

Course Code & No. - Section:	DART 480 - Section 1
Course Title (Credits):	Drone Workshop (3)
Term & Year:	Fall 2019
Course Ref. No. (CRN):	80002
Instructor:	Chris Lanier
Phone(s):	X7421
Email:	clanier@sierranevada.edu
Office:	HAMC
Office Hours:	MW 1:00 - 3:00 p.m., by appointment
Class Meeting Time:	MTWRF 10:00 a.m. - 3:00 p.m.
Location:	HAMC, 208
Prerequisites (from Catalog):	none
Corequisites (from Catalog):	none
Class website:	https://sierranevada.instructure.com/courses/448

Course Description

An introduction to drone videography. Students will learn drone safety and etiquette, as well as strategies for capturing visually dramatic drone footage. We will cover subjects that are included in the FAA Knowledge Test for qualification for a sUAS license, as well as post-production strategies (such as Voice Over and speed ramping) for drone films. There will be several field trips for in-the-field drone practice in the Tahoe Donner area, and class speakers who have used drones in a variety of capacities, from real estate photography to political activism.

Student Outcomes

Upon successful completion of this course, a student will be able to:

1. Understand drone safety and etiquette
2. Read weather reports prior to flight to gauge safe conditions
3. Understand the basics of aviation sectional charts, to understand where drone flight is and is not permitted, and what zones require authorization
4. Understand a variety of career and informational applications for drone videography
5. Use video editing software to shape drone footage into an eye-catching short film
6. Have a grasp of ethical and technological ramifications of drone technology
7. Have a clearer sense of Tahoe/Donner geography and history

Methods of Assessing Student Outcomes

Student outcomes are measured by multiple projects during the term. These projects will be evaluated for the student's ability to demonstrate the principles covered in lecture, demonstration and discussion.

Instructional Strategies

This class will utilize lectures and demonstrations, small groups, individual work in class, inquiry learning, and hands-on fieldwork.

Required Texts and Materials

1. 1 GB jump drive
2. Handouts and web URLs

Attendance

If you miss more than one (1) classes without a written doctor's excuse, your grade will drop by one letter (i.e., from an A to a B). This will continue for every class missed thereafter. If you are tardy by more than 20 minutes or leave class early by 30 or more minutes, this will count as an absence. If you are late (less than 10 minutes) to class you will receive a late mark, every three late marks will count as one unexcused absence.

Class Requirements

Cell phones must be turned off or set to silent mode. You must ask permission to leave the classroom once class begins.

Sanctions for Cheating and/or Plagiarism**The Honor Code**

The faculty of SNC believes students must be held to high standards of integrity in all aspects of college life in order to promote the educational mission of the College and to encourage respect for the rights of others. Each student brings to the SNC community unique skills, talents, values and experiences which, when expressed within the community, contribute to the quality of the educational environment and the growth and development of the individual. Students share with members of the faculty, administration and staff the responsibility for creating and maintaining an environment conducive to learning and personal development, where actions are guided by mutual respect, integrity, responsibility and trust. The faculty and students alike must make diligent efforts to ensure high standards are upheld by their colleagues and peers as well as themselves. Therefore faculty and students accept responsibility for maintaining these standards at Sierra Nevada College and are obligated to comply with its regulations and procedures, which they are expected to read and understand.

Consequences of Violating the Student Honor Code

SNC students and faculty share the responsibility for maintaining an environment of academic honesty. Thus, all are responsible for knowing and abiding by the SNC Faculty/Student Honor Code published in the current SNC Catalog. Faculty are responsible for presenting the Honor Code and the consequences of violating it to students at the start of their classes AND for reporting all incidences of academic dishonesty to the Provost. Students are responsible for knowing what constitutes CHEATING, PLAGIARISM and FABRICATION and for refraining from these and other forms of academic dishonesty. Violations of the Honor Code become part of a student's academic record.

- 1st Offense: Student receives a zero for assignment/exam and counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.
- 2nd Offense: Student fails course and receives counseling with faculty on the honor code, consequences for violating the honor code, and the value of academic honesty in learning.
- 3rd Offense: Student is expelled.

Grading Policy

Your grade will be based upon the following: finished projects executed during class and as homework; your participation during class, particularly in discussions and critiques; writing assignments and other homework assignments.

If you attend all of the classes, and do the assignments, you will have no problem in passing this class with a decent grade. Only outstanding work will be rewarded with an A. You will be expected to be in

class on time and ready to work. Participation is crucial, voicing your ideas, critiquing your peers and asking questions is part of the learning process.

ADA Accommodations

In accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, students with a documented disability are eligible for support services and accommodations. If a student wishes to request an accommodation, please contact the Director of Academic Support Services, Henry Conover, at (775) 831-1314 x7534, hconover@sierranevada.edu or go to the OASIS offices on the third floor of Prim Library within the first week of the semester.

The SNC Email System

The SNC email system is the official communication vehicle among students, faculty members and administrative staff and is designed to protect the confidentiality of student information as required by the Family Educational Rights and Privacy Act of 1974 Act (FERPA). Students should check their college email accounts daily during the school year.

Students have a right to forward their SNC e-mail to another e-mail account (for example, @hotmail or @gmail). However, confidentiality of student information protected by FERPA cannot be guaranteed for SNC e-mail forwarded to an outside vendor. Having email redirected does not absolve a student from the responsibilities associated with official communication sent to his or her SNC email account.

Class Schedule

Class 1

Introduction to drone safety concepts
Introduction to the class drones – basics of operation
Introduction to flight app
Viewing excerpts of documentaries that use drone footage
First on-campus drone flight

Class 2

Introduction to basic flight modes: tracking, tripod, etc.
Drone flight: open field (Incline Middle School fields or Tahoe Meadows)
Offloading footage
Basics of weather info for Knowledge Test
GPS – history

Class 3

Edit day: speed ramping and VO capture
Introduction of extended flight modes: tracking, tripod, etc.
Script-writing exercise: astral projection
National Forest – history

Class 4

Drone flight: open field (Incline Middle School fields or Tahoe Meadows)
Aviation Sectional Chart basics: Part 1
Opportunity for self-directed weekend flights

Class 5

Editing the “astral projection” videos and screening
Class speaker: Lloyd Garden – real estate, commercial, and documentary drone videography
Introduction to drone waypoints

Class 6

Drone flight: Tahoe Meadows – use of waypoints
Aviation Sectional Chart basics: Part 2
Use of drones at Standing Rock - history

Class 7

Class speaker: E'sha Hoferer – drone pilot at Standing Rock
Documentary on military drones: National Bird
Donner Tunnels - history

Class 8

Drone flight: Donner Tunnels
Offload and edit

Class 9

Screening of final drone films
Drone Safety test

The Mission Statement:

Sierra Nevada College graduates will be educated to be scholars of and contributors to a sustainable world. Sierra Nevada College combines the liberal arts and professional preparedness through an interdisciplinary curriculum that emphasizes entrepreneurial thinking and environmental, social, economic and educational sustainability.

The Core Themes:

Liberal Arts

Professional Preparedness

Entrepreneurial Thinking

Sustainability