

# EASTERN ARIZONA COLLEGE

## 3D Animation

Course Design

2015-2016

### Course Information

**Division** Industrial Technology Education  
**Course Number** DRF 214  
**Title** 3D Animation  
**Credits** 3  
**Developed by** Dee Lauritzen  
**Lecture/Lab Ratio** 1 Lecture/4 Lab

### Transfer Status

ASU	NAU	UA
GIT Departmental Elective	CTE Departmental Elective	Non Transferable

**Activity Course** No  
**CIP Code** 15.1300  
**Assessment Mode** Portfolio  
**Semester Taught** Fall  
**GE Category** None  
**Separate Lab** No  
**Awareness Course** No  
**Intensive Writing Course** No

### Prerequisites

DRF 154 or instructor approval

### Educational Value

Associate degree seeking students in the Drafting field

Individuals from local industry or the community seeking instruction in the use of the latest drafting software and hardware, focusing on the latest Maya software

### Description

Students become familiar with the different methods of developing 3D graphics and animation using leading industry software such as Autodesk Maya or 3D Studio.

### Supplies

None

## **Competencies and Performance Standards**

### **1. Characterize types of animation.**

#### **Learning objectives**

*What you will learn as you master the competency:*

- a. Identify the characteristics of 2D animation.
- b. Identify the characteristics of 3D animation.

#### **Performance Standards**

*Competence will be demonstrated:*

- o in successful completion of a written exam at the end of the course

*Criteria - Performance will be satisfactory when:*

- o learner identifies the application of the various types of technical illustrations

### **2. Identify animation design considerations.**

#### **Learning objectives**

*What you will learn as you master the competency:*

- a. List design considerations for animation project development.
- b. Analyze design considerations.

#### **Performance Standards**

*Competence will be demonstrated:*

- o through written examination

*Criteria - Performance will be satisfactory when:*

- o learner successfully identifies and distinguishes between design considerations for animation development

### **3. Create a story board.**

#### **Learning objectives**

*What you will learn as you master the competency:*

- a. Develop a simple set of part movements for a mechanical assembly.
- b. Outline a simple animation using hand sketches.

#### **Performance Standards**

*Competence will be demonstrated:*

- o using paper and pencil and no computer help
- o by successful completion of assigned project

*Criteria - Performance will be satisfactory when:*

- o story board outline is created of not less than 6 frames
- o story board contains dialog explaining each story board frame

### **4. Import a drawing file from one application to another.**

#### **Learning objectives**

*What you will learn as you master the competency:*

- a. Translate a 3D solid model drawing file to a 3D neutral file format (such as DXF or 3DS) from a drafting software package (such as Auto CAD).

- b. To translate a 3D image from a neutral file format into a 3D Studio format.

**Performance Standards**

*Competence will be demonstrated:*

- o when the learner is given a computer configured with the appropriate software and outside data source

*Criteria - Performance will be satisfactory when:*

- o story board outline is created of not less than 6 frames

**5. Design a 3D animation project.**

**Learning objectives**

*What you will learn as you master the competency:*

- a. Develop a story board outline.
- b. Complete online software training tutorials.
- c. Assemble the necessary objects, materials, and backgrounds.
- d. Develop the project according to the story board outline.

**Performance Standards**

*Competence will be demonstrated:*

- o through written examination

*Criteria - Performance will be satisfactory when:*

- o learner uses a story board to develop an animation project

**6. Create production quality output.**

**Learning objectives**

*What you will learn as you master the competency:*

- a. Arrange the visual effects for output (i.e. graphics, animation, slide show).
- b. Identify the correct output source for the type of illustration (i.e. video, cd-rom, internet).
- c. Create the output on the selected output device.

**Performance Standards**

*Competence will be demonstrated:*

- o when the learner is given a computer configured with appropriate software and printer

*Criteria - Performance will be satisfactory when:*

- o project is presented to class
- o project is rendered to printer
- o animation project is copied to video tape

**Types of Instruction**

Classroom presentation

### ***Grading Information***

#### ***Grading Rationale***

Each instructor has the flexibility to develop evaluative procedures within the following parameters:

The Post Test will represent 10% of the course grade.

Course learning activities shall represent 90% of the course grade.

#### ***Grading Scale***

A	90% - 100%
B	80% - 89%
C	70% - 79%
D	60% - 69%
F	Below 60 %