Subject Description

Capturing images of the natural world is one of the most pleasurable and rewarding ways students can express their feelings about the environment, artistically. For many students who struggle with drawing, painting and other methods for creating art, photography provides a workable medium that allows them to be creative and expressive. The advent of digital photography has opened a new door into visual creativity, providing tools for self expression that were formally unavailable to all but the most accomplished artisan. This session introduces the students to the artistic power and potential of photography to change the way we interact with the natural environment, through the creation of inspirational images of the natural world.

Objectives

- Students will understand the importance of photography in helping to protect and preserve the environment.
- Photography will be a tool to encourage students to see the natural world through ‘new’ eyes.
- Students will be able to analyze the qualities of a given photo and articulate what makes a photograph get someone’s attention.
- Students will demonstrate the application of the elements of composition in their own nature photographs.

Background Information

See attached photography information sheet

Materials

Example photographs to scatter around the table
Digital Cameras (1 for every pair of students)
Batteries and Memory Cards for the cameras
Clipboards
Pencils
Photography Tips and Techniques Sheet
Photography Challenge Field Sheet

If printing and matting:
Card Reader
Photo Printer
Photo Paper
Matte board
Double sided tape or glue
**Procedure**

1. As students enter the classroom have a selection of photographs scattered on the table. Instruct students to select a photograph that appeals to them.

2. Begin discussion by asking students the reasons why people take pictures of nature. Some responses may include: for fun, to remember a place/time, for aesthetic reasons, to evoke a strong feel to protect or preserve an area, to monitor change in the environment, to sell things such as in magazine ads, for motivation such as in posters with motivational messages, for money – professional photographer.

3. Proceed with a discussion of basic elements of design and composition in photography (see information sheet and poster, provided). Be sure to highlight topics such as lighting, reflections, color, rule of thirds, foreground, viewpoint, focusing and leading lines.

4. At the conclusion of this discussion have students share with the group what design or composition elements that were just discussed may be evident in the photo that they pulled aside at the beginning of class.

5. Tell students that they will be asked to take a number of pictures that will challenge them to see their environment in ways that they may not have thought of in the past. Review the different picture challenges that are listed on the next page and explain that each student should attempt at least one photograph from each category on the checklist. Working in pairs they should share the camera and share the responsibility for recording the information on the checklist.

6. Prior to leaving the classroom remind students of safety concerns when photographing animals or positioning themselves to get that great shot. Discuss the basic use of the camera and respect for the equipment. Be certain to point out how to use the macro setting.

7. If time or resources permit, allow approximately 30 minutes at the end of class to print out one photograph for each student and allow them to matte these photographs using matte board or mattes that have been pre-cut.

**Summary**

As a culmination to the class have students share their photographs with the class and discuss what they learned. If possible, try to tie in a discussion of the importance of protecting the plant(s), animal(s), or habitat(s) that they depicted in their photograph.

**Please note**- Instructors should format camera cards at the end of each class, be sure batteries are charged, and replenish the clip-boards with blank Photo Challenge Field Sheets. Checking on ink levels for the printer, and supplies for matting (matte boards, glue, tape) and printing (photo paper) would also be helpful.
Image Check List

Each student will be given a check-list like the one below so that they can keep track of the pictures they are expected to take during the session.

<table>
<thead>
<tr>
<th>Conservation Photography</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Close-up (Macro)</td>
</tr>
<tr>
<td>□ New perspective</td>
</tr>
<tr>
<td>(down low or up high)</td>
</tr>
<tr>
<td>□ Landscape</td>
</tr>
<tr>
<td>□ Leading Line</td>
</tr>
<tr>
<td>□ Creative Lighting</td>
</tr>
<tr>
<td>(shadows or reflections)</td>
</tr>
<tr>
<td>□ Vertical Shot</td>
</tr>
<tr>
<td>□ Still Life</td>
</tr>
<tr>
<td>□ Patterns in Nature</td>
</tr>
<tr>
<td>□ Photographer’s Choice I</td>
</tr>
<tr>
<td>□ Photographer’s Choice II</td>
</tr>
</tbody>
</table>

**Remember these tips:**
- ✓ Pay attention to lighting.
- ✓ Consider your viewpoint.
- ✓ Think about where to focus.
- ✓ Use the rule of thirds.
- ✓ Avoid clutter.
- ✓ Hold the camera steady.
Conservation Photography
Tips and techniques

**Lighting**
- Avoid harsh shadows.
- Avoid sun flares by hiding the sun behind an object like a tree.
- Experiment with angles of light (back light, side light etc.).
- Dawn and dusk provide the best light for landscapes.
- If the weather is bad, look for contrasting colors.
- Remember your flash is only effective 6-10 feet from the object.

**Viewpoint**
- Get in close (but do not put yourself in danger).
- Lie down or get up high.
- Look the subject in the eye.

**Focusing**
- Lock the focus-then move the subject off center.
- Focus on: eyes- for people, stamens/pistils- for flowers, antennae- for insects.

**Composition**
- Use the rule of thirds.
- Move the subject out of the middle.
- Watch your horizon lines. Keep them straight and use the 1/3 rule.
- Use leading lines to draw your eye into the picture.
- Put something of interest in the foreground.

**Avoid Clutter**
- Use a simple background
- Fill the frame with your subject by moving in close to exclude any extraneous elements.
- If practical, move the subject to a better location with a cleaner backdrop or carry a plain background with you.

**Additional tips**
- Press the shutter button smoothly
- Hold the camera steady.
- Take some vertical pictures.
- Use reflections.
- Partial images add interest to some photos.
- Think about the message you want to convey with your picture.
- Take your time; pay attention to what you have included in your viewfinder.