PHOTOGRAPHIC COMPOSITION
*For Beginners*

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**STUDENT BOOKLET**

*Name _______________________*
Any photographer can benefit from systematic exposure to the concepts and principles of good composition. Composition is knowable, and it is learnable.

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Why are some photographs more appealing and eye-catching than others? What is the secret behind an effective composition? This *Photographic Composition for Beginners* teaches you the basic principles and the design elements that are used to compose a photograph. These will act as guidelines to help make your composition more harmonious and pleasing to the eye.

**WHAT IS PHOTOGRAPHIC COMPOSITION?**

Composition is the arrangement of subjects or elements within the photographic frame. How the subjects are selected and arranged can make a big difference to your photograph. As a photographer, you control the arrangement and the look of the image. You decide what the focal point of interest is and where to place it within the frame so that the viewer will be drawn to the picture. Design elements such as line, shape, pattern and color have a dual function. Firstly, their presence helps to create a stronger image. Secondly, each element has intrinsic and symbolic attributes which can evoke certain emotions and feelings in the viewer. For example, curved lines give the feeling of gracefulness and calmness; diagonal lines can be dramatic and powerful; patterns can be repetitive and structured.
The learning objectives of the unit are:

1. *Principles of Design in Photographic Composition.* Given a series of photographs, learners will identify and apply the three golden principles (rule of thirds, golden triangle and golden spiral).

2. *Elements of Design in Photographic Composition.* Given photographs, learners will explain how the three design elements (line, shape and pattern) contribute to a good photographic composition.

3. *Color.* Learners will identify the use of complementary colors in photographs.
For a space divided into equal parts to be agreeable and aesthetic, between the smallest and largest parts there must be the same relationship as between this larger part and the whole space.

Vitruvius

1. THE GOLDEN SECTION / MEAN

The ancient Greeks were the first to devise the golden section. Based on geometry and mathematical formula, they constructed the golden section or mean. They found that the proportions drawn were most beautiful and pleasing to the eye. The golden section is applied to art, architecture, design as well as photography. Examples are the Parthenon in Athens and Keops in Egypt.
Refer to Figure 3. The golden section is a rectangle of a shape such that the ratio of the length of the short side (B) to the long side (A) is the same as the ratio of the length of the long side (A) plus the length of the short side (B). It can be written as $B : A = A : (A+B)$ or $B : A = A : C$. The ratio is approximately 5:8. The rectangle is also known as the golden rectangle.

The golden rectangle is important in photographic design because the 35mm frame approximates the proportion of the golden rectangle. See Figure 4.
2. RULE OF THIRDS

The *rule of thirds* is an extension of the *golden section*. Since the 35mm frame approximates the proportion of the *golden section*, we can use the *golden section* to help us compose our picture. If the subject or points of interest are placed on one of the intersection of the lines (black dots in Figure 5), it will give the image a more harmonious balance. The *rule of thirds* helps to break the symmetry and monotony of the rectangle.

![Figure 5 Rule of Thirds](image)

Beginners have a tendency to place subjects right in the center of the frame or divide the frame into two equal parts resulting in a weak and less dynamic composition. A centrally placed image does not follow the *golden section*. Notice that if you place your subject in the center, the triangles formed within the rectangle are disproportionate to one another.

![Figure 6 Centrally-placed subject](image)
The horizon line of the photograph is also usually placed either about one third from the bottom or the top of the frame corresponding with the *rule of thirds* lines. The horizon line is never or rarely placed in the center of the frame as the image will have less impact. If the image is divided into equal parts, it tends to be weak and undefined (Figure 7a). Conversely, if the horizon line is placed at the lower or upper third of the frame, it will divide the image into unequal parts, creating a more dynamic composition (Figure 7b)

**Figure 7a**  
*Horizon line placed in the middle of the frame where all the elements are evenly placed.*

**Figure 7b**  
*Horizon placed at one third from the bottom of the frame draws attention to the clouds resulting in a stronger composition.*
3. GOLDEN TRIANGLE

If your picture is characterized by diagonal lines, you may want to apply the *golden triangle* rule. Divide the rectangle of your frame into triangles as shown in Figure 8. If you place your main subject on either of the intersection points (shown as black dots), it will be more appealing to the eye. This is the *golden triangle* rule.

*Figure 8  Golden Triangle*

*Figure 9  Examples of Application of Golden Triangle*
4. GOLDEN SPIRAL

Take a close look at the nautilus shell or the head of a sunflower. Can you see the spiral design in their forms? See Figure 10.

![Figure 10 Examples of Golden Spiral in Nature](image)

Flowers such as daisies and sunflowers, the leaves of the agave plant, cactus and nautilus shell are some examples in nature which depict the form of the golden spiral. The golden spiral is another extension of the golden section. See Figure 11 below. The dimension and form of the golden spiral is constructed from several golden sections. If you frame your subject within the spiral, that will become the central focus of your composition. This principle is commonly used in photographing close ups of flowers, cacti blooms or any other circular forms.

![Figure 11 The Golden Spiral](image)
EXERCISE 1

Before you begin on the exercise, the instructor will demonstrate how to use the photo adjuster.

1) Using the photo adjuster, choose one photograph and select one design principle that is appropriate. Crop the photograph accordingly to arrive at a good composition. You have to do three photographs, one for each design principle. Discuss in class why you crop your photograph in a particular manner and which design principle you use.

Instructions on using the photo adjuster:

a) Go to the photo adjuster website:
   http://photoinf.com/Golden_Mean/photo-adjuster.html

b) Begin by clicking on browse. Go to desktop and look for the folder Photographic Composition.

c) Open the folder and look for the folder Practice 1: Golden Principles.

d) Select one photograph from folder and click open. The photograph will appear in the photo-adjuster viewer.

e) Choose one of the golden principles - the golden mean, golden spiral or golden triangles. Click on the appropriate circle on the photo-adjuster. You can orientate the lines by using the horizontal / vertical flip and rotation options.

f) Crop the photograph by adjusting the left, right, top and bottom of the frame. The point of interest or subject should be placed according to the selected design principle.

g) Once completed, print screen and save in a word document.
SUMMARY

In Lesson 1, you have learnt the four golden principles in composition: the golden section, rule of thirds, the golden triangle and the golden spiral. These principles will help you decide where to place the subject within the frame that will be appealing to the viewer. Do remember that these principles serve as useful guidelines. They are not rules to be followed blindly. There are always exceptions to the rules depending on the circumstances, the overall effect and the message you wish to convey in your photographs.

PHOTO TIP

Take an empty slide frame. Take four pieces of string and place it like a grid following the lines of the rule of thirds. When you are out on the field, look through the frame to guide you where to position your subject or point of interest. With enough practice, you will be able to do this instinctively.

ADDITIONAL RESOURCES

- History and the mathematical foundation of the golden section:
  http://en.wikipedia.org/wiki/Golden_mean

- Article on construction of the golden section and its variants:
  http://www.mcs.surrey.ac.uk/Personal/R.Knott/Fibonacci/phi2DGeomTrig.html

- Golden spiral and nature:
  http://www.mcs.surrey.ac.uk/Personal/R.KNott/Fibonacci/fibnat.html

Line, shape and pattern are some of the design elements that you can use to compose your photographs, whether they are landscape, close-ups, architectural or action images. Most photographs will contain at least one or a combination of these elements. Being aware of the design elements and being able to identify and isolate them in your images will help you improve your composition.

In addition, all the elements have a symbolic representation. They indirectly convey a message to your viewer. For example, vertical lines depict strength and height while horizontal lines give a calm and expansive feel to the picture.

1. LINE

Lines are the strongest and most powerful visual element in design and photography. They draw the attention of your viewer into the photograph and direct the eye across the photographic space. They lead the viewers to the portions you want them to see. Lines also define and divide the areas within the frame and give a spatial relationship to the various elements in the photograph.

There are two types of lines: straight and curved lines. Straight lines can be horizontal, vertical or diagonal.

1.1. LINES AND THEIR MEANINGS

Another function of lines is that they can convey emotion and give meaning to your photographs. For example, thick lines give a sense of stability while thin lines are weak and have less impact. As a photographer, you can choose the type of lines (straight or curved) as well as the orientation of the lines (horizontal, diagonal, vertical, converging or diverging) to evoke different moods and feelings in your photographs.

Straight lines appear to be more stable, reliable and rigid while curved lines are softer and convey a relaxed feeling.
Here are examples of the different types of lines and the expressive qualities and meanings they add to the image.

1.2. STRAIGHT LINES

a) Horizontal Lines

Figure 12  Horizontal Lines

Horizontal lines express stability and calmness. Most landscape photographers use horizontal lines to convey a sense of space and to add breadth to the scene. Take a look at the top photo of Figure 12, does the scene with the bales of hay and the blue sky in a horizontal format give you a pastoral mood and a feeling of a lazy summer afternoon?
b) **Vertical Lines**

*Figure 13 Vertical Lines*

Vertical lines can evoke a feeling of strength, power and assertiveness. Verticals also accentuate height in the composition. Can you think of examples of vertical structures and forms? Look at buildings, flagpoles, towers, trees and waterfalls and see how their strong vertical lines can add power and height to your photographs.
c) **Diagonal Lines**

![Diagonal Lines Image](image)

*Figure 14  Diagonal Lines*

Diagonals give the picture a sense of movement because the lines go up or down, away or towards the viewer. The presence of diagonals adds more energy to your composition than vertical or horizontal lines. Diagonals can be rather striking and dramatic as seen in the photo on the right in Figure 14.
1.3 CURVED LINES

In nature, lines are seldom perfectly straight. If you look at the meandering of rivers, undulating sand dunes and breaking waves, they are all examples of curved lines.

![Curved Lines](image1)

Curving lines evoke a restful mood and add movement to the picture. Man-made structures like roads, highways and buildings can also depict a curved form which you can use in your composition.
EXERCISE 2

a) Identify the types of lines in the photographs.
b) Explain how the lines help to enhance the photo composition.

Photo 1
a) Type of line: ______________________________________________________
b) Line and composition: ______________________________________________

Photo 2
a) Type of Line: ___________________________________________________
b) Line and composition: _____________________________________________
Photo 3
a) Type of Line: _____________________________________________________
b) Line and composition: ______________________________________________

Photo 4
a) Type of Line: _____________________________________________________
b) Line and composition: ______________________________________________

Photo 5
a) Type of Line: _____________________________________________________
b) Line and composition: ______________________________________________
2. SHAPE

Shape is the most fundamental element of design. If you look at a photograph and take away its pattern and color, you will be left with just the basic shape or outline of the objects in the scene. You can identify the object just by its shape alone.

Most photographers use frontlighting or backlighting to define and emphasize the shapes in their images. Backlighting creates a silhouette which eliminates the texture and pattern of the photograph leaving behind a stark outline and shape.

Figure 16 Shapes and Silhouettes
2.1. SHAPES AND THEIR MEANINGS

a) Circles

A circle represents wholeness. It’s unbroken line and gives a sense of continuity, unity and completeness. Sometimes you may frame the circle partially.
b) Squares and Rectangles

Figure 18  Squares & Rectangles

Squares and rectangles give structure and stability to your composition. You find squares and rectangles mostly in man-made objects such as buildings, windows and cars.
Triangles

*Figure 19 Triangles*

Triangular forms such as mountain peaks, pyramids and buildings which point upwards into the sky represent stability, endurance and strength.
EXERCISE 3

a) Identify the types of shapes in the photographs.
b) Explain how the shape helps to enhance the photo composition.

Photo 1
a) Type of shape: ______________________________________________________
b) Shape and composition: _____________________________________________

Photo 2
a) Type of shape: _____________________________________________________
b) Shape and composition: _____________________________________________
Photo 3
a) Type of Shape: _____________________________________________________
b) Shape and composition: ____________________________________________

Photo 4
a) Type of Shape: _____________________________________________________
b) Shape and composition: ____________________________________________
3. PATTERN

*Once is an instance, twice may be an accident but three or more makes a pattern.*

*Diane Ackerman*

We get patterns when the elements of shape, line and color repeat themselves in a scene. You can find patterns almost everywhere. Patterns are all around. Look at Figure 20. Can you identify the repeated design elements in the six photographs? The veins of a leaf, cables, cut oranges, roof tiles, glass windows and chain fences are some examples of ordinary everyday things that may be arranged to form patterns.

If you fill the whole frame with the same pattern, you get a very strong visual impact. Patterns give a sense of regularity, rhythm and predictability to your composition.
SUMMARY

In Lesson 2, we look at three design elements - line, shape and pattern. These design elements are important as they give order to your composition. We have looked at examples on how lines can bring the viewer into the picture and how they can give an impression of calmness or power depending on whether it is a curved or diagonal line. Patterns, on the other hand tend to be repetitive. Shapes like rectangles and triangles give a sense of stability while circles a sense of unity.

When used effectively, line, shape and pattern can create a visual as well as an emotional impact. They not only direct the viewer to focus immediately on your subject but also elicit an emotional interpretation of the photograph.

PHOTO TIP

Train your eye to look for line, shape and pattern in the scene in front of you. Before you click the shutter, look at the scene and see if you can identify and isolate any interesting line, shape or pattern that you can fill the camera frame. You can do this by abstracting, that is looking at only the outline of the objects. Then, visualize how you can use one element or a combination of these design elements to create a stronger composition. Ask yourself if the elements elicit an emotional response. Finally, when you are satisfied with the composition, press the shutter.
**LESSON 3  COLOR**

*Color is a language by itself.*
*Ernst Haas*

We don’t live in a black and white world. Our world is filled with colors – blue skies, green grass, white clouds, yellow sunsets, red roses and pink flamingoes. Colors can attract and draw attention. Have you noticed that images of red flowers among green ferns, or a field of orange-yellow sunflowers shot against the blue sky are more appealing? Why? In this lesson you will learn about colors and how they can be combined to create an effective composition. This lesson will focus on primary and secondary colors, complementary colors and color harmony.

1. **COLOR BASICS: Primary and Secondary Colors**

Colors can be classified as primary and secondary colors. Primary colors are red, yellow and blue. See Figure 21. Primary colors cannot be created by mixing with other colors. Secondary colors are created by mixing two primary colors. Mixing red and yellow results in orange, mixing yellow and blue results in green, and mixing blue and red results in violet. See Figure 22.

![Figure 21](image)
**Figure 21**
*Primary Colors – Red, Yellow, Blue*

![Figure 22](image)
**Figure 22**
*Secondary Colors – Orange, Green, Violet*
A color wheel is an arrangement of twelve colors, both primary and secondary colors and their combinations. It shows the relationship of the colors to one another.

![Color Wheel](Figure 23 Color Wheel)

2. **COMPLEMENTARY COLORS**

For each color there is an opposite color. This pair of colors is known as complementary colors. Take a close look at the color wheel in Figure 23. Violet is opposite to yellow. Thus, violet and yellow are complementary colors. Can you find other complementary pairs of colors?

Also, each primary color is opposite a secondary color. Red falls opposite green. Blue falls opposite orange. Finally, each secondary color falls between the two primary colors from which it is made. For example, green is between blue and yellow.
3. COLOR HARMONY

How can color help you improve the design of your photograph? Color harmony is achieved when you are able to successfully look for and combine pairs of complementary colors in your composition. In Figure 24, the red color of the poppies is complementary to the green background.

![Figure 24 Color Harmony – Red and Green](image)

In Figure 25, the orange-yellow color of building complements the blue of the sky.

![Figure 25 Color Harmony - Orange and blue](image)
1) Check the diagrams below which show complementary colors.

2) Mark the photographs that use complementary colors in its composition.
SUMMARY

In this lesson on color, you learn about primary and secondary colors and how they relate to one another. You find that the combination of some colors work better than others. If you are able to identify the various pairs of complementary colors, for example, red and green, blue and orange, yellow and violet, and use them in your photograph, you will achieve a sense of harmony in your composition.

PHOTO TIP

When you are out on photography field trips, try to look for complementary colors. If you find a red object, survey the surroundings and look for a green color and see if you can combine both colors within the frame. With practice and experience, you will learn how to make the colors work in your images. Remember as a photographer you are in control and can select what you want to shoot.