PRINCIPLES OF ANIMATION
Course Syllabus

Course Number: MDIA-0015  
OCAS Code: 8220  
Course Length: 120 Hours  
Career Cluster: Information Technology  
Career Pathway: Web and Digital Communications; Interactive Media  
Career Major(s): 3D Animator, Special Effects Technician, Motion Graphics Artist

Pre-requisite(s): Multimedia & Image Management Techniques

Course Description: Students will utilize animation and storyboarding techniques to plan the production of an animation project. Students learn to design production steps from script and storyboard the actions in the preproduction planning process. (This course can be substituted with Advanced Design Techniques in the Graphic Design Specialist, Animator, 3D Animator, 3D Modeler, Motion Graphics Artist, Video Editor, Video Producer, Web Producer, and Webmaster Career Majors).

Textbooks: 
Inspired 3D Short Film Production and The Art of the Storyboard

Course Objectives: A. Demonstrate Knowledge of 3D Animation
1. Trace the history of animation.
2. Describe the animation techniques for the stop-action process.
3. Describe the animation techniques for simple animations that include cutout animation, image capture, digital cutout, collage, and rotoscoping.
4. Describe the animation techniques for cell animation.
5. Describe the use of dope or exposure sheets.
6. Describe the process for lip-syncing the animation to a voice track.
7. Compare and contrast the techniques used for web animation, animated GIF, Flash, 3D web animation.
8. Apply the proper animation techniques for 3D digital motion graphics animation.
9. Research and create a script for an animation.
10. Describe the preplanning process for developing an animation.
11. Create a storyboard for an animation.
12. Demonstrate the use of action in a storyboard.
13. Show increased reality by using perspective and receding planes.
14. Utilize depth of field and light to set the mood for the story.
15. Frame the shot to achieve the desired effect.
16. Use shots to further the narrative flow.
17. Describe the shot as the visual language of cinema.
18. Create digital storyboards.
19. Create an animatic (pencil test) from the digital storyboard.

ODCTE objectives
**Teaching Methods:** The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

**Grading Procedures:**
1. Students are graded on theory and shop practice and performance.
2. Each course must be passed with seventy (70%) percent or better.
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

**Description of Classroom, Laboratories, and Equipment:**
Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

**Available Certifications/College Credit:**
The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

**College Credit Eligibility:**
The student must maintain a grade point average of 2.0 or better.