

## PHOTO136 : Drone Photography

### General Information

Author:	<ul style="list-style-type: none"><li>David Yamamoto</li></ul>
Course Code (CB01) :	PHOTO136
Course Title (CB02) :	Drone Photography
Department:	PHOTO
Proposal Start:	Spring 2025
TOP Code (CB03) :	(1012.00) Applied Photography
CIP Code:	(10.0201) Photographic and Film/Video Technology/Technician.
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000619248
Curriculum Committee Approval Date:	05/22/2024
Board of Trustees Approval Date:	07/16/2024
Last Cyclical Review Date:	05/22/2024
Course Description and Course Note:	PHOTO 136 provides students with hands-on experience creating still images using drones. Emphasis is placed on planning and executing flight plans to support camera-based capture systems on unmanned aerial vehicles (UAV). Note: Students seeking employment in drone operation should enroll in AT-152, Intro to Unmanned Aircraft Vehicles, to prepare for the Federal Aviation Authority (FAA) Remote Pilot License.
Justification:	Mandatory Revision
Academic Career:	<ul style="list-style-type: none"><li>Credit</li></ul>
Mode of Delivery:	
Author:	
Course Family:	

### Academic Senate Discipline

Primary Discipline:	<ul style="list-style-type: none"><li>Photographic Technology/ Commercial Photography</li></ul>
Alternate Discipline:	<ul style="list-style-type: none"><li>Photography</li></ul>
Alternate Discipline:	No value

## Course Development

### Basic Skill Status (CB08)

Course is not a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

### Course Special Class Status (CB13)

Course is not a special class.

### Pre-Collegiate Level (CB21)

Not applicable.

### Grading Basis

- Grade with Pass / No-Pass Option

### Course Support Course Status (CB26)

Course is not a support course

## General Education and C-ID

### General Education Status (CB25)

Not Applicable

### Transferability

Transferable to CSU only

### Transferability Status

Approved

## Units and Hours

### Summary

**Minimum Credit Units (CB07)** 2

**Maximum Credit Units (CB06)** 2

**Total Course In-Class (Contact) Hours** 72

**Total Course Out-of-Class Hours** 36

**Total Student Learning Hours** 108

### Credit / Non-Credit Options

#### Course Type (CB04)

Credit - Degree Applicable

#### Noncredit Course Category (CB22)

Credit Course.

#### Noncredit Special Characteristics

No Value

#### Course Classification Code (CB11)

Credit Course.

Variable Credit Course

#### Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience

Education Status (CB10)

### Weekly Student Hours

	In Class	Out of Class
Lecture Hours	1	2
Laboratory Hours	3	0
Studio Hours	0	0

### Course Student Hours

<b>Course Duration (Weeks)</b>	18
<b>Hours per unit divisor</b>	0
<b>Course In-Class (Contact) Hours</b>	
Lecture	18
Laboratory	54
Studio	0

<b>Total</b>	72
<b>Course Out-of-Class Hours</b>	
Lecture	36
Laboratory	0
Studio	0
<b>Total</b>	36

### Time Commitment Notes for Students

No value

### Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

### Pre-requisites, Co-requisites, Anti-requisites and Advisories

#### Advisory

AT152 - Introduction to Unmanned Aerial Vehicles (in-development)

### Entry Standards

#### Entry Standards

Identify and use basic digital camera features.

Use light meters and demonstrate exposure control methods.

Identify characteristics of light.

Identify basic characteristics of digital files and printing.

Define and analyze technical and composition effects on image.

## Course Limitations

Cross Listed or Equivalent Course

## Specifications

### Methods of Instruction

Methods of Instruction

Lecture

Methods of Instruction

Laboratory

Methods of Instruction

Discussion

Methods of Instruction

Multimedia

Methods of Instruction

Tutorial

Methods of Instruction

Independent Study

Methods of Instruction

Collaborative Learning

Methods of Instruction

Demonstrations

Methods of Instruction

Field Activities (Trips)

### Out of Class Assignments

- Planning and preparing flight plans (e.g. student will prepare written flight plans for specific locations)
- Individual and team aerial shooting projects to develop creative and technical skills (e.g. student will shoot subjects related to the target area)

Methods of Evaluation

Rationale

Project/Portfolio

Evaluation of flight plans

Project/Portfolio

Individual and group critiques of work and final project

### Textbook Rationale

This is an industry standard text for drone photography

### Textbooks

Author	Title	Publisher	Date	ISBN
Cheng, Eric	Aerial Photography and Videography Using Drones	Peachpit Press	2016	978-0134122779

### Other Instructional Materials (i.e. OER, handouts)

No Value

### Materials Fee

No value

## Learning Outcomes and Objectives

### Course Objectives

Organize and prepare for an aerial shoot.

Analyze drone images and footage for technical and creative quality.

### SLOs

**Create and safely execute an aerial shoot using a drone.**

Expected Outcome Performance: 70.0

*ILOs* Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.

Core

ILOs

Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.

**Create a technically and visually cohesive project using aerial stills and videos.**

Expected Outcome Performance: 70.0

*ILOs* Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.

Core

ILOs

Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.

## Additional SLO Information

**Does this proposal include revisions that might improve student attainment of course learning outcomes?**

No

**Is this proposal submitted in response to learning outcomes assessment data?**

No

**If yes was selected in either of the above questions for learning outcomes, explain and attach evidence of discussions about learning outcomes.**

No Value

**SLO Evidence**

No Value

## Course Content

### Lecture Content

**History of Aerial Image Capture Systems (4.5 Hours)**

**Current Technologies and Equipment (9 Hours)**

- Characteristics of contemporary aerial camera systems
- Equipment requirements and selection
- Uses of aerial imagery in commercial and creative settings

**Safe and Legal Operation of Drones and Aerial Image Capture Systems (4.5 Hours)**

**Total Hours: 18**

### Laboratory/Studio Content

**Drone Flight and Image Capture (54 Hours)**

- Creating and executing flight plans
  - Identifying locations
  - Constructing an aerial shooting sequence
- Flying to support technical and creative imagery
  - Weather and lighting
  - Solo flight and camera operation
  - Team flight and camera operation
- Processing, editing, and presenting drone imagery

**Total Hours: 54**

## Additional Information

**Is this course proposed for GCC Major or General Education Graduation requirement? If yes, indicate which requirement in the two areas provided below.**

No

**GCC Major Requirements**

No Value

**GCC General Education Graduation Requirements**

No Value

**Repeatability**

Not Repeatable

**Justification (if repeatable was chosen above)**

No Value

**Resources**

**Did you contact your departmental library liaison?**

No

**If yes, who is your departmental library liaison?**

No Value

**Did you contact the DEIA liaison?**

No

**Were there any DEIA changes made to this outline?**

No

**If yes, in what areas were these changes made:**

No Value

**Will any additional resources be needed for this course? (Click all that apply)**

- No

**If additional resources are needed, add a brief description and cost in the box provided.**

No Value