

Camera Handling and Exposure

Why don't we have a quick review, and maybe add a bit to what we have already learned...

Holding the Camera

Use your strap!

Cradle the camera in your left hand.

Use your right hand to operate functions.

It's okay to shoot vertically.

The steadier you are, the sharper your picture
will be.

Taking Your Camera to the Beach

Use your strap!

Don't set the camera in the sand or on the towel,
keep it in a closed cooler when it is not in use.

Keep the cooler in the shade.

Don't keep food in the camera cooler.

Keep some wet wash cloths (not wet-wipes) in zip-
lock bags.

Never touch your camera with sandy or wet hands.

Avoid changing lenses or batteries or media; if you
have to, go inside or to your car.

Shooting From Aircraft

Use your strap!

If you have the option, high-wing is better than low-wing.

Do not brace the camera on any part of the aircraft,
it vibrates.

In some small planes, you can shoot out the pilot's window.

When on the ground, avoid the propeller.

At Public Events...

Use your strap!

Find out if there are official limitations on photography and adhere to them.

Turn off the cute sound effects.

Be courteous to other photographers and videographers.

**DO NOT EVER SET YOUR CAMERA
DOWN!**

Now, on with the show

It's all in the metering...

Metering

Match your metering to your situation.

Multi-Segment for general purpose shooting; outdoors in daylight; large, far-away subjects; and backlit or side lit subjects with flash.

Center-Weighted for large groups of people; large objects, centered; and landscapes.

Spot (with manual exposure) for tricky situations, backlit, side lit, and spot lit subjects without flash.

Be prepared to use flash whether you expect to need it or not.

Multi-Segment Meter



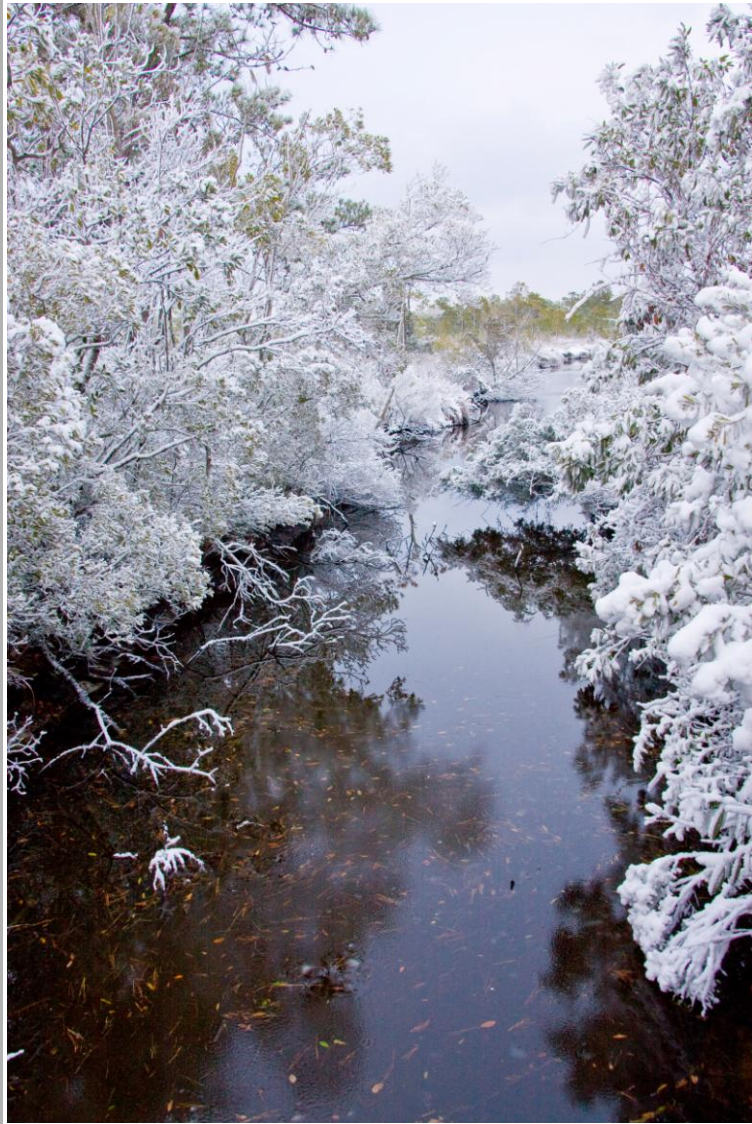
Use a multi-segment meter when there are a variety of different levels of lighting and you want to try to get as much of the range as possible.

Center-Weighted Metering



Use center-weighted metering when the subject is centered, but the background matters too.

Spot Metering



Use spot metering for high contrast
or side lit scenes without flash.

Spot Metering



Use spot metering for back lit
and spot lit scenes without flash.

Using Your Spot Meter

Using a spot meter often requires a good bit of estimation and supposition.

You must decide what part of the image is the most important aspect, exposure-wise.

Take several readings, base your exposure settings on an average biased toward that aspect you selected as most important.

Optimizing for a single element



Spot metered on face.

Optimizing for best range



Snow

1/1000 @ f/8

Pine Needles

1/250 @ f/8

Water

1/60 @ f/8

Shot at

1/500 @ f/8

Sunny 16 Rule

**On a bright, sunny day, at
f/16, your shutter speed
should be equal to your
ISO.**



Shooting the Moon

It's always noon on the moon...



You can usually ignore the meter
and use the Sunny 16 Rule for moon pictures.

Reciprocal Exposures

Different aperture and shutter speed combinations can give you the same exposure, but with different effects.

Stops action,
reduces depth of field

2000 @ f/1.4
1000 @ f/2
500 @ f/2.8
250 @ f/4
125 @ f/5.6

Blurs action,
increases depth of field

60 @ f/8
30 @ f/11
15 @ f/16
8 @ f/22
4 @ f/32

All of these settings give the same exposure.

Medium Shutter Speed...
1/100th Second



Faster Shutter Speed...
1/250th Second

Slow Shutter Speed



$1/15^{\text{th}}$ Second



$1/30^{\text{th}}$ Second



$1/60^{\text{th}}$ Second

Exposure Override



In Aperture Priority Auto

Point at sky above subject, touch shutter button, hold exposure lock. Compose picture, let TTL flash Set foreground flash exposure.

Silhouettes



Expose for background, no flash.

Focus and Exposure

Focus is not exposure, exposure is not focus!

Focus is what the lens does to determine which part of the image is sharp.

Exposure is what the shutter speed and aperture do to make sure the picture isn't too dark or too light.

Focusing

Auto focus is usually the best solution, but not always.

Manual focus becomes important in situations in which the auto focus system either can not work or will tend to focus in the wrong place.

1. Low light with no AF assist light
2. Very low contrast subjects
3. Off-center, moving subjects

Pre-Focusing for a Moving Subject



Pick a spot.

Focus on it.

When the subject gets there,
shoot.

Consecutive Focus



Some cameras have an auto focus setting that will follow a moving subject.

Slow-moving subjects



If your lens is set to single-shot AF, and your subject starts moving, tickle the shutter button until you have the composition you want, then shoot.

Be sure to keep your AF point on your subject.

Auto focusing on an off-center subject



Set your AF point on the subject, press the shutter button half way, recompose, follow through.

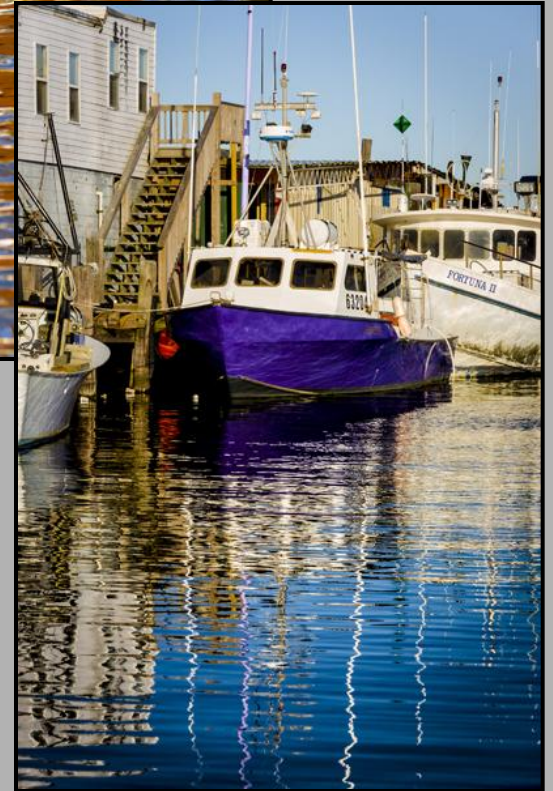
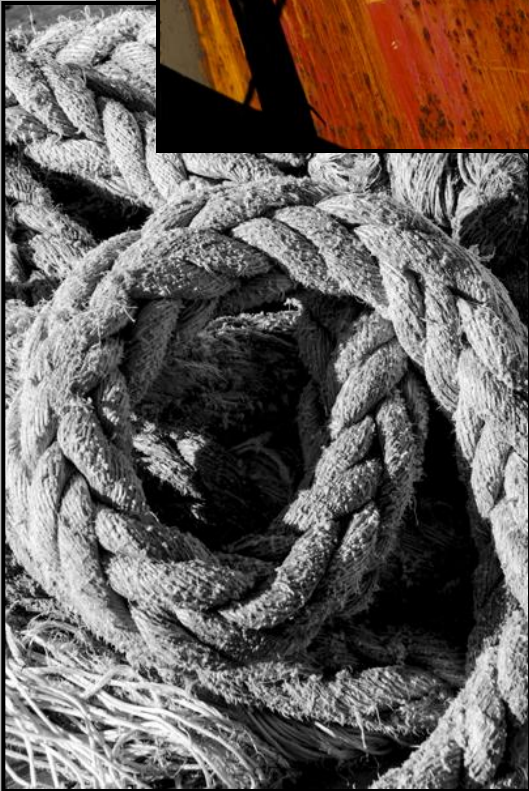
Field Trip for Class Seven

1. Wanchese boat docks
2. Jockey's Ridge
3. Elizabethan Gardens (We will each have to pay admission.)
4. Wanchese nature trail
5. Coquina Beach
6. Oregon Inlet or points south
7. Whalehead Club or anywhere in Corolla at sunset
8. Nature trail behind Lost Colony History Center
9. Old Freedman's Colony memorial site at sunset
10. Make a suggestion...

The days we have to choose from are Saturday and Sunday, March 9 and 10 or Saturday and Sunday March 16 and 17.

DST starts March 9, so sunrise is a little after 6:00, sunset is just after 7:00 on the 9th. They will be an hour later after that. We want AM shooting to start a little before sunrise and PM shooting to start a little before sunset.

Wanchese Boat Docks



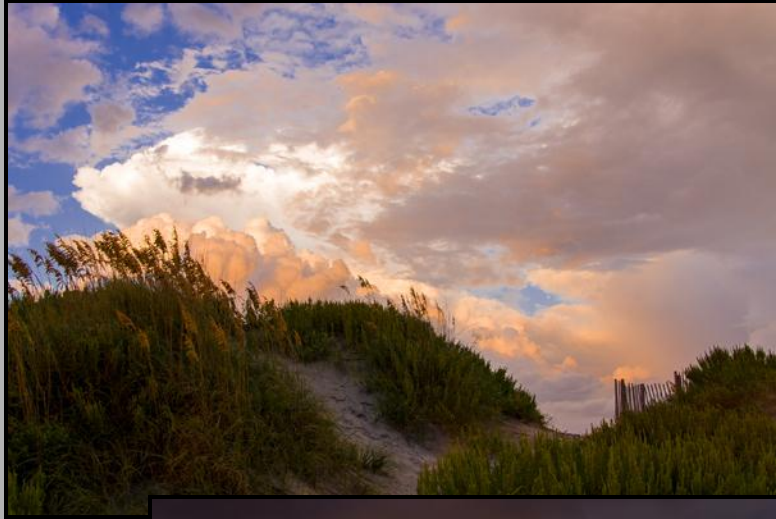
Jockey's Ridge



Wanchese Nature Trail



Coquina Beach



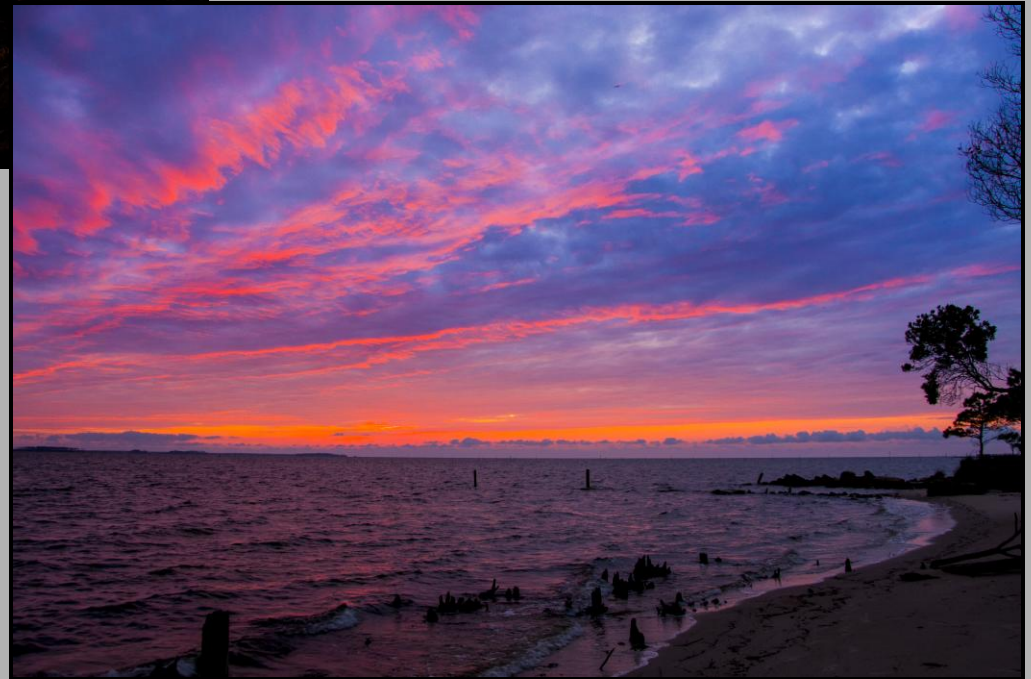
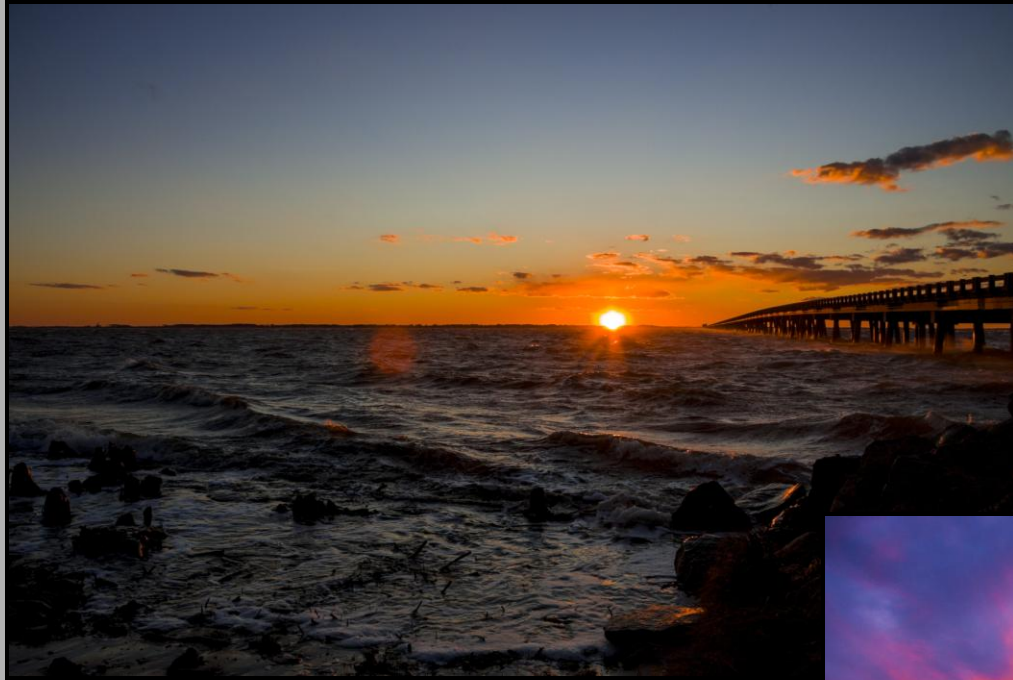
Oregon Inlet and South



Corolla



Freedman's Colony

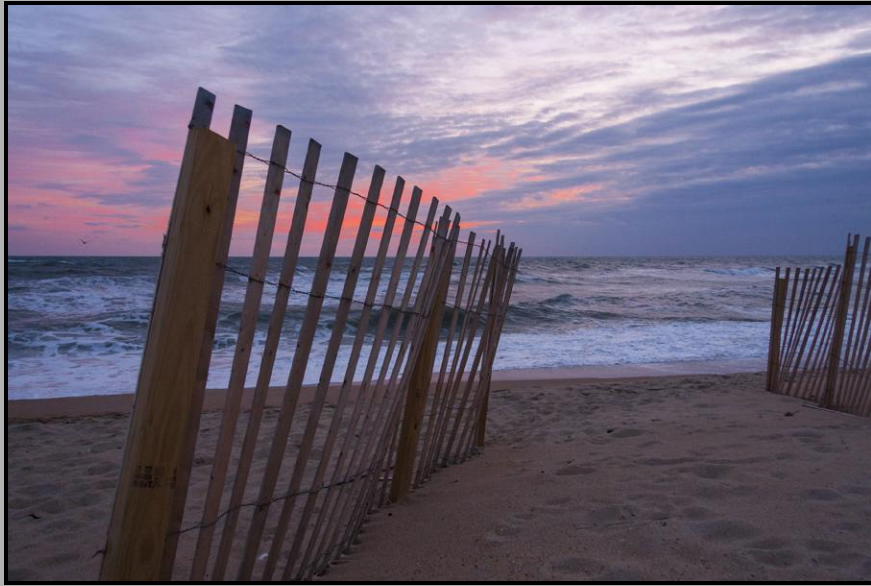


January 2011 Field Trip

The class chose, without my prompting, to shoot sunrise in Kitty Hawk. It was about 17 degrees and the 27 knot wind from the northeast was brisk...



Half of the class just huddled together and shivered without ever turning on their cameras. The whole thing had a surreal kind of National Geographic Arctic Expedition feel to it. The Kitty Hawk 7-11 ran out of Hot Hands that morning before the sun ever rose.



There were pictures to be had, for those of us who were willing to step out from under the blankets...





Focus and Expose!

The best time to shoot is early morning or late evening. Sunrise to about an hour or so later is the best morning time. An hour or so before to just a little after sunset is the best evening time.

Try to shoot several shots of the same subject using different techniques. Keep notes about what you do.

1. Optimize for the subject by close or spot metering just the subject.
2. Generalize for the whole scene by metering shadows and highlights and averaging.
3. Shoot a few shots in Programmed Auto using different metering modes and take note of the different exposures and what situations rendered different exposures.
4. Try to find side lit, back lit, and spot lit subjects and manually meter them.
5. Using some sort of exposure over-ride, over or under expose something in even steps until it becomes so bad it can't be used. This will help you learn your camera's exposure latitude.