



Note:

This was the photo equipment list for students enrolling for fall 2016. Use this packet as a reference until the new packet for the Fall 2017 is given out to you in June at the New Student Registration. (June 29-30, 2017)

June 28, 2016

Dear Professional Photography Students:

Welcome to the new student registration for the Professional Photography Program of the Isaacson School for New Media at Colorado Mountain College. This packet will help you get the most out of your time here.

Included in this packet are:

- Your core photography class schedule for the fall semester. **These schedules have been done in order to evenly distribute students in the core professional photography classes. You may only register for the schedule that you are assigned. Students may switch an A schedule for a B schedule only by trading with another student.
- A course sequence for the AAS in Professional Photography that outlines the degree requirements.
- A supply list for required and recommended equipment that you will need.

On Tuesday morning, we will have an advising session and work on finding the two general education classes that you will need in addition to your photography classes for the fall semester. Be sure that your general education classes do not conflict with your core photography class schedule that you have been assigned. Add these general education classes to your schedule in Base Camp along with your core photography classes. You will need to have your schedule reviewed by an advisor in before you register.

Your advising sheet lists English Composition (ENG121) and a math requirement for the first fall semester. It is preferred that you meet your math and English requirements first, and then take the other required general education courses, but you may take any of the general education requirements depending on your needs and schedule availability. You must have a 100 level math class for this program. College Algebra (MAT121), Career Math (MAT107) and Math for Liberal Arts (MAT120) are the most common classes taken for this requirement. If you have transfer credits from another college, you may already have met these requirements.

The other general education requirements are Public Speaking (COM115) OR Interpersonal Communication (COM125), a business requirement (BUS102 OR BUS115 OR BUS217 OR MAN216) and an elective, three credit, general education course. The open general education requirement should be a guaranteed transfer course. Please refer to your course sequence if you have questions about these general education courses and the preferred sequence. Additional information about the AAS in Professional Photography and required courses can also be found at:

http://catalog.coloradomtn.edu/preview_program.php?catoid=8&poid=866&returnto=952

On Tuesday afternoon, we will have a question and answer session about the program and supply list. Please review the supply list information before Tuesday's afternoon's meeting, so that you have time to form any questions about supplies.

Additional advising sessions will also be available on Tuesday after the question and answer session. We will employ a lottery system to determine the order in which students will be able to sign up for additional advising. Due to the number of students in the Professional Photography Program, these advising sessions are short. It is critical that you get answers to general questions during Tuesday's advising session or in the informational session. You are not required to schedule an advising appointment on Tuesday if you have completed a schedule and registered after receiving approval from an advisor.

Thank you for choosing the Professional Photography Program at Colorado Mountain College and taking the time to attend this new student registration session. In doing so, you have already taken the first step toward success in this program.

Sincerely,



Derek Johnston

Professor/Program Director Professional Photography



Isaacson School for New Media at **Colorado Mountain College**

3000 County Road 114 | Glenwood Springs, CO 81621 | www.ColoradoMtn.edu

☎ 970.947.8151 | ✉ djohnston@coloradomtn.edu



Professional Photography Course Information for First Year Fall 2016

The following schedule has been pre-made for you on a registration form. Please use the student planning in Base Camp to add the additional general education courses needed. For the first semester, it is preferred that you complete your math and English requirements. Math in particular can be difficult to fit into your schedule if your plan is to take MAT107.

A Schedule

Photo Image Capture I

Course code: PHO121-SV01, Synonym # 99625

Monday 10:00-11:50 am, room 128

Computer Literacy for Photography

Course code: PHO106-SV02, Synonym #99622

Monday 1:00-3:50 pm, room 130

Digital Capture Processing I

Course code: PHO161-SV01, Synonym #99630

Wednesday 9:00-11:50 am, room 130

Perception & Photography I

Course code: PHO143-SV02, Synonym #99629

Wednesday 1:00-3:50 pm, room 128

Professional Photography Course Information for First Year Fall 2016

The following schedule has been pre-made for you on a registration form. Please use the student planning in Base Camp to add the additional general education courses needed. For the first semester, it is preferred that you complete your math and English requirements. Math in particular can be difficult to fit into your schedule if your plan is to take MAT107.

B Schedule

Photo Image Capture I

Course code: PHO121-SV02, Synonym #99627

Monday 1:00-2:50 pm, room 128

Computer Literacy for Photography

Course code: PHO106-SV01, Synonym #99621

Monday 9:00-11:50 am, room 157

Digital Capture Processing I

Course code: PHO161-SV02, Synonym #99631

Wednesday 1:00-3:50 pm, room 130

Perception & Photography I

Course code: PHO143-SV01, Synonym #99628

Wednesday 9:00-11:50 am, room 157

Student Supply List for CMC Professional Photography Program Fall 2016

Nikon Cameras

<u>Model/body type/sensor size/year released</u>	<u>Resolution</u>	<u>approx. \$</u>
*D3300/compact slr/APS-C/2014 (no K temp) http://www.dpreview.com/products/nikon/slrs/nikon_d3300	24 mp	\$550 (kit)
*D5500/compact slr/APS-C/2015 (no K temp) http://www.dpreview.com/products/nikon/slrs/nikon_d5500	24 mp	\$650 (body)
D7200/mid-size slr/APS-C/20135 http://www.dpreview.com/products/nikon/slrs/nikon_d7200	24.1 mp	\$1,199 (body)
D500/mid-size/APS-C/2016 http://www.dpreview.com/reviews/nikon-d500	21 mp	\$ 2,000 (body)
D750/mid-size/full frame/2014 http://www.dpreview.com/products/nikon/slrs/nikon_d750	24 mp	\$ 2,000 (body)
D810/full-size slr/full frame/2014 http://www.dpreview.com/products/nikon/slrs/nikon_d810	36.3 mp	\$2,800 (body)

Canon Cameras

*100D/compact slr/APS-C/2013 (no K temp) http://www.dpreview.com/products/canon/slrs/canon_eos100d	18 mp	\$800 (kit)
760D Rebel T6s/compact slr/APS-C/2015 (no K temp) http://www.dpreview.com/products/canon/slrs/canon_eos760d	24 mp	\$1199 (kit)
80D/mid-size slr/APS-C/2016 http://www.dpreview.com/products/canon/slrs/canon_eos80d	24 mp	\$1,199 (body)
7D Mark II /mid-size slr/APS-C/2014 http://www.dpreview.com/reviews/specs/Canon/canon_eos7d.asp	20 mp	\$1,799 (body)
6D/mid-size slr/full frame/2012 http://www.dpreview.com/products/canon/slrs/canon_eos6d	20.2 mp	\$2,100 (body)
5D Mark III/mid-size slr/full frame/2012 http://www.dpreview.com/products/canon/slrs/canon_eos5dmkiii	22.3 mp	\$3,500 (body)
5DS/full size slr/full frame/ 2015 http://www.dpreview.com/products/canon/slrs/canon_eos5ds	51mp	\$3699 (body)

*These cameras do not have the ability to set Kelvin temperature for white balance which is very limiting in certain areas of this program such as video capture and advanced lighting technique.

**For an excellent side-by-side comparison of camera features see dpreview.com's side-by-side comparison feature at the following link:

<http://www.dpreview.com/products/compare/cameras>

Lenses

Digital SLR cameras can be used with a variety of interchangeable lenses. There are several factors that need to be considered when purchasing a lens. A few of these factors are: lens speed, glass quality, focusing technology, image stabilization and vibration reduction, what size sensor it is manufactured for, focal length and zoom vs. prime lenses.

As a result, it can be an overwhelming task to choose an appropriate lens when first getting started in photography. We are recommending that first year students buy one lens at first and wait until they better understand lens technology before buying any additional lenses. We will thoroughly cover lenses as part of the first semester, after which point a more educated purchase will be possible. We simply do not have the time to cover all of the factors that need to be considered during this information session.

The preferred lens to start the program is in the 28-50mm range because it provides close to a normal angle of view. The 85mm lens is a little longer and is on the list because it is beneficial to have in the second year for the Portraiture class. **The one aspect of the lens that is a must is that it is an f/2.8 or faster lens (smaller f#), so that students can complete assignments that teach shallow depth of field.**

The following are direct links to some lenses that would work well for starting the program. These links are to B&H Photo in New York City, which is not the only source of these lenses.

Nikon Lenses

Nikon 28mm f/2.8D- \$ 286.95 http://www.bhphotovideo.com/c/product/131063-USA/Nikon_1922_Wide_Angle_AF_Nikkor.html

Nikon 35mm f/1.8DX- \$ 196.95 - http://www.bhphotovideo.com/c/product/606792-USA/Nikon_2183_AF_S_Nikkor_35mm_f_1_8G.html

Nikon 50mm 1.8D- \$ 131.95 - http://www.bhphotovideo.com/c/product/247091-USA/Nikon_2137_Normal_AF_Nikkor_50mm.html

Nikon 85mm 1.8G- \$ 496.95 - http://www.bhphotovideo.com/c/product/84151-USA/Nikon_1931_AF_Nikkor_85mm_f_1_8D.html

Lenses (continued)

Canon Lenses

Canon EF 28mm f/1.8 \$449.00- http://www.bhphotovideo.com/c/product/102851-USA/Canon_2510A003_Wide_Angle_EF_28mm.html

Canon EF 40mm f/2.8- \$149 - http://www.bhphotovideo.com/c/product/870179-REG/Canon_40mm_f_2_8_EF_Pancake.html/prm/alsVwDtl

Canon EF 50mm 1.8 - \$ 125.00 - http://www.bhphotovideo.com/c/product/12142-USA/Canon_2514A002_Normal_EF_50mm_f_1_8.html

Canon EF 35mm f/2 - \$ 549 - http://www.bhphotovideo.com/c/product/898726-USA/Canon_5178b002_EF_35mm_f_2_0_IS.html

Canon EF 85mm 1.8 - \$ 419.00 - http://www.bhphotovideo.com/c/product/12182-USA/Canon_2519A003_85mm_f_1_8_USM_Autofocus.html

We have an additional information sheet on lenses if you are interested in buying additional lenses or would simply like more information before purchasing. Please remember that it is our recommendation to wait before purchasing additional lenses. The following is an additional link with a basic introduction to factors to consider when buying a lens:

<http://www.digital-slr-guide.com/focal-length.html>

Flashes- Use of small system flash begins in the second semester of the program. Integrated small system flash technology has improved greatly in the past few years. In order to take full advantage of instruction on this integrated technology, it is preferred that you buy the first flash on the list that matches your camera system.

Canon Flashes

Speedlite 600EX-RT, \$549.00- http://www.bhphotovideo.com/c/product/847537-REG/Canon_5296B002_Speedlite_600EX.html

Speedlite 320EXII, \$219.00- http://www.bhphotovideo.com/c/product/754468-GREY/Canon_5246B002_Speedlite_320EX.html

OC (off camera) cord- http://www.bhphotovideo.com/c/product/498744-REG/Canon_1950B001_OC_E3_Off_Camera_Shoe.html

Nikon Flashes

SB5000, \$596.00- http://www.bhphotovideo.com/c/product/1214170-REG/nikon_4815_sb_5000_af_speedlight.html

SB500, \$249- http://www.bhphotovideo.com/c/product/1082606-REG/nikon_sb_500_af_speedlight.html

OC (off camera) cord- http://www.bhphotovideo.com/c/product/300477-REG/Nikon_4765.html

Additional Required Items

Computer: Hardware & Software (optional)- Many times we are asked to recommend a computer for use in the program. Mac is the platform used by courses in the Isaacson School for New Media at Colorado Mountain College's Spring Valley Center of the Roaring Fork Campus. We recommend purchasing a Mac computer if you are going to purchase a computer, but it is possible to use either platform provided you own the appropriate software. A laptop would also be a good choice because of its portability. You should consider the computer's storage capacity (ROM) expressed in GB, the amount of RAM (random access memory, the more the better) and GHz, which refers to processing speed. A good computer salesperson will be able to help you choose a computer based on your needs. Be sure to discuss the fact that you will be using it for both still and motion based digital imaging, running Adobe imaging software and commonly running multiple software applications at once.

The monitor is another important consideration. Laptop screens are not acceptable for most digital imaging work. Many photographers do a lot of work on laptops, but connect the laptop to an external monitor for critical digital imaging work. If purchasing a laptop be certain you can connect an external monitor. This is another item that would be better to purchase after getting further into the program because of issues concerning color management and calibration of monitors.

Whatever computer you choose, the computer doesn't help if you don't have the software. **Adobe Photoshop, Adobe Lightroom, Adobe Premiere** and **Microsoft Office** (primarily Word) are crucial. When purchasing software, it is important to have the same version that is being used at the college. We currently use Adobe Creative Cloud based software.



Software Tutorials- Classes in the Professional Photography Program give excellent in lab training on a variety of software. Classes that instruct in software will also use online tutorials by Lynda.com instead of software manuals. Students will be expected to have an account and complete modules on Lynda.com. Subscriptions are \$25 a month or \$250 for a year.

Tripod with Head- A tripod that is rated for approximately 12 pounds is recommended in order to ensure that it is a quality and sturdy tripod. Inexpensive, lightweight tripods do more harm than good. One major thing to think about in this category is weight. There are very good quality aluminum tripods, but they can be heavy. There are also more expensive tripods made of carbon fiber that are great for photographers who need to be concerned about weight. A backcountry, landscape photographer would be one example. Induro and Bogen are two companies that make very good tripods in both the aluminum and carbon fiber categories. Be aware that the head and legs of a tripod are two separate items unless they are specifically packaged together. The tripod head should be a pan/tilt type of tripod head.

Portable Hard Drives- You will need **two portable hard drives** for the program. One will be for bringing to class and working on images. The other will be for backup purposes. As part of this program, you will be introduced to digital asset management procedures to ensure the safety of your images. *All Isaacson School students are charged a program fee and will be provided with two hard drives to meet this requirement.*

Many other drives have had failures and caused students to lose files if they were not properly backed up. Your drive needs to be **MAC compatible** or dual formatted if you work cross platform (on a PC).

This formatting can be done when you get to school in fall, as long as there is no data stored on it. One drive also has to be **BUS powered**. This means it draws its power source from the computer connection without the need to be plugged into an outlet. Hard drives have different storage capacities noted in bytes. Digital captures, the layered files created in Photoshop and videos can be very large. The drive you designate as the backup drive should be at least 500GB or more.

**See additional information on connectivity below the storage card reader item.

Storage Card Reader- This is needed to download your images to your hard drive. We do not use the camera software to download images to the computer. Make sure that it is compatible with the type storage card your camera uses. **See connectivity below.

Connectivity refers to how an external device connects to a computer. The portable hard drives and storage card reader on this supply list are both external devices in which connectivity needs to be considered when purchasing. Different types of connections are: USB I, II & III, Firewire 400 & 800, and Thunderbolt (available on newer Mac computers). **We recommend that your hard drive has multiple types of connectivity.

Digital Media/Storage Cards- Digital SLRs save captures to storage cards. The type of card needed depends on the camera. The two most common storage cards are CF and SD. The links provided in the camera section will provide this information. Two factors to consider when purchasing a storage card are storage capacity and write speed. Cards with more storage capacity and faster write speeds will be more expensive. We recommend either Lexar or SanDisc cards.

Audio Equipment- As the professional photography program adapts to the needs of motion based capture and new media storytelling, there has been an increased need for audio equipment. Though the program has a variety of check out equipment such as microphones and field recorders, many students are finding it easier to have their own audio equipment.

The first semester of the program includes an introductory multi-media project that teaches the hardware and software used in new media storytelling including audio capture.

The following is an excellent kit that is capable of a variety of audio captures including: improved, synched on camera audio capture for HD/SLR video, interviews and ambient sound. It also includes some very useful accessories such as headphones, attenuation cable and windscreen.

Zoom H1 On Camera DSLR Audio Kit-

<http://www.bhphotovideo.com/bnh/controller/home?O=&sku=731488&gclid=Cj0KEQjwkv-rBRDwoMLav-2I9KIBeiQAUTkDU7gtdYxGTKOSqCivbzhP9ADYNtxctQsHnS1cHNS37MaAjHM8P8HAQ&is=REG&Q=&A=details>

Over-the-Ear Headphones- Headphones are needed for video and audio editing work. Do not purchase in the ear or ear bud type headphones. These are not good for editing in a group lab environment.

Extra camera battery- Your camera will come with a battery, but **it is necessary to have at least two camera batteries.** Different cameras take different batteries, so be sure have the correct battery for your camera when purchasing additional batteries.

Sensor Cleaning Supplies- Digital cameras can accumulate dust on the sensor where the capture occurs. This dust needs to be cleaned off or blemishes will appear in the capture. This topic is covered in the first semester. Cleaning a sensor can cause permanent damage to the sensor and void a camera's warranty. It should only be done after trained in the procedure. The following is a link to an excellent source of sensor cleaning supplies: <http://visibledust.com/> **Purchase of these supplies is not recommended until after this topic is covered in class.**

Neutral Density Filter (preferably variable)- A neutral density filter is a critical tool for managing exposure and depth of field while shooting video in bright lighting conditions.
http://www.bhphotovideo.com/c/product/813278-REG/Tiffen_77VND_77mm_Variable_Neutral_Density.html

Polarizing Filter- A polarizing filter reduces glare and reflections. It also produces more saturated colors in a capture. **You need a circular polarizing filter for at least one lens.**

UV Filter- An ultra-violet filter should be put on all camera lenses. They provide protection against dust and scratches to the lens. Note that the quality of a filter can affect image quality. More expensive filters use higher quality glass and are less likely to compromise the image quality of your lens. Filter sizes are measured in millimeters, but are not the same as the focal length of the lens. See your lens specifications for correct filter size.

Camera Bag- There are many options here and this is a personal choice. We recommend that you purchase a bag that works well with how you work. For example, if you are interested in outdoor and adventure photography, you might want to purchase a backpack style of camera bag.

Books for Classes- The cost for books can add up. There are not specifics to list, but definitely a category to consider when budgeting for expenses. You can easily spend \$50-100 on books for each class.

Mini Color Checker- Color checkers are used to create custom camera profiles and for color management in a variety of capture situations.

<http://www.mac-on-campus.com/Store/Products/Color-Management/X-rite/Color-Checkers/ColorChecker-Mini.aspx> - Overview

This one is the same thing except a little more durable and expensive.

<http://www.mac-on-campus.com/Store/Products/Color-Management/X-rite/Color-Checkers/ColorChecker-Passport.aspx>

5 in 1 Reflector (optional)- This is a great device for controlling and modifying light. We recommend this for the second year in Portraiture class. See example at:

http://www.bhphotovideo.com/c/product/358607-REG/Impact_R1132_5_in_1_Reflector_Disc.html

Remote Trigger- Prevents camera shake when releasing the shutter on long exposures. More expensive ones have additional features, such as the ability to program time lapse exposures. The professional photography program has introduced a variety of motion and time based captures into its curriculum and a trigger capable of doing time based capture such as timelapse is highly recommended.

Sources for Equipment

There are numerous sources for photographic equipment around the country and on the web. **Adorama**, and **B&H Photo** are two of the most popular sources within the professional photographic community, but they are certainly not the only options. Many regions have excellent professional level suppliers and allow money to remain in local communities. Where you purchase your supplies is up to you.

Adorama

<http://www.adorama.com>

B & H Photo – New York, NY

<http://www.bhphotovideo.com/>

*Not recommended as a source if you want to discuss products and ask questions. They expect you to know your equipment and place an order.

<http://store.apple.com/us> - to locate an Apple Store near you and find expertise in choosing the right Mac for you. Apple does offer a small educational discount.

~~<http://www.journeyed.com/> - Student discounts on software.~~

Adobe Creative Cloud

<http://www.adobe.com/products/creativecloud.html> - Software licensing at monthly and yearly rates.



There are substantial student discounts available once students are enrolled in a photography program through The MAC Group (Mamiya America Corporation). Proof of enrollment in a photography program is required. The class registration confirmation that you will receive after registering for your classes will serve as proof of enrollment and qualify you for these discounts. Register for student discounts at: <http://www.photovideoedu.com/>.

Several manufacturers also provide special pricing for students enrolled in a photography program. These include: Induro, Benro, Vü, and Tenba (Induro and Benro make tripods, Vü makes filters, and Tenba makes camera bags).

Unfortunately, none of the recommended DSLR manufacturers offer any special pricing, but some dealers like B&H and Adorama will offer a discount off of their normal price to students.

Special Note

The Professional Photography Program at Colorado Mountain College makes a great effort to provide students with a thorough and complete supply list, but perfection is difficult to achieve. Information contained herein is subject to change without notice and additional items are likely. This list does not include miscellaneous items such as matting supplies, printing charges and program fees. Prices, where included, are only approximate. Prices vary considerably from location to location, dealer to dealer, and whether the items are new or used. Consumable supply expenses also vary with each individual and are dependent upon how conservative each student is and how much photographic work is produced.

These supplies, though expensive, will serve as introductory, professional quality items that a successful student will be able to employ in a career in photography.