

Night Sky Photography

September 11-13, 2020
with Stan Honda



CLASS INFORMATION AND SYLLABUS

In this workshop we will be photographing during the evening and night on the South Rim at some of Grand Canyon's most photogenic locations. Emphasis will be on photographing stars with the landscape. Midday photo reviews will give creative inspiration for you to improve the quality of your images. Class emphasis will be about making engaging compositions, understanding light and dealing with technical aspects unique to night sky images. Field sessions and classroom reviews will allow for individual instruction, problem solving, and sharing ideas.

Participants should have a digital SLR or mirrorless camera that takes interchangeable lenses. Standard kit lens acceptable, wider angle lenses recommended. Point and shoot or fixed lens cameras not suitable for the class.

DAY 1

2:00 – 2:20 PM. Introductions and participants' objectives and expectations for the course at The Community Building ([directions](#))

(Participants should bring camera with wide angle lens.)

Review of course itinerary, field safety and logistics, and distribution of handouts

2:20– 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 – 3:30 PM. Break

3:30 – 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 – 5:15 PM. Break, prepare for departure

5:15 PM-12:00 MIDNIGHT. 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.

DAY 2

1:00 – 2:30 PM. Image Processing at The Community Building ([directions](#))

(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 – 2:40 PM. Break

2:40 – 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 – 5:00 PM. Break, prepare for departure.

5:00 PM – 12:00 MIDNIGHT. 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.

DAY 3

Meet at The Community Building ([directions](#)) for discussion of field sessions.

1:00 – 3:15 PM Critique of participants' work from previous night, optional critique of prior work

Continue image processing demonstration with participants' files. Learn to look critically at photographs.

Review of camera settings and techniques.

3:15 – 3:25 PM. Break

3:25 – 4:00 PM. Review of class material and Q&A

Course evaluations and conclusion

SPECIALIZED EQUIPMENT:

- Warm Clothing** including Warm Jacket and Pants, Waterproof Outer Layer and Pants, and Hat and Gloves. Temps will range from the 40's to the 80's
- Headlamp** with fresh batteries. Must have a **Red Light Setting**.
- Comfortable footwear.**
- Foldable camp chair.**
- Camera Pack** that can also carry food, water and extra clothes. Lowepro® packs work well.
- Water**, 1 liter per outing
- Food:** snacks and dinners as needed.
- Sunscreen, Lip Balm, and Sunglasses.**
- Notebook** (at least 5" x 7") with firm backing and a pen/pencil for taking notes.
- Camera** with adjustable aperture, shutter speed, and ISO, and interchangeable lenses with manual focusing.
- Camera battery charger, extra battery.**
- Camera owner's manual.**
- Lenses:** Range of lenses or a zoom lens that covers at least 18-55mm for crop sensors, 24-70mm for full frame sensors and lens cleaning tissue. Wider angle (shorter) focal length preferred, but optional. "Fast" lenses with aperture of f2.8 or wider preferred, but optional. Telephoto/zoom lens for sunsets.
- Filters:** None needed.
- Tripod:** Necessary for tack sharpness, fine compositional adjustments, and long exposures. Tripods with independent leg action are most useful. (Avoid tripods with angled braces attaching to a collar midway down the center post.) Three-way pan head recommended for ease of use. Gitzo® and Bogen/Manfrotto® are reliable brands.
- Cable release:** Prevent camera shake on tripod for long exposures, recommended.
- Memory cards:** Bring several.
- Card Reader:** for downloading images.
- Laptop computer:** Download and edit your images for class reviews. Optional as we will have a designated computer for sharing slides with the group.
- USB flash drive/memory stick:** Transfer your selected photos for class review, place in folders labeling date of shoot.

ABOUT THE INSTRUCTOR

Stan Honda is a photographer with 34 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 six national parks, including the Grand Canyon and has presented talks and workshops at Rocky Mountain NP, the Flagstaff Star Party and other locations. 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

RECOMMENDED PUBLICATIONS (GCC members receive a 15% discount):

Photographing Grand Canyon

<https://shop.grandcanyon.org/collections/books-art-and-photography/products/photographing-grand-canyon-10239>

The Hidden Canyon: A River Journey

<https://shop.grandcanyon.org/collections/books-art-and-photography/products/the-hidden-canyon-ea>

Grand Canyon Geology

<https://shop.grandcanyon.org/collections/books-geology-and-natural-history/products/grand-canyon-geology-5-60-10120>

The Amazing Kolb Brothers

<https://shop.grandcanyon.org/collections/books-culture-and-history/products/the-amazing-kolb-brothers>

The Emerald Mile

<https://shop.grandcanyon.org/collections/books-river/products/sc-emerald-mile-the-story-1-24128>