### **APTECH 65 Course Outline as of Fall 2019**

# **CATALOG INFORMATION**

Dept and Nbr: APTECH 65 Title: ADV 3D ANIM WORKSHOP Full Title: Advanced 3D Animation Workshop Last Reviewed: 10/8/2018

Units		Course Hours per Week	]	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	4.00	Lecture Scheduled	3.50	17.5	Lecture Scheduled	61.25
Minimum	4.00	Lab Scheduled	1.50	8	Lab Scheduled	26.25
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 122.50

Total Student Learning Hours: 210.00

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	

### **Catalog Description:**

This class focuses on animation production for professional portfolio development using Autodesk 3ds Max and other complementary software. Students work individually and collaboratively to develop complex 3D (three dimensional) models, textures, visual effects and animations. This course also includes an investigation of career options, and enables students to produce demonstration reels showcasing their specific skills.

### **Prerequisites/Corequisites:**

Course Completion of APTECH 63 OR APTECH 64 OR APTECH 162

### **Recommended Preparation:**

### **Limits on Enrollment:**

### **Schedule of Classes Information:**

Description: This class focuses on animation production for professional portfolio development using Autodesk 3ds Max and other complementary software. Students work individually and collaboratively to develop complex 3D (three dimensional) models, textures, visual effects and animations. This course also includes an investigation of career options, and enables students to produce demonstration reels showcasing their specific skills. (Grade or P/NP) Prerequisites/Corequisites: Course Completion of APTECH 63 OR APTECH 64 OR APTECH 162 Recommended: Limits on Enrollment: Transfer Credit: CSU; Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: CSU GE:	Area Transfer Area	I		Effective: Effective:	Inactive: Inactive:
<b>IGETC:</b>	Transfer Area	l		Effective:	Inactive:
CSU Transfer	:Transferable	Effective:	Spring 2011	Inactive:	
UC Transfer:		Effective:		Inactive:	

CID:

## **Certificate/Major Applicable:**

Both Certificate and Major Applicable

# **COURSE CONTENT**

## **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

- 1. Create original 3D animation elements suitable for use in film, broadcast, or computer games.
- 2. Prepare and present effective application materials for employment in the 3D animation industry.
- 3. Participate effectively in a group production environment, including the evaluation of animation projects.

## **Objectives:**

At the conclusion of this course, the student should be able to:

- 1. Present class project proposals in a simulated professional environment.
- 2. Develop and adhere to project production schedules.
- 3. Produce project development materials.
- 4. Use various software to fulfill individual and group project functions.
- 5. Participate in class critiques and incorporate appropriate suggestions in subsequent work.
- 6. Prepare and present an effective employment application package.

# **Topics and Scope:**

- I. 3D Animation Industry Analysis
  - A. Job titles and responsibilities
  - B. Company size: generalists vs. specialists
  - C. Demo reel survey: appropriate elements for specific jobs
- II. Class Pipeline Overview
  - A. Design visualization
  - B. Pre-production

- C. Production
- D. Post-production
- E. Production break down and scheduling
- III. Survey of Available Software: Appropriate Uses and Best Practices
  - A. 3ds Max
  - B. Mudbox
  - C. After Effects
  - D. Premiere Pro
  - E. Photoshop
- IV. Project Categories and Components
  - A. Visual Development
    - 1. Character and set design
    - 2. Layout/scene design
    - 3. Lighting design
    - 4. Visual effects design
    - 5. Storyboarding/animatics
  - B. Modeling/Texturing
    - 1. Organic
    - 2. Hard-surface
    - 3. Characters
    - 4. Architectural and environmental
    - 5. Product
  - C. Rigging and controls
    - 1. Character animation toolkit rigs (CATRigs)
    - 2. Custom rigs and user interfaces
    - 3. Maxscript
  - D. Animation
    - 1. Character
      - a. Animating to storyboards and video reference
      - b. Lip-synching to dialogue tracks
    - 2. Environments
  - E. Visual effects and compositing
    - 1. Multipass rendering
    - 2. Greenscreen compositing
    - 3. Motion matching and tracking
    - 4. Real-time compositing
- V. Project Development Sessions
  - A. Project proposal pitch sessions
  - B. Classroom production meetings
- C. Ongoing project critiques
- VI. Vocational Preparation
  - A. Survey of employment opportunities
  - B. Application materials development
  - C. Demo reel design and execution
    - 1. Editing basics
    - 2. DVD authoring
- VII. Final Portfolio Review

The above Topics and Scope apply to both lecture and lab course components in an integrated format.

## Assignment:

Lecture-Related Assignments:

- 1. Project development materials/elements (e.g., storyboards, animatics, meshes, character test, test animations/renderings, etc.)
- 2. Quizzes (1-3)
- 3. Final Project: completed group and/or individual projects will be screened during a final portfolio review

Lecture- and Lab-Related Assignments:

- 1. Employment application package, including survey of job opportunities, cover letter, resume, demo reel, shot breakdown sheet, and other supplemental materials
- 2. Develop and pitch a project proposal

Lab-Related Assignments:

- 1. Project reviews: ongoing class critiques of project development materials
- 2. Skill development projects: Students perform common animation production procedures specified by the instructor

## Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Project proposal, employment application package, and vocational survey

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Project development and review of materials/elements

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes

**Other:** Includes any assessment tools that do not logically fit into the above categories.

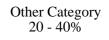
Final project, demo reel, and employment package components

**Representative Textbooks and Materials:** 

Writing 10 - 20%	
Problem solving 40 - 60%	

Skill Demonstrations	
0 - 0%	

Exams	
5 - 15%	



The Animator's Survival Kit. 4th ed. Williams, Richard. Farrar, Straus and Giroux. 2012 (classic) Inspired 3D Short Film Production. Cantor, Jeremy and Valencia, Pepe. Cengage Learning. 2004 (classic)

Instructor prepared materials

STUDENTS PLEASE NOTE: Do not buy textbooks before checking with the SRJC Bookstore. These titles are representative only, and may not be the same ones used in your class.