

Industry Representatives

Mt. SAC Faculty and Staff

Х	Christy Jewel, Samy's Camera	х	Gary Colby, University of La Verne	Х	Dr. Sue Long, Dean of Arts
х	Will Chesher, GOALS Academy	Х	Stephen Swintek, Swintek Photography		Mark Lowentrout, Associate Dean of Arts
х	Louis Felix, Louis Felix photography	х	Greg Zajack, Zajack Photography	Х	Laurie Hartman, Co-Chair CEA Dept., Professor
	Steve Schenck, Shenck & Schenck Photography	Х	Brock P. Christoval, Cal Poly Pomona, Flyspan Systems	Х	Jason Perez, Professor of Photography
Х	David Lopez, ACCD Student, Mt. SAC Alumni		Joe Lavine, Profoto USA	Х	Chris Benoe, Photography Lab Technician
х	Marcus Martinez, Mt. SAC photography student	х	Marshal Jen, DJI	Х	Debbie Bautista, Program Specialists
х	Josh Schaedel, Josh Schaedel photography	х	Adrian Zaw, Zaw Studios	X	Linda Rogus, Mt SAC Aeronautics
		Х	Adam Taylor, Adam Taylor Photography	X	Robert Rogus, Mt SAC Aeronautics

Item	Discussion	Outcome/Action Needed
Welcome and Introductions 11:30am	 Purpose of Advisory Assist departments and college in evaluating effectiveness of program and prep of graduates Recommend changes to curriculum, facilities, and equipment Assist the program in identifying work experience opportunities Advise the program of industry changes and trends 	
	General Update-State of the College. Dr. Sue Long thanked the committee for their participation and described the importance of the Advisory Committee. She also explained that the college and the photography program are in growth mode. She introduced information about the Strong Workforce Project (SWP) grant/funding for the new UAV/UAS programs.	
	 Achievements: Jay Perez highlighted a few of the photography program's major achievements from the past year. The retirement of lab technician Randy Smith and the new hire of Chris Benoe. Addition of new part-time faculty members: Josh Schaedel, Hiroshi Clark and Stephen Swintek. Our new Video for Photographers Certificate approval and implementation. In process: adding courses and two new certificates in UAV/ Drone technology. In process: hiring a new a part-time lab technician. 	



	 In process: hiring a new full-time faculty member. Program growth with successful increased course offerings. Outreach to high school students via on-campus workshops for ROP programs and darkroom experience for schools participating in the articulation process. Articulation 9 high schools Secured Perkins funding for purchase of a barcode system for inventory and check out Revision of Department procedures to help focus instructors time in the classroom & labs Revision of Resource Check outs for students to help make the process more efficient. Fully managed large format digital printers to provide students professional style printing & increase the efficiency of printing for better time management & cost. In process implementation of Asset Management System "In reach" to current students via informational hallway posters promoting individual courses and degree/certificate requirements. Received donation of Canon AE1 cameras kits Individual Education Planning resulted in 21 degree/certificate completions One-year Lynda.com license for all CEA students and faculty Secured Strong Workforce Program funding for the UAV Certificates 	
Advisory-Driven Program Improvements to date	Laurie Hartman commented that the Photography Program has successfully completed the following recommendations from last year's Advisory Committee. Curriculum. Updated courses: 1ABCD, 9, 10, 12, 14, 15, 16, 18, 19, 20, 21, 24, 26, 28, 30, 98, 99. Split photo 11 (4 units) into 11A and 11B (3 units each) Updated degree/certificates to reflect course changes Secured CEA department "approval of concept" for two new UAV Certificates and related courses. Personnel: Full-time faculty (growth) position Full-time lab tech (replacement) position Reassigned time create a new UAV Certificate Full-time CEA admin to help with program management Student Workers Counseling liaison dedicated to CEA Work study grant Christina Johnson and Saul Barrera	



Facilities and Equipment Purchases:

- Currently working on Remodel studio storage/Issue Room
- New iMac Computers (3 classrooms)
- Photo/studio equipment
- Kessler Crane Pocket Job Traveler
- Kessler Pocket Dolly 3
- 4 T5i
- 4 Canon 6D's
- Canon 24-70mm
- Canon 24mm TS
- 4 ipf6400 canon printers
- 4 NEC color monitors
- 3 color profiles for printer setups
- Color viewing station
- 2 Arri Light Kits (6 lights total)
- 3 48"x48" Mattews Solid Frame Scrims
- 3 24"x36" Mattews Solid Frame Scrims
- 3 24"x36" Mattews Solid Frame Cutters
- 4 Speedlights (request for wedding class)
- 4 Radios to complete wedding kits.
- 2 magic arms w/ camera mount adapters
- 5 full apple boxes
- 5 half apple boxes
- 6 ND filters (variable)
- 6 Step up rings
- 5 Manfrotto Tripods (beginning to replace our light use tripods)
- 2 Monopods for Video
- 2 Zacuto Z-Finders
- 6 6-1 Westcott Reflectors
- 10 25lb sandbags
- 2 super clamps

Marketing/Promotion

- Hallway Posters
- Printed Promotion

Conferences

International Drone Expo



Program Success Data Data from: http://datamart.cccco.edu/Out comes/Program_Awards.aspx	Commercial UAV conference L Pathways UAV Drone educator UAV/ UAS Small Unmanned Ar UAV Coach Ground School UAV Geo Mapping and Modelin Laurie, Jay and Sue explained that phot develop education plans and assist with identified a counselor to work specifically Department.	To increase degree/certificate completion rates, the photography faculty will continue to meet with students or refer them to our designated counselor for education plans and application completions.		
		2014-15	2015-16	
	Certificates ARGOS Report SHR0009	38	15	
	Degrees ARGOS Report SHR0009	8	6	
	Total Completions			
Alumni Input				



Advisory Input

Discussion Items

UAV Trends:

Jay Perez outlined the new courses and the difference between the two proposed UAV/UAS certificates (handouts). He explained that we intend to train students to operate/fly drones as well as have camera skills needed to accurately capture, manage, and deliver the data needed for a variety of industries

The committee had the following recommendations:

- 1). Students need to complete FAA 107 Certification to operate in airspace. Recommend collaborating with Mt. SAC's Aeronautics Department.
- 2). The photography program's UAV/UAS certificates should bridge the gap between having the FAA certification and knowing how to produce and deliver digital image content that employers and customers need. Students need to understand composition, lighting, lens choice, exposure, communication, resolution, data asset management, risk management, and data security.
- 3). The group discussed the difference between shooting stills and pulling frames from motion content. They agreed that in the future, photographers will need to shoot both stills and motion content and seamlessly blend them.
- 4). Pre-production (lens choice, camera angle, composition, storyboards, art direction) is very important.
- 5). It is important to carefully consider technology purchases as well as vendor selection for successful implementation in the educational setting.
- 6). Photographers providing content for drone imagery should be prepared to work in teams that blend drone operation with creative vision and camera operation. If we graduate commercial flight teams would differentiate our program from other schools. The teams would benefit from connecting and networking in a Makers Space environment.



Advisory Input

- 7). DJI Ozmo technology is easy to learn and inexpensive and good for quick, inexpensive jobs, but does not have lens and focus capabilities of DSLR's. Students should know both. Implement Ozmo into PHOT 26. The skills will be also be transferrable to drone capture.
- 8). PHOT 28 (Portfolio) and PHOT 29 (Business Practices) are important classes for students to take.
- 9). There is no standard pricing for drone photography. There are many people that have completed the FAA 107 certification, but they also need experience, camera skils and artistic ability to be successful. The film/television industry has union rates and there is a need for union still photographers with drone equipment and skills. They can also charge clients for the use of their equipment. The FAA 107 certification will be the barrier to entry.
- 10). Photogrammetry and Imaging Certificate is more scientific (mapping,) but still need skills to properly expose, focus, etc. Photogrammetry is taking measurements from pictures. High resolution is important. Drones capture data that is transferred to a map (2D or 3D). Used in architecture, construction, or any field that needs detailed measurement. Students need skills to capture data, process data and send it to industry. Includes Photogrammetry/mapping as well as thermal imaging for emergency response.
- 11). Phot 29 (Business Practices) should be required.
- 12). Include a course in operations and risk management (including mission planning, insurance, and information/data asset security). This could be a collaborated course cross-listed with Aeronautics.
- 13). The group discussed the importance of hiring a lab technician who is proficient with the maintenance of UAV/ Drone technology. They also stressed how important it is to log flight times with each part of a the drone, FAA in the future may requires flight time log books on all drone parts.

Advisory Input



Job Market Trends:

- 1). There are many applications for drones in a variety of industries, including agriculture, and construction. There are many employment opportunities for photographers using drones.
 - 2). Union Still Photographer for the Entertainment Industry is a great, high paying career with benefits. We should teach students this skill, style of work, and how enter the industry.

• Professional Development:

• Emerging Trends:

- 1). Virtual Reality, 360 Cameras, Augmented Reality, large CCDs for DSLR and medium format cameras.
- 2). (via email response). Increase coursework teaching motion skills in the photography program. In the future, photographers will be required to shoot both stills and motion and seamlessly blend the two. "Every business today needs stills and motion. If you can do both, then you can double your opportunities to make a living."

Internships

- 1). Debbie Bautista explained the college's internal and external Work Experience program and requested that committee members consider hiring our students for paid or unpaid internships.
- 2). A committee member commented that as business owners, there is some risk involved in hiring interns (equipment, clients).



Bldg. 13, Room 1435

2 year Requisite Review- Mandatory	Course Title	(PR), (requis	quisite	App Y/N	ropriate Requis	ite	Advisory Comments/Recommendations:
	PHOT 5 Digital Cameras and Composition PHOT 17 Photocommunications	(PR) PHOT 10			es. Approved.		The photography faculty will update course requisites.
	PHOT 29 Studio Business Practices			Yes. Approved.			
Curriculum Review -Mandatory	Course Title		4 Year Rev Y/N	iew	Modification Y/N	Advisory	comments Recommendations
New curriculum (proposed)	Phot 50 Still and Motion Camera Operator		New Course	Э.	New Course.	Approved	
	Phot 55 UAV/UAS Photogramme and Mapping		New Course.		New Course.	Approved	
	Phot 56 UAV/UAS Inspection an Thermal Imaging	d	New Course New Course.		New Course.	Approved	
	Phot 57 UAV Operations and Risk Management				New Course.	Approved	,



Photography Advisory Committee Meeting Minutes February 13 2017

11:30AM-2:30PM Bldg. 13, Room 1435

UAV/UAS Photogrammetry and Imaging	New Certificate	Approved
LIAV/IIIAO Olilla a I Malia Blatana I	No. Octivisate	
UAV/ UAS Still and Motion Photography	New Certificate	Approved
UAV/ UAS Small System Operations	A.S Degree	Approved

Documentation of Program Needs- Mandatory

Camera and lenses:

- Canon 5D mark IV
- Sony A7R2
- Panasonic GH5
- Canon C100 Mark II
- Pentax 645Z Medium Format DSLR Comprehensive Starter Kit or Fuji new Medium format camera
- Canon lenses
- Nikon lenses
- Lens Adapters
- Medium format film cameras
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Lighting and grip:

- 4 Arri fresnel kits
- Stripbank (Medium 14 x 56", Silver Interior) each
- Lowel Kits
- Mathews baby Jr. Rollers
- 4 Matthews Solid Frame Scrim 48x48" White Artificial
- Silks
- · LED Light panels
- Kino Flows

Video equipment:

5 Redrock Micro Captain stumbling bundle w Follow Focus-

Advisory Committee Recommendations:

The committee approved all items on this list and made the following recommendations:

- 1). Consider Hassleblad H60 medium format cameras. Use EDU pricing.
- 2). Purchase more Canon 5D Mark IV's. Our current Canon ti series cameras are limiting (resolution, sharpness, DOF).
- 3). Consider eliminating medium format digital cameras. Skills can be learned/transferred from DSLRs.
- 4). Upgrade or trade-in older equipment (cameras, strobes, lighting) for credit towards new equipment.
- 5). Purchase more high-quality lenses
- 6). Purchase more on-camera flash and remote slaves (Pocket Wizards).
- 7). Consider moving away from DSLR's for motion work (3 minute limit). Sony or



Bldg. 13, Room 1435

Documentation of Program Needs- Mandatory

- 4 Video Assist Monitors
- LED Lighting
- 4 DSLR video cages complete w/ follow focus, rails, handle for low angle
- 4 Zoom H4n
- 4 Rodes Shot gun Mics
- 4 Lav Mics
- 4 Dynalite XP800 Sine Wave Inverter (battery power for strobes / lighting)
- 4 Dynalite Batteries for XP800 (spare batteries)
- GTI PDV-2020E/DX Desktop Viewer

UAV:

- 5 DJI Phantom 4pro Kits
- DJI Ozmo
- 10 Intelligent Flight Battery
- 2 DJI Inspire 2 kits
- 2 DJI Focus
- 2 DJI S1000 or M600 Pro
- 1 Fixed Wing Parrot Disco
- 3 FPV Viewer
- 7 iPad Air 2 Wi-Fi 128GB
- Phantom Vision and Vision+ Charging Station

Software:

- Aerofly RC 7 Radio controlled Flight Simulator
- Pix4D
- Fight Logbook
- II. Conferences and Professional Development
 - Commercial UAV conference Las Vegas
 - NAB Show, Las Vegas
 - Cinegear at Paramount Studios

Panasonic would be better for motion.

- 8). DJI M600 Pro instead of S1000. Will need additional gimble.
- 9). Build a large (5 foot) multi platform system.
- 10). Battery charging hub
- 11). Drone camera filters, cases, accessories, ipads, monitors,
- 12). DJI Phantom 4 pro PLUS has monitors.
- 13). Flight simulators- Yuneec.
- 14). PC computers for flight simulators.
- 15). AirMap mobile application.
- 16). Staffing: Need staff to manage drone equipment in place ASAP (to register, tag and keep records).
- 17). New Mac computers are running slowly. Need to look at solutions (upgrade RAM, purchase external hard drives, look at operating system and configuration, do not mirror- instead deploy from a server).
- 18). Conferences: Cinegear at Paramount Studios.
- 19). Conferences: host a conference at Mt. SAC that is not driven by equipment sales.
- 20). Marketing/Promotion: make promotional



П		Guest Speakers Funding	videos about Mt. SAC, the Design Technology	
	IV.	Staffing and Student Workers	Center, and the Photography Program.	
	\ \/i	Marketing and Promotion	The photography faculty will request funding for	
	Vi	Marketing and Promotion	all approved items.	
Future Meetings				