**Watercolor Exercises: Overview**

1- COLOR WHEELS + STRIPES

Using your full array of paints arrange your palette to create both a six unit, and then a twenty-four unit color wheel. Your goal is to use visual judgment to arrive at a consistent degree of transition from color to color.

2- STAINING PROPERTIES

The staining properties of all watercolors are not equal. Some colors can be lifted and removed while others permanently stain the paper. The goal of this exercise is to determine which of your pigments stain and which do not.

3- TRANSPARENCY VS. OPACITY

By using a black ink stripe you will notice that some colors disappear totally when painted over black ink while others opaque out the ink stripe with visible pigment to different degrees. The goal of this exercise is to learn which of your colors are transparent and which are opaque.

4- VALUE STUDIES

Using the three primary colors paint three sets of value runs. By mixing the primary in even increments of light and dark your goal is to use visual judgment to arrive at a consistent degree of transition from color to color.

5- INTENSITY STUDIES

Using a very intense color that is not a primary the goal of the exercise is to dull the color by two possible means; with its compliment and with grey.

6- TEMPERATURE STUDIES

Using your palette the goal of this exercise is to explore and become familiar with temperature variations in the spectrum of color.

Here is a list of the work to be done, further explanation follows:

2 Color Wheels: one 6 colors, one 24 colors (each wheel 5”)
1 “Stripes” Painting (14” x 11”)
1 (14” x 11”) Staining/Sedimentary/ Transparency vs. Opacity Exercise
6 colors mixed three different ways (each swatch approx. 2” x 2”)
3 10 step primary color value strips (10” x 1 ½” Total. Each Swatch 1” x 1 ½”)
6 intensity studies (14” x 2” see example)
4-6 Flat Wash/Graded Wash studies (4” x 8” each study)
1 (10” x 8”) Mountain scape
1 (10” x 8”) cloud study and 4-6” x 4” studies
1 (8” x 10”) abstract wet into wet study

Fundamentals Exercises for Watercolor
PIGMENT EXPERIMENT #1: WARM AND COOL PIGMENTS

Temperature is an important property of color. We have pigments that are cooler and pigments that are warmer. We need both to mix color effectively. To create brilliant color you must choose your pigments carefully and mixing color that “lean” in the same direction.

Red is in general a warm color, but this is relative:

* Rose madder genuine and alizarin crimson, for example, are cool reds.
* Cadmium red and light red are considered warm reds, because they lean more toward yellow.

Yellow is considered a warm color also, but...:

* Aureolin yellow is slightly cool when compared with cadmium yellow.

Blue is in general considered a cool color, but...:

* French ultramarine is a warmer blue.
* Cobalt blue is close to a true primary, but it is still slightly cool.

PROJECTS:

1- COLOR WHEELS

Then using your full array of paints arrange your palette to create both a **six unit**, and then a **twenty-four unit** 5 inch color wheel (this can include colors from your palette). Your goal is to use visual judgment to arrive at a consistent degree of transition from color to color.

TECHNICAL CONSIDERATIONS:

1. Be sure to scrub your plastic palette with an abrasive powder before adding your pigments.
2. Arrange your colors so that your complements are separated. Therefore, keep reds and greens, yellows and violets, as well as blues and oranges separated.
3. Place similar colors in sequence. Reds with reds etc...
4. When possible arrange warm to cool.
5. Consider placing your staining pigments in the corners of your palette.
6. Label the pigments on your palette with a bleed-proof black marker.
7. Label the pigments, as well as the properties of each pigment, on your color wheel

2- STRIPES: Glazing over and laying under

Use 14” x 11” paper and paint ½” (approx.) strips of your colors in one direction. Let dry, then glaze over in the opposite direction the same colors. By doing this you will gain a feel for each pigment and see how each color as being glazed over the other colors and glazing over the other colors.
3- WATERCOLOR PIGMENT EXPERIMENT A/B/C

Section your paper with tape into small rectangles (approx. 2” x 3”) one for each of your pigments. About half way down the rectangle paint a narrow line (approx. 1/4”) of undiluted India ink (or use a waterproof magic marker) across the rectangles. 14” x 11” paper works well for this.

Once the ink has dried begin painting:

A: SEDIMENTARY VS SPREADING PIGMENTS

Sedimentary pigments have a beautiful granular effect, while other paints spread profusely on wet paper. By knowing which pigments have which property, you can better control the effects they have in our painting.

For each pigment: Wet the rectangle, and paint the color on half of the space (just past the ink line). Keep the colors fairly intense...don’t dilute with too much water. Notice that some colors, such as cobalt violet, stay almost exactly where you put them. Spreading colors, such as alizarin crimson will blossom out onto the other half of the dampened square. Be sure to label each pigment used for later reference.

B: STAINING QUALITY

STAINING PROPERTIES

The staining properties of all watercolors are not equal. Some colors can be lifted and removed while others permanently stain the paper. The goal of this exercise is to determine which of your pigments stain and which do not.

The purpose of this exercise is to discover which pigments stain the paper and do not lift up after scrubbing, and which pigments can be lifted completely by scrubbing.
Cover one side of each pigment rectangle with a piece of cardboard or mat board, and scrub the visible half with a dampened bristle brush. Pick up the loosened pigment with a rag or tissue. Some pigments will lift off completely, while others will stain the paper permanently.

C: TRANSPARENCY VS OPACITY (Observational)

Notice that some of the colors nearly disappear where they lie across the ink strip. Others cover the black line almost entirely. Those that disappear are transparent. The pigments that cover the black line are opaque. Some pigments will be semi-transparent, partially covering the black line.

4. PIGMENT EXPERIMENT: COLOR MIXING - FOR WASHES

When mixing colors for one wash, there are three ways to do it. This exercise explores the different ways and demonstrates how to achieve lively washes of two colors.

Prepare a sectioned sheet with tape. Choose a pair of pigments to be mixed.

1. Mix the colors thoroughly on the palette, and paint one square (approx. 2 inches)
2. Now place the pure pigments on either edge of the mixed puddle on your palette, and run your brush across all three puddles. Apply this to another section without mixing the colors too much. You should see three colors - the two pigments plus the mixture of the two.
3. Now apply the colors of the same two pigments directly on to a third section, mixing a bit on the paper.

The second and third squares should be a more lively wash - they should seem more colorful than the wash that was completely mixed on the palette.
Repeat this exercise with various combinations of two pigments. Paint 6 pairs of color minimum.

Label the pigments used. Paint 6 pairs of color minimum.
5a VALUE STUDIES

Using the three primary colors paint three sets of value runs. By mixing the primary in even increments of light and dark your goal is to use visual judgment to arrive at a consistent degree of transition from color to color. Start with purer pigment then add more water to lighten each step.

- Do 10 value steps using Payne’s gray or Black (not Shown) (1 ¼” x 1 ¼” each value step).
- Do a 10 value steps for each primary: One for red, one for blue and one for yellow (1 ¼” x 1 ¼” each value step).

5b INTENSITY STUDIES

Using a very intense color that is not a primary the goal of the exercise is to dull the color by two possible means; with its compliment and with grey. Do this for a minimum of three colors. Use approx. 2 inch squares. Compliments: crossing mix the pairs of yellow/violet, orange/blue, and red/green. Greying: Use a violet and lay down a square of pure color, then add steps of gray into the violet thus dulling (graying the color). Do this for green and orange as well.
6. WATERCOLOR: FLAT WASH /GRADED WASH

PROJECT: This project explores the ways to control modulations of color through even and gradual changes of value. In preparation for accomplishing the final portion of this project you will do a series (4 - 6) of rectangular test strips, measuring approx. 4” x 8”.

FLAT WASH

Mix a puddle of even intense color. Then paint a flat even wash by loading the brush with paint and pulling the bead of color across and down the paper. Try one without wetting the paper first and then paint one by wetting the paper with clear water first.

RECTANGLE-GRADED WASH:

Mix a small puddle of intense color. Paint across the top of the rectangle, pushing a bead of the color as you go. Add water to the puddle on the palette, and paint the next stroke halfway into the previous one, remembering to keep a bead of paint going as you work. Before you begin each stroke down, add more water to your puddle to gradually lighten your wash. Your final stroke should be pure water. Remember to keep the board tilted a least 15 degrees, the brush handle high and the brush well loaded.

Do these:

- Flat wash without wetting the paper first using a single color
- Flat wash with wetting the paper with clear water first using a single color
- Graded wash without wetting the paper first using a single color
- Graded wash with wetting the paper first using two or three color
7. MOUNTAIN SCAPE:

Your will develop a simple mountain landscape painting using overlapping systems of graded washes (approx. 8” x 10” in size). Have at last four overlapping mountain ranges and a graded background sky. Use a warm foreground to cool background.

TECHNICAL CONSIDERATIONS:

1. You don’t need to mix a large puddle on your palette when you begin, because you will be adding to it to change or grade the wash.

2. Keep your puddle evenly sized. A change in wetness will cause vertical streaks.

3. Move the puddle at an even pace. Working too slow will cause horizontal streaks.

4. Pick up the extra bead of paint at the end of the wash.

5. Keep your paper at an angle, let gravity work with you.
8. WATERCOLOR: WET INTO WET

PROJECT: Wet into wet is just as the nomenclature suggests. The paint is applied to a surface that has been pre-wet either with clear water or a preliminary wash. This technique allows the adjustment of edge control. The artist is able to regulate the softness of the edge, producing either a very soft blurred edge or a semi-soft edge. Timing and the ratios of wetness of the painting surface as compared to the brush wetness are very important.

PRODUCE PAINTINGS using the wet into wet technique. Do four 6” x 4” studies and one 8” x 10” painting(s) of clouds
WATERCOLOR:  SKY AND CLOUD EXPERIMENT
(For Above)

SKY INFORMATION:

1. The sky is the source of light and will set the mood of our painting.

2. Skies will change with the time of day and atmospheric conditions.

3. Early on toward sunset the sky will become warmer...especially, if there is smog, smoke or particles of dust.

4. Luminous/natural looking skies are painted by not mixing on the palette but by mingling on the paper.

5. Notice how many sky's get paler/slightly greener about 1/2 way down...then fade to a light lavender near the horizon.

CLOUD INFORMATION:

1. The undersides of the nearest clouds are warmer. Reds and sienna’s reflect up from the earth below.

2. Clouds get smaller and paler as they recede.

SKY AND CLOUD FORMULAS:

1. BASIC SKY: Wash ultramarine blue over the sky area. Add a touch of raw sienna at the lower level to brighten.

2. NATURAL/LUMINOUS SKY: A wash of raw sienna, followed by a wash of ultramarine blue.

3. DAYLIGHT SKY: Wash ultramarine blue and burnt sienna over the sky area. Add a small amount of raw sienna to the bottom of the sky...while still wet add touches of cobalt violet.

4. RAINY SKY: Begin with a light wash of raw sienna. Mix a wash of ultramarine blue and burnt sienna and add to the original. Add extra small amounts of ultramarine blue and burnt sienna for a mottled cloudy effect.

5. THREATENING SKY: Start with a wash of raw sienna and add a mixture of ultramarine blue and burnt sienna over the raw sienna. Lastly add a little more raw sienna at the horizon area.

6. TWILIGHT SKY: Wet the sky with water. Start at the horizon and work upward with a light wash of alizarin crimson. Add cadmium orange, then cadmium yellow then cerulean blue, then permanent magenta, then ultramarine blue and lastly a darker mixture of ultramarine blue.
Create one wet into wet abstract timing experiment, approx. 8” x 10”

METHOD: Wet into wet can be used on the entire paper or on one specified area at a time.

1. Wet the paper, or the area to be worked on, with a brush or sponge (use the sponge lightly so as not to mar the surface of the paper). You may also lay down a wash of color instead of water, depending on the desired effect. Since lots of water can cause watercolor paper to buckle, make sure you are using stretched paper. KEEP YOUR PAPER FLAT.

2. ALWAYS REMEMBER
   a) The wetness of the pigment in your brush should be dryer than the wetness of the paper. If the color in the brush has too much water, run backs, bleeds, lines and other uninvited things may occur.
   b) Work from light colors towards darker ones.
   c) The wetter the paper, the softer the edges will be, so work with soft edged areas first, then areas with semi-soft edges. THINK BEFORE YOU PAINT.

3. Experimentation before working wet into wet on a painting will prove invaluable. Lighter pigments tend to blur more readily, and granular or sedimentary pigments tend to stay where you put them. By testing your pigments you can more accurately control what happens in your painting.
4. **HAVE PATIENCE.** Sometimes you need to sit for a moment, and closely watch until the paper has just lost the sheen of wetness. That is typically a good time to apply paint, depending on the desired effect.

5. If you need to blow dry the area, wait until the paint has soaked in and the sheen is gone from the paper.