

NIGHT SKY LANDSCAPE PHOTOGRAPHY

AUGUST 21-23, 2020

COURSE LEVEL: II COURSE #: S1020
FEE: \$300 PER ADULT AGES 16 AND OLDER

INSTRUCTOR: STAN HONDA



Rocky
Mountain
Conservancy

FIELD INSTITUTE

PAGE 1 OF 4

LOCATION: Rocky Mountain Conservancy – Field Institute & Conference Center
1895 Fall River Road, Estes Park, Colorado

TIME:

Friday: 2:00 PM – 12:00 Midnight
Saturday: 12:00 Noon – 12:00 Midnight
Sunday: 12:00 Noon – 4:00 PM

COURSE DESCRIPTION: Don't put your camera away after the sun sets! There's a whole different park to photograph when the stars come out. And you don't need a telescope. This course will discuss and demonstrate various techniques and camera settings necessary to photograph the Milky Way, the moon, the stars, and other objects in the night sky with landscape features by using digital cameras and standard lenses. We'll discuss how to plan shots using star charts, software, and apps to determine what will be seen in the night sky. A tutorial will be presented on how best to edit, process, and archive these images on a computer. This course is best for intermediate level and above. Participants should have a digital SLR or mirrorless camera with interchangeable lenses that allows manual adjustments to the settings.

COURSE LEVEL: II

Short-distance walks to moderate hikes throughout the day on varied terrain.

Note: Portions of this class may be held at elevations exceeding 11,000 ft. Participants should be in good health and be able to handle high-altitude activity.

BRIEF INSTRUCTOR BIOGRAPHY (additional information available at www.RMConservancy.org):

Stan Honda is a photographer with many years of photojournalism experience in New York City and southern California. During the past few years, he has been working on wide-angle night sky landscapes and other astronomical images taken in locations around the world and even in New York City. He has been a National Park Service artist-in-residence in five national parks, including Rocky Mountain and has presented talks and workshops at Rocky's Night Sky Festival. Stan's night sky landscapes have appeared on NASA's *Astronomy Picture of the Day*, *CBS Morning News*, *Sky and Telescope* magazine and *Yahoo News*. Reports by Chaco Culture National Historical Park and Flagstaff Area National Monuments containing his photos have led to Dark Sky Park designation for the two national parks.

INSTRUCTOR'S WEBSITE: stanhonda.com + Instagram and Facebook

EXPECTATIONS: Professional conduct will be expected from participants at all times. Individual ideas will be respected. Except during course breaks, cellular phones, pagers, and personal entertainment devices are strictly prohibited in the classroom and during field sessions.

CAR-POOLING: Rocky Mountain Conservancy - Field Institute courses utilize car-pooling to limit vehicles traveling into the park. Car-pooling makes it easier to keep the group together, reduces transit time, and allows courses greater access because fewer parking spaces are required at destinations. In addition, it provides an opportunity for participants to discuss course material in small groups during transit. Typically, a few participants from each course volunteer the use of their vehicles for car-pooling to course locations.

PARTICIPANTS WILL EAT DINNER IN THE FIELD. PLEASE PLAN TO BRING A SACK DINNER. PARTICIPANTS SHOULD PLAN TO BUY DINNER BEFORE THE CLASS BEGINS, SINCE WE WILL GO STRAIGHT FROM THE FIELD INSTITUTE TO THE PHOTO SESSION LOCATION.

COURSE SCHEDULE:

FRIDAY (2:00 PM – 12:00 MIDNIGHT)

- 2:00 PM – 2:20 PM Introductions and participants’ objectives and expectations for the course
(Participants should bring camera with wide angle lens)
Review of course itinerary, field safety and logistics, and distribution of handouts
- 2:20 PM – 3:20 PM Introduction to night sky photography – slide presentation
*What to photograph in the sky – day and night – with landscapes
 Composition, visualizing the image, advantage of digital technology
 Dark sky locations vs. cities/suburbs*
- 3:20 PM – 3:30 PM Break
- 3:30 PM – 5:00 PM Camera settings, techniques, planning
*Exposure, focusing, making a steady platform
 Working in the dark
 Know **your** equipment. **(Bring your user’s manual)**
 Using star charts, software, and apps to plan a shot*
- 5:00 PM – 5:15 PM Break, prepare for departure
- 5:15 PM - 12:00 AM Depart for in-the-field photography session.
 Arrive at location before sunset, scout out shooting spots.
Sack dinner. Discuss preparations for shooting (optional sunset photography).
 Instruction, demonstrations, discussion for night work
Working in the field: weather, carrying equipment, using camera/tripod in the dark. Visualizing the picture. Seeing landscape features to frame sky. Lens selection, composing, focusing on stars/moon, proper exposure, reading histogram, using analog sky charts to locate objects
 Session can extend past end time depending on weather and participants.

SATURDAY (12:00 NOON – 12:00 MIDNIGHT)

- 12:00 PM – 1:00 PM (Optional group lunch) Meet at Field Institute for discussion of first field session
- 1:00 PM – 2:30 PM Image Processing
(Optional: participants bring laptop computer)
Downloading, archiving camera files, editing, processing the image, saving and storing files, working on RAW files
Emphasis on single image processing in Photoshop or similar programs
- 2:30 PM – 2:40 PM Break
- 2:40 PM – 4:30 PM Continue image processing
Assembling star trails, time-lapse composites
Critique of participants' work from previous night, demonstration of processing with participants' images
- 4:30 PM – 5:00 PM Break, prepare for departure.
- 5:00 PM – 12:00 AM Depart for in-the-field photography session.
Arrive at location before sunset; scout out shooting spots.
Sack dinner (optional sunset photography).
Instruction, demonstrations, discussion for night work
Continue emphasis on focusing and exposure
Framing the shot with flora or geological features
Star trails: composing/exposing/planning
Dealing with airplanes, satellites. Optional – ISS flyovers
Session can extend past end time depending on weather and participants.

SUNDAY (12:00 NOON – 4:00 PM)

- 12:00 PM – 1:00 PM (Optional group lunch) Meet at Field Institute for discussion of field session.
- 1:00 PM – 3:15 PM Critique of participants' work from previous night; optional critique of prior work
Continue image processing demonstration with participants' files.
Review of camera settings and techniques
- 3:15 PM – 3:25 PM Break
- 3:25 PM – 4:00 PM Review of class material and Q&A
Course evaluations and conclusion

WHAT TO BRING (CONTINUES ON NEXT PAGE):

- **Sack dinner**, snacks, energy bars, **WATER**.
- **Clothing layers** for comfort, especially for cooler nights; include raingear (jacket and pants).
- **Chemical hand-warmers**.
- **Headlamp or flashlight with red light** (red light to preserve night vision and cause less interference to other photographers).
- **Sturdy hiking shoes or boots**.
- At least two extra memory cards.
- Small notebook and pen for notetaking.
- And, if possible, bring the camera manual.

WHAT TO BRING (CONTINUED):

- **Camera equipment, tripod.** Digital cameras suitable for the course include DSLR (digital single lens reflex with interchangeable lenses), mirrorless with interchangeable lenses, micro four-thirds with interchangeable lenses. All should have ISO of 3200 or higher. Standard wide-angle zoom kit lenses are fine, optional wider-angle lenses are useful, especially with wide/fast f-stops. All cameras should function in the Manual (M) mode. **Participant should be able to manually change ISO, shutter speed, and aperture (f-stop).** Several key functions used for night sky photography are found in the cameras' menu. Be familiar with the general menu layout. A sturdy tripod is required. It doesn't have to be large, just big enough to hold your camera and lens steady.
- Your photographic equipment must also include:
 - **Camera bag/backpack** large enough to comfortably carry gear plus water, food, extra clothes
 - **Waist pack** (optional) — good for carrying small items that you'll need in the field
 - **Electronic shutter release**, remote release
 - **Spare camera batteries** and/or charger

REMEMBER TO BRING THE 10 ESSENTIALS:

Rocky Mountain National Park recommends that hikers always carry the 10 essentials in their daypacks.

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|-----------------------------|-------------------|---------------------------------|
| ▪ Raingear | ▪ Map and compass | ▪ Flashlight or headlamp |
| ▪ Sunglasses and sunscreen | ▪ Candles | ▪ Matches or other fire starter |
| ▪ Pocketknife | ▪ First-aid kit | ▪ Extra layers of clothing |
| ▪ Sack lunch, snacks, water | | |

Note: Rocky Mountain Conservancy - Field Institute recommends that participants for all courses dress in layers and wear comfortable, sturdy hiking boots/shoes. Participants should be prepared for sudden changes in temperature and weather conditions.

REFUND POLICY:

Cancellations received at least 14 days prior to the start of a class will qualify for a refund minus a cancellation fee of \$25 per participant for a one-day class, \$50 for a multi-day class, \$5 per kid's class and \$15 per half-day class or bus tour seat. Registration money transferred to another class will be subject to a \$10 switch fee.

Cancellations received less than 14 days prior to the start of a class or bus tour will not generate a refund. If the Field Institute cancels a class, every effort will be made to place the participant in another class; otherwise, a full refund will be given.

TEACHER RECERTIFICATION CREDIT:

Most courses are eligible for teacher recertification credit through the Centennial Board of Cooperative Education Services (BOCES). The fee is \$25 per course (.5 unit) or \$25 per series of threaded courses (1.0 - 3.0 units). A list of threaded courses can be found online at www.RMConservancy.org. Participants must enroll in all courses of a threaded series in order to qualify for the \$25 multi-unit fee. Please be prepared to pay for this credit with a check, made payable to BOCES, on the first day of a course or on the final day of a threaded series of courses.