Animation-Entertainment and Game Art Design, A.A.S.

The Associate of Applied Science Degree in Animation provides instruction for creating animation, 3D modeling and special effects for applications such as animated shorts, movies and games. Fundamental drawing skills, design concepts and the development of entertainment media assets will be covered. New classes in game art assets and level design will give students an employment advantage in the ever-growing game industry. Depending on individual choices and talents, students who complete the Animation program should be prepared for employment as an animator, a game art creator, a 3D visual artist, and/or a special effects artist.

(Major Code 2630; State CIP Code 10.0304)

- Animation

Associate of Applied Science Degree

Prerequisite for Required Courses

Note: Prior to the beginning of the program, the student must take the following prerequisite, or have taken the equivalent transfer course, or have passed the waiver test (where applicable), or have obtained a waiver from the department.

CDTP 135	Desktop Photo Manipulation I: Photoshop	1

First Semester

ANI 123	Concept Art for Animation	3
ANI 125	Introduction to 2D Animation*	3
ANI 250	Game Art Assets*	3
ART 130	Drawing I	3
ENGL 121	Composition I*	3
Total Hours		15

Second Semester

ANI 245	Character Animation*	3
ENGL 140	Writing for Interactive Media*	3
ANI 145	Introduction to 3D Animation*	3
ANI 258	Game Level Design*	3
ART 231	Life Drawing I*	3
Humanities Elective ^		3
Total Hours		18

^   Humanities Elective (http://catalog.jccc.edu/spring/degreecertificates/electives/humanities-aas)

Third Semester

Animation Elective (see below)		3
ANI 255	Advanced Animation and Effects*	3
MUS 156	MIDI Music Composition	3
BUS 141	Principles of Management	3
ANI 270	Visual Effects and Compositing*	3
Health and/or Physical Education Elective ^		1
Total Hours		16

^   Health and/or Physical Education Elective (http://catalog.jccc.edu/fall/degreecertificates/electives/health-and-or-physical-ed-aas)

Fourth Semester

Animation Elective (see below)		3
ANI 260	Animation Capstone*	3

ANI 273	Career Preparation*	4
Science and/or Math Elective ^		3
Social Science and/or Economics Elective ^^		3
Total Hours		16

^   Science and/or Math Elective (http://catalog.jccc.edu/spring/degreecertificates/electives/sci-and-or-math-aas)

^^   Social Science and/or Economics Elective (http://catalog.jccc.edu/spring/degreecertificates/electives/social-sci-econ-aas)

Animation Electives

ENGL 150	Digital Narratives*	3
ART 129	Design Color*	3
ART 131	Drawing II*	3
ART 135	Painting I	3
ART 138	Digital Imaging for Artists I	3
ART 145	Sculpture I	3
ART 232	Life Drawing II*	3
ARTH 180	Art History: Ancient to Renaissance	3
ARTH 182	Art History: Renaissance to Modern	3
ARTH 184	Art History: Twentieth Century	3
ARTH 186	Art History: Introduction to Asian Art	3
ARTH 188	History of Photography	3
CIM 130	Interactive Media Concepts*	2
CIM 135	Digital Imaging and Video*	3
CIM 140	Interactive Media Assets*	4
CIM 235	Advanced Digital Video*	3

Total Program Hours: 65

Courses

ANI 123 Concept Art for Animation (3 Hours)
This basic concept art course is designed for graphic artists, animators, and game artists. Students will study basic and advanced drawing elements and principles. Students will produce conceptual artwork used in animation, graphic arts and gaming, including realistic and cartoon character design, vehicles, architecture, and landscape environments. 6 hrs. integrated lecture-studio/wk.

ANI 125 Introduction to 2D Animation* (3 Hours)
Prerequisites or corequisites: ANI 123

In this course students will learn all aspects of traditional 2D animation, including flipbook, cell, puppet and claymation. Students will create a 2D character, write a story, fabricate a simple puppet and take it through a series of exercises. Experimental animation will be integrated into the course using paper cutouts, replacement animation and stop motion. 6 hrs. integrated lecture studio/wk.

ANI 145 Introduction to 3D Animation* (3 Hours)
Prerequisites or corequisites: ANI 250

This introductory course will provide a historical background and general design and production issues for 3D animation. The details of modeling dimensional objects and environments and a range of simple to complex rendering techniques will be covered. Issues associated with telling a story through moving pictures such as screenplay writing, storyboarding and techniques for bringing an animated character to life will be explored. Students will also be introduced to motion graphics, and generate basic animation, compositing, and effects. 6 hrs. integrated lecture-studio/wk.

ANI 245 Character Animation* (3 Hours)
Prerequisites: ANI 250

Students will continue to refine their skills in a variety of character animation media. The computer and cutting edge software has become an increasingly important tool in creating character animatics, 2D and 3D character animations. More principles and elements of character animation will be introduced to create more realistic, believable and engaging stories. Continued focus on the importance of plot, character development, key principles of animation and artistic skill will push students into realms of endless creativity and imagination. 6 hrs. integrated lecture-studio/wk.

ANI 250 Game Art Assets* (3 Hours)
Prerequisites or corequisites: CDTP 135

This course provides an introduction to making game art assets, and animations for next generation games. Students create high polygon, and low polygon gaming models of characters, land and air based vehicles, weapons, ammunition, health items, armor, power-ups and other model assets used in game play. Students create textures, rigging, light assets, animations, and export them into an existing game engine. 6 hrs. integrated lecture-studio/wk.

ANI 255 Advanced Animation and Effects* (3 Hours)
Prerequisites: ANI 245

The Advanced Animation and Effects course exposes students to various Hollywood style effects, from viscous liquid to open ocean effects. Through hands-on tutorials students will simulate and render a variety of visual effects including fire, explosions, smoke, steam, lightning, rain, snow storms and tornados. These are just a few of the many limitless possibilities that are required by today's demanding visual effects companies. The students will also explore compositing, combining CG (computer generated) and live video together to create stunning imagery. 6 hrs. integrated lecture-studio/wk.

ANI 258 Game Level Design* (3 Hours)
Prerequisites: ANI 250

This course provides an introduction to game level design and how to create interior and exterior levels using the same state of the art editing tools that are used in ultra high-end video games. Students learn to build white box levels first and then populate the level with detailed original game artwork. Students will create terrain maps, textures and interactively place static meshes into the game editor to enhance the visual aspects of the level. Students explore how to build a map that is purposeful and exciting to play 6 hrs. integrated lecture-studio/wk.

ANI 260 Animation Capstone* (3 Hours)
Prerequisites: ANI 255

In this course, the student will use all the knowledge attained in previous core animation courses and develop a finished 1-2 minute independent movie following a predetermined animation production process and schedule. Students will develop a portfolio including an auto-run DVD or VHS tape, and a hard copy portfolio including illustrations of characters, model sheets, storyboards, props, environments, textures and final rendered scenes created for the movie. 6 hrs. integrated lecture-studio/wk.

ANI 270 Visual Effects and Compositing* (3 Hours)
Prerequisites: ANI 145

This course emphasizes the importance of breaking down visual effects shots for effective compositing. Advanced topics will include correct use of garbage mattes, 2D/3D visual effects, blue screen or green screen removal, traveling mattes, image correction, lighting and shading. An introduction to the production pipeline used in professional film and TV work will also be covered. 6 hrs. integrated lecture-studio/wk.

ANI 273 Career Preparation* (4 Hours)
Prerequisites or corequisites: ANI 260

This course will provide interactive media majors instruction in the presentation of his or her work in a digital portfolio format of professional quality. A printed and written resume will be produced. Self-promotion, networking, job searches and interview skills will also be covered. 3 hrs. lecture, 2 hrs. lab/wk. CIM 273 is the same course as ANI 273; do not enroll in both. This course is taught in the spring semester.