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

<table>
<thead>
<tr>
<th>Units</th>
<th>Number of Weeks</th>
<th>Contact Hours/Week</th>
<th>Total Contact Hours</th>
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<tbody>
<tr>
<td>3</td>
<td>18</td>
<td>Lecture: 2</td>
<td>Lecture: 36</td>
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<td></td>
<td></td>
<td>Lab: 3</td>
<td>Lab: 54</td>
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<td></td>
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<td>Other: 0</td>
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<td>Total: 5</td>
<td>Total: 90</td>
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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

5/22/2018
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:

5/22/2018
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
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

5/22/2018
In-Service: N
Occupational Course: C
Maximum Hours: 
Minimum Hours: 
Course Control Number: CCC000592759
Sports/Physical Education Course: N
Taxonomy of Program: 095000