

# Animation – Concept Development

Program Number: 10-207-1

## Associate in Applied Arts Degree

Applied Arts Program Cluster

Center for Business and Applied Arts

Program offered at Downtown Education Center

For information call: (608) 246-6003 or  
(800) 322-6282 Ext. 6003

## About the Program

The Associate of Arts Degree in Animation & Concept Development offers courses in traditional and digital skills related to professional 3D animation and concept planning and development. The program assists students in developing a broad foundation of skills addressing such topics as concept drawing and layout; figure drawing for concept work; concept presentation; digital modeling, texturing, rigging, and animation; level design and construction; asset creation and management; digital lighting and cinematography. Graduating students have the opportunity to apply for professional internships and mentorships, and are required to develop a professional portfolio and demo-reel.

## Program Courses

### 10-207-103 Basic Drawing for Concepting 3 credits

An introductory drawing course emphasizing visualization and rendering skills necessary for concept development in animation and digital 3D. Students will learn the fundamentals of perspective, proportion, linear rendering, basic value structure, and digital approaches currently practiced in related industries. Lecture/demonstration and guided practice leads students toward the creation of concept drawings intended for modeling in 3D, including the development of variations, digital techniques to enhance productivity, and discussion of the strengths and limitations of 3D final execution.

### 10-207-110 Animation 1 2 credits

General overview of professional animation, including current industry standards and practices. Students begin a basic study of motion dynamics based largely on the industry's "Fundamental Principles of Animation," presented through a combination of lecture and demonstration and continual analysis of existing professional animation. Contemporary standards, definitions, workflows, etc., are discussed as well as job organization and job-tracking skills, and translation of basic motion principles into digital 3D space. Corequisites: 10-207-103, 10-207-111, and 10-207-112.

### 10-207-111 Introduction to Digital 3D 3 credits

A foundation introduction to digital 3D. Students learn to organize electronic files and projects into a professional workflow, and to electronically navigate Cartesian space. Class activities include the basics of digital modeling and surfacing, and the translation of 2D prep-work into 3D prototypes. Corequisites: 10-207-103, 10-207-110 and 10-207-112.

### 10-207-112 Photoshop for 3D and Concepting 2 credit

An introduction to Photoshop as used in professional 3D asset creation and concept development. File organization, efficiency, capture, and best practices are discussed, as well as basic texture creation, tiling, and interaction with 3D software. Corequisites: 10-207-110 and 10-207-111.

## Curriculum

The courses listed below outline the requirements for graduation for students entering this program in the 2011-2012 academic year. Requirements for graduation may vary depending on the semester in which a student is admitted to their program.

Current/continuing students should consult their degree progress report available through their student center (myMadisonCollege) account for specific graduation requirements. Program requirements are subject to change.

### FIRST YEAR

First Semester	Credits	Hrs/week Lec-Lab
10-207-103 Basic Drawing for Concepting .....	3	3-3
10-207-139 Design and Color for Concepting .....	2	2-2
10-207-112 Photoshop for 3D and Concepting .....	2	0-2
10-207-110 Animation 1 .....	2	3-3
10-207-111 Intro to Digital 3D .....	3	3-3
10-801-195 Written Communication .....	3	3-3
10-809-199 <u>Psychology Human Relations</u> .....	3	3-3
<b>Semester Total</b>	<b>18</b>	

### Second Semester

10-207-117 Figure Drawing for Concepting.....	3	3-3
10-207-120 Animation 2.....	3	3-3
10-207-122 Advanced Digital 3D .....	3	3-3
10-207-150 Animation Concepts 1 .....	3	3-3
10-801-196 Oral/Interpersonal Communication.....	3	3-3
10-804-107 <u>College Mathematics</u> .....	3	3-0
<b>Semester Total</b>	<b>18</b>	

### SECOND YEAR

#### First Semester

10-207-130 Digital Set Design .....	1	2-2
10-207-131 Animation 3.....	3	3-3
10-207-140 Advanced Animation Studio 1 .....	3	3-3
10-207-151 Animation Concepts 2 .....	3	3-3
10-801-198 Speech.....	3	3-0
<u>Elective</u> .....	4	E
<b>Semester Total</b>	<b>17</b>	

#### Second Semester

10-207-141 Animation 4.....	3	3-3
10-207-142 Animation Internship.....	1	0-4
10-207-143 Animation Portfolio .....	2	2-2
10-207-144 Adv. Animation Studio 2 .....	3	3-3
20-809-276 Business Ethics* .....	3	3-0
10-809-197 <u>Contemporary American Society</u> .....	3	3-0
<b>Semester Total</b>	<b>15</b>	

*Note: Students are placed in English or mathematics courses based on their scores on the COMPASS or ASSET test or on completion of the appropriate prerequisite/s.*

\*Other course options are available. See program advisor for information.



Program Courses (continued)

**10-207-117 Figure Drawing for Concepting 3 credits**  
 An introduction to drawing the human figure for the purpose of creating concept art for 3D industries. Course syllabus includes approaches to gestural sketching, proportional and anatomical construction, complete figure studies, and digital techniques for making corrections, variations, and enhancing productivity based on current 3D industry practices. Prerequisites: 10-207-103 and 10-207-112.

**10-207-120 Animation 2 3 credits**  
 Continuation of the study of motion with emphasis on character movement and animation. A combination of lectures and class demonstration introduces students to forward- and inverse-kinematics, and gradually more complex character rigging. The continued study of body mechanics and dynamics by analyzing classic and contemporary professional animation will assist students in translating their own ideas into credible motion in digital form. Prerequisites: 10-207-103, 10-207-110 and 10-207-111.

**10-207-122 Advanced Digital 3D 3 credits**  
 A continuation of Introduction to Digital 3D, this course moves students into more complex modeling and surfacing challenges. Specialized techniques such as patch- and advanced spline-modeling are explored as well as specialized shaders, normal maps, and other advanced surfacing options. Students complete the semester with the design and creation of a complex, multi-part object correctly constructed, linked and boned for advanced animation techniques. Prerequisites: 10-207-103, 10-207-110, 10-207-111 and 10-207-112.

**10-207-130 Digital Set Design 1 credit**  
 Students concentrate on the planning and construction of architectural and environmental spaces in game-engine software. Basic architectural principles as they relate to animation and appropriate effects for specific themes are explored as well as environmental factors relating to the creation of credible worlds. Class activities include the exploration of specialized perspective problems, world-specific texture-sets, lighting and composition. Prerequisites: 10-207-103, 10-207-139 and 10-207-122.

**10-207-131 Animation 3 3 credits**  
 By exploring various off-computer techniques for analyzing character motion, students practice translating their observations into digital form and applying them to their own creations. Extensive study of actual footage and professional work helps students make the conceptual transition from real-world to believable virtual motion. Prerequisites: 10-207-120 and 10-207-122. Co-requisite: 10-207-151.

**10-207-139 Design and Color for Concepting 2 credits**  
 An introduction to the fundamental principles of design and how they relate to both 2D and 3D environments. The course examines differences in interpretation when design principles are applied to a variety of 2D and 3D scenarios. The second half of the semester introduces primary, secondary and tertiary colors leading to an in-depth exploration of color theory and how these concepts relate to 3D media.

**10-207-140 Advanced Animation Studio 1 3 credits**  
 This is the first class in a two-part comprehensive animation studio series. It is a project-based course in which students develop their own projects in consultation with instructors. Extensive studio time provides advanced students with large blocks of instructor and equipment access and allows an in-depth study of particular aspects of digital 3D targeting the completion of a professional quality demo-reel. Group study and interaction is encouraged and detail job tracking is required. Prerequisites: 10-207-120, 10-207-122 and 10-207-150.

**10-207-141 Animation 4 3 credits**  
 Animation 4 is an advanced course in multiple aspects of digital 3D motion. The focus of this course is to develop more intricate and complex character and mechanical animation. Prerequisites: 10-207-120, 10-207-122 and 10-207-151.

**10-207-142 Animation Internship 1 credit**  
 Students work on-site in a professional setting or work on a specific task in consultation with a professional mentor. Regular reviews with a professional are scheduled to assess the student's progress and work quality. Details of internship arrangements can be developed between the student and the participating company as long as specific minimum course requirements are fulfilled. Prerequisite: final semester in program and registration in 10-207-143.

**10-207-143 Animation Portfolio 2 credits**  
 Each student finalizes a series of animations and other artwork to be posted online highlighting his/her capabilities. The collection is targeted to potential employers and/or to four-year animation degree programs for further education. In addition, each student prepares a professional-level 2D portfolio and a personal ID package (stationary, business cards, etc.) and is required to participate in the year-end portfolio show in conjunction with other art degree programs. Prerequisites: 10-207-131 and final semester status.

**10-207-144 Advanced Animation Studio 2 3 credits**  
 This is the second class in a 2-part comprehensive studio series. It is a project-based course in which students develop their own projects in consultation with Instructors and industry professionals. Extensive studio time provides advanced students with large blocks of instructor and equipment access, and allows an in-depth study of particular aspects of digital 3D targeting the student's particular interests. Group study and interaction is encouraged and detailed job-tracking is required. Prerequisites: 10-207-131 and 10-207-140.

**10-207-150 Animation Concepts 1 3 credits**  
 Intensive study of the process of developing visual concepts for 3D execution. Course Traditional and digital drawing techniques cover the design of architectural, mechanical, vehicle, and other assets related to the creation of credible and functional 3D environments. Prerequisites: 10-207-103, 10-207-112 and 10-207-139.

**10-207-151 Animation Concepts 2 3 credits**  
 Intensive study of the process of developing visual concepts for 3D execution, with concentration on the development of character and creature ideas for 3D execution. Traditional and digital drawing techniques cover the design of functional body-mechanics, personality traits and other aspects related to creating the illusion of life. Prerequisites: 10-207-117 and 10-207-150.

**Recommended Electives**

10-207-152 Adv. Animation Workshop 1-2 credits  
 10-201-117 Illustrative Figure Drawing 3 credits

**Career Potential:**

- Character Animator
- Concept Artist/Designer
- Storyboard Artist
- Animator, Modeler, Lighter or Illustrator in the following industries:
  - Advertising
  - Architecture
  - Broadcasting
  - Entertainment
  - Game Design
  - Instructional
  - Medical and Scientific
  - Multimedia Production
  - Printing/Publishing
  - Product Design Development
  - Web Design

Career opportunities in the animation field include: character animation, modeling, lighting, digital game production, illustration for print, architectural rendering, instructional animation, simulation animation for documentary and journalism.

*More detailed and updated information on this program may be available at: [madisoncollege.org](http://madisoncollege.org). The college reserves the right to make changes in the regulations and courses announced in this publication without notice.*

*Madison Area Technical College provides equal opportunity in education and employment.*

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