

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 Introduction to Animation 3 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: 10-201-103 and 10-207-111.

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: 10-201-103 and 10-207-110.

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; 10-207-110; 10-207-111.

Curriculum

FIRST YEAR

First Semester		Credits	Hrs/week Lec-Lab
10-207-103	Basic Drawing for Concepting	3	3-3
10-201-139	Design and Color for Concepting	3	3-3
10-207-110	Intro to Animation	3	3-3
10-207-111	Intro to Digital 3D	3	3-3
10-801-195	Written Communication	3	3-3
10-809-199	Psychology Human Relations	3	3-3
Semester Total		18	

Second Semester

10-207-117	Illustrative Figure Drawing	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
10-804-106	Introduction to College Math	3	3-0
Semester Total		18	

SECOND YEAR

First Semester

10-207-130	Level and Set Design	2	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
	Elective	4	E
Semester Total		18	

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	Contemporary American Society	3	3-0
Semester Total		15	

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)

10-207-120 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: 10-201-103, 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 and 10-207-111.

10-207-130 Level and Set Design 2 credits

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, 10-207-122 and co-requisites: 10-207-151.

10-207-139 Design and Color for Concepting 3 credits

Description not available. Contact center office for details.

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, 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 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

10-201-117 Illustrative Figure Drawing 3 credits

10-207-152 Adv. Animation Workshop 1-2 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: malcmadison.edu. 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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