DVID-2503

Adobe After Effects is to video and film what Adobe Photoshop is to photography. Students in this course learn to master this powerful software tool used by professionals in the film and video industries for generating visual effects and motion graphics. In the process of creating video shorts, students are afforded the opportunity to composite multiple layers, animate an unlimited number of elements and apply visual effects to video. Students can then apply these skills to both professional and personal projects.

## **LEVEL TWO**

### **Flash II: ActionScripting**

WEB-2522

ActionScript is the language that Flash designers use to make their Flash files more interactive, scalable and productive. In this course, students take their Flash skills to the next level by gaining a deeper understanding of ActionScript and by working with advanced features of Flash. Students learn skills specific to Flash, such as how to control the variables and properties of objects, how to create effects like looping and randomizing through ActionScript, and how to work user-interactive elements into their projects. Through hands-on assignments and demonstrations, students work with advanced animation techniques and learn database integration and multiple delivery methods for their Flash projects. Because of the advanced nature of the course, familiarity with Flash's tools, working environment and basic actions is necessary.

### **Narrative Animation Studio**

ANIM-2832

In this course, students learn the art of building a narrative, pixel by pixel. Beginning with a viewing of noteworthy animated films, students then discuss the factors that make each piece exciting and meaningful for its audience. Students translate a story, theme or idea of their choice into storyboards, which are then used to develop a fully animated project (short animated video or scenes for a longer piece) built upon various 2D and 3D production approaches. Throughout the course, students are encouraged to use the delivery application with which they are most comfortable, such as Flash MX, Adobe After Effects or Autodesk's Maya, but the emphasis is first and foremost on creating a compelling narrative.

### **Burn This! DVD Studio Pro**

COM-2822

Whether for home movies, documentaries, corporate videos or art films, displaying footage in DVD format is the way to go. In this course, students learn to publish and distribute their work in a professional manner with DVD Studio Pro, which converts video and sound into high-quality files using MPEG-2 compression (readable by all DVD players). Through hands-on projects and lectures, students learn to make interactive menus that grab the viewer's attention, mastering such special features as multiple video angles and audio tracks, slideshows and Dolby Digital Surround Sound. Later, they can reproduce as many copies as they like. Once the DVD is burned and ready for a home DVD player or digital projector, participants even design the packaging to achieve a truly professional look.

## **PORTFOLIO**

### **Final Projects Studio: Computer Animation**

Final Projects coursework offers students the opportunity to synthesize a wide variety of approaches, tools and concepts related to their certificate program and to develop samples of work for a portfolio. Whether refining an existing piece of work or creating something new, students receive guidance in choosing their strongest creative and visual solutions, and in compiling a group of samples that best represents them and their work.