

**Course Outline**

COURSE: AMT 229                      DIVISION: 50                      ALSO LISTED AS:

TERM EFFECTIVE: Spring 2019                      CURRICULUM APPROVAL DATE: 05/14/2018

SHORT TITLE: ADV DRONE AERIAL PHOTO AND CIN

LONG TITLE: Advanced Drone Aerial Photography and Cinematography

Units	Number of Weeks		Contact Hours/Week		Total Contact Hours
3	18	Lecture:	2	Lecture:	36
		Lab:	3	Lab:	54
		Other:	0	Other:	0
		Total:	5	Total:	90

**COURSE DESCRIPTION:**

This course is designed to teach a variety of skills in aerial photography and cinematography with drones, including: cinematic techniques during flight, video production techniques, 3D mapping, photographic techniques, panorama, video editing, and photo editing. Students will use software such as the DJI Go App, Adobe Photoshop CC, Adobe Premiere CC, Adobe Lightroom, and Pix4D Mapper Pro to create original content that showcases a variety of professional aerial projects. This class has the option of a letter grade or pass/no pass. PREREQUISITE: AMT 225 and AMT 227

**PREREQUISITES:**

- Completion of AMT 225, as UG, with a grade of C or better.
- AND Completion of AMT 227, as UG, with a grade of C or better.

**COREQUISITES:**

CREDIT STATUS: D - Credit - Degree Applicable

**GRADING MODES**

- L - Standard Letter Grade
- P - Pass/No Pass

REPEATABILITY: N - Course may not be repeated

**SCHEDULE TYPES:**

- 02 - Lecture and/or discussion
- 03 - Lecture/Laboratory
- 04 - Laboratory/Studio/Activity

04A - Laboratory - LEH 0.65  
05 - Hybrid  
72 - Dist. Ed Internet Delayed  
73A - Dist. Ed Internet LAB-LEH 0.65

**STUDENT LEARNING OUTCOMES:**

1. Describe and demonstrate a variety of software that can be used to capture and edit aerial photography and cinematography.

Measure: Homework, Project, Demonstration

Year assessed, or planned year of assessment: Fall, 2018

2. Create and produce an original professional video to tell a story using aerial photography and videography.

Measure: Demonstration, Project

Year assessed, or planned year of assessment: Fall, 2018

**CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS**

Curriculum Approval Date: 05/14/2018

**LECTURE CONTENT:**

4 Hours

Content: History of Aerial Videography; Developing a Drone Video/Photo Business

Student Performance Objectives: Discuss the current state of camera drone equipment and how to become a competent drone operator. Explain how to develop a drone video that could be used in a photo business.

4 Hours

Content: Cinematography and Editing Techniques

Student Performance Objectives: List several tips for getting the best aerial still images and videos. Explain various editing techniques.

4 Hours

Content: Creating Professional Panoramas

Student Performance Objectives: Discuss the software that would be used to process panoramic photos. Describe how to create a professional aerial panorama.

4 Hours

Content: 3D Mapping and Inspection

Student Performance Objectives: Explain aerial mapping and the apps that would be used. Discuss how to create a 3D map.

4 Hours

Content: Cinematography 2 and Flight Night

Student Performance Objectives: Describe how to tell a story from aerial photographs and videographs.

4 Hours

Content: Real Estate Videos and Photos

Student Performance Objectives: Discuss how you would acquire imagery to produce a real estate video. Explain how to create an original professional real estate video.

5 Hours

Content: Content Creation and Editing 1 (Portfolio Project)

Student Performance Objectives: Discuss various editing techniques that could be utilized. Describe how to tell a story with a professional video using aerial videography.

5 Hours

Content: Content Creation and Editing 2 (Portfolio Project)

Student Performance Objectives: Discuss various editing techniques that could be utilized. Describe how to tell a story with a professional video using aerial videography.

2 Hours

Final

**LAB CONTENT:**

6 Hours

Content: Aerial Videography

Student Performance Objectives: Demonstrate how to develop a video using a drone that could be used in a photo business.

6 Hours

Content: Editing Techniques

Student Performance Objectives: Demonstrate non-linear editing and photography editing skills.

6 Hours

Content: Creating Professional Panoramas

Student Performance Objectives: Demonstrate the use of software that would be used in shooting aerial panoramas. Demonstrate how to create a professional aerial panorama.

6 Hours

Content: 3D Mapping and Inspection

Student Performance Objectives: Demonstrate the use of software that would be used to create a 3D map. Demonstrate how to create a 3D map.

6 Hours

Content: Cinematography

Student Performance Objectives: Demonstrate how to tell a story from aerial photographs and videographs.

6 Hours

Content: Real Estate Videos and Photos

Student Performance Objectives: Demonstrate the use of software that would be used in shooting aerial real estate videos and photos. Demonstrate how to create an original professional real estate video.

7.5 Hours

Content: Portfolio Project Presentations

Student Performance Objectives: Demonstrate how to tell a story with a professional video using aerial videography.

7.5 Hours

Content: Portfolio Project Presentations

Student Performance Objectives: Demonstrate how to tell a story with a professional video using aerial videography.

2 Hours

**METHODS OF INSTRUCTION:**

lecture, discussion, audio-visual, guided practice, demonstration

**OUT OF CLASS ASSIGNMENTS:**

Required Outside Hours: 24

Assignment Description: Read related textbook chapters and/or assigned materials. Study for quizzes/exams.

Required Outside Hours: 24

Assignment Description: Homework/Problem Solving Assignments: Investigate the various software that is used in photo and video editing and that is used to process panoramas and 3D mapping and come prepared to discuss with the class.

Required Outside Hours: 24

Assignment Description: Project: Work on and complete portfolio that showcases a variety of professional aerial projects. **METHODS OF INSTRUCTION:**

lecture, discussion, audio-visual, guided practice, demonstration

**METHODS OF EVALUATION:**

Writing assignments  
Percent of total grade: 20.00 %  
Homework  
Problem-solving assignments  
Percent of total grade: 20.00 %  
Project, Demonstration  
Skill demonstrations  
Percent of total grade: 40.00 %  
Performance Exams  
Objective examinations  
Percent of total grade: 20.00 %  
Quizzes, Exams

**REPRESENTATIVE TEXTBOOKS:**

Required Representative Textbooks

Eric Cheng. Aerial Photography and Videography Using Drones. Peachpit Press/Pearson Education,2016.

ISBN: 13: 978-0-134-12277-9

Reading Level of Text, Grade: 12th Verified by: MS Word

Required Other Texts and Materials

Students will be required to purchase a 750Mb-1Tb hard drive that can be MAC formatted. This drive should be a brand new drive to hold course content exclusively for this class. In addition, students will be required to bring a set of headphones to every class.

Hardware such as: Portable Hard Drive and Mini Scan Disks and a micro SD card that will go in the drone.

**ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Not Transferable

UC TRANSFER:

Not Transferable

**SUPPLEMENTAL DATA:**

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department:

CSU Crosswalk Course Number:

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: C

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000592759

Sports/Physical Education Course: N

Taxonomy of Program: 095000