

Digital Imaging

Throughout history, we have created images using media such as colourful minerals, charcoal, paint, ink and sculpture. With the development of computers, we now create images using digital information and technology. **Digital images** are electronic images captured or created using a wide range of technology.

Watch this video for a brief overview of digital images.

https://www.youtube.com/watch?time_continue=4&v=Yj5Qlc9tQ9s&feature=emb_logo

In addition to hardware, we use software to capture, manipulate, draw, create and copy digital images. A vast range of digital imaging software is available, from powerful and expensive, to inexpensive or even free. **In this course, we will use a popular free program: Gimp. This is available for MacOS, Windows and Unix. If you don't have it already, download it from a secure site and load it on your machine.**

There are many formats for viewing images (jpg, gif, png, etc.) and there are also formats for manipulating images. Gimp uses a XCF file extension. To manipulate images in Gimp, you must save them as this format so that you retain the ability to manipulate the changes (move text, etc.). When you're ready to finalize your work, you can export it in another viewing format.

Designing Digital Images

The term "digital image" can apply to a wide range of products, from a simple photo to the landscape and characters in a science fiction or fantasy movie. Digital images include the PowerPoint slides you create and the covers and ads on the magazines you read. Digital imaging can include photographic elements, illustrations, shapes and designs, and text.

Regardless of the type of image, you will focus on these three areas as you design and produce your work:

- **Purpose**
- **Composition**
- **File management**

We will look more closely at each area on the following pages.

Purpose

Before starting work on creating a digital image, you should be sure that you know the answers to a few basic questions. Answering the following questions will help identify the purpose of your work and increase the chances that you will produce a successful image. Click on each question for more information:

- [What am I saying?](#)
- [Who am I saying it to?](#)
- [Why am I saying it?](#)

Think of these questions as helping to define the target you are aiming at in your work. Just like a dartboard shows you where to focus your attention and aim your darts, identifying your purpose helps you design an image where all of the elements work together. It will also save you time, as a clear purpose can help you leave out unnecessary parts. As you work, ask yourself, "Does this help get my message across to my audience?" If the answer is No, then leave it out!

Why am I saying it?

You can create images for various **reasons**. For example, you may want to sell a product, convince people to make a decision or warn people of danger. You may want to entertain, trigger an emotional response or remind the viewer of the past. You may want to inform your audience, direct them or educate them. You must identify the reason for creating your image so that you can ask yourself later whether it was effective. Sometimes, an image can do two things at once, but if it does not achieve the **main purpose**, it has failed. For example, an advertisement may entertain while trying to sell a product; however, if the audience laughs at the funny ad but doesn't remember to buy the product, then the image's message is not effective.

Who am I saying it to?

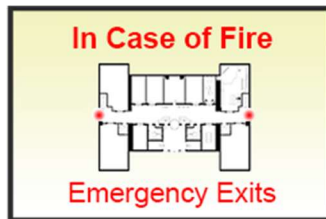
As you saw in the last module, target audience is a key consideration. Once you identify what you intend to communicate, you must identify **who** you are communicating to. Who is your **audience**? How old is your audience? Can they read? Are they already interested in what you are saying, or will you have to catch their interest? Will they have the time to look carefully at your image, or will they be in a hurry? Will they see your image up close or from a distance? The more that you know about your audience, the more effectively you can design your image to meet their interests and needs

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Purpose: Examples

Take a moment to look at the following images and respective purpose. What message does each one send, who is the target audience, and why was the message created?



The message here is simple: "These are exits you can use if there is a fire in the building." The audience is anyone in the building, particularly people who may be in a panic. That may be why red font is used. The reason for the image and its message is to inform people before a fire starts, and to help people who may be panicking once a fire alarm is ringing.



The messages here are, "Look at us handling the rapids!" and "Remember that day on the river?" This photo is just a snapshot intended for family and friends of people on the canoe trip. The reason for the image and its message is to remind people who were on the trip, and to help people who didn't go imagine what it was like.



The message here is that the four principles of design are easy to remember if you notice that their first letters spell "CRAP." The purpose of this image is not to teach the four principles—it is only to help the audience remember their names. People use PowerPoint slides like this to help their audience remember the key points of a lesson or speech.



The message here is that this magazine is for young children, both male and female. The 'feel-good' title, My Best Friends, would appeal to kids as being welcoming and friendly. The bright colours are used to attract the attention of potential buyers. Most magazines are sold because of eye-catching covers!

Composition

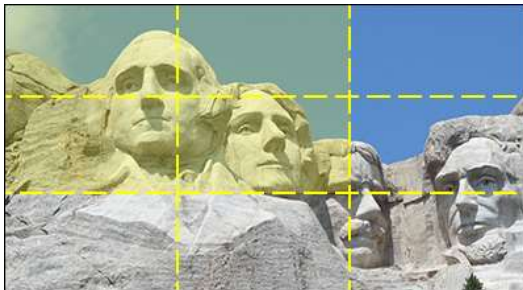
Once you understand the purpose for your digital image, your focus shifts to composing the image itself. Earlier in this course you learned about the elements of good design: contrast, repetition, alignment and proximity. You also looked at colour as a design element. In addition to these basic design elements, keep the following three goals in mind as you design your image.

1. **Control the viewer's eyes.** When your audience looks at an image, what will they notice first? What will they look at most closely? What will they ignore? Will their eyes follow the "story" you are trying to tell? You can control the viewer's eyes, or attention, in various ways. Click the following links to learn two powerful techniques:

- **Rule of thirds**

Place your key elements where they will be most effective. The rule of thirds says that elements placed on imaginary lines that divide an image in thirds will get more attention and be more pleasing. Items placed where these lines cross may get the most attention. Use the rule as a guideline for arranging elements when you want your image to have a feeling of energy, informality, flow or unexplored possibilities.

You can create a feeling of formality, stability, tradition, and intense focus by ignoring the rule of thirds and centering your key element or elements.



- Leading Lines



You have some control over where your audience moves their eyes while looking at your images. **Strong lines** of text or graphic elements can lead the eyes from one area to another. A viewer's focus will also jump from one strong element to another. **Diagonal lines** (straight or curved) suggest motion and are effective ways to lead the viewer's attention through your image.

2. **Use white space effectively.** Often, the space between letters or elements in an image is as important as the elements themselves. This "empty" space is called **white space** or **negative space** (it is not always white). White space can help separate and align elements and make text easier to read. It can make a single, isolated element stand out, and it can give the viewer's eye a place to rest. Watch this video for further explanation.

https://www.youtube.com/watch?time_continue=31&v=H84SRIG62dU&feature=emb_logo

3. **Choose an effective font.** If you have ever scrolled through the list of font choices in a Word document, you will know that choosing the perfect font can be complicated. Even so, understanding the basics of fonts will improve your design. The following video that does a good job of showing how font and design can work together.

https://www.youtube.com/watch?time_continue=3&v=mBoVoj5jLfc&feature=emb_logo

Composition: Example

Notice how this car ad uses the design elements and goals to create an effective digital image, using photographic and text elements.



For this week's exercise, use the tools of design and composition that have been covered so far to create an image of your choice. You can use any platform you wish; paint, gimp, photoshop, you choose. Alternatively, you can use an existing image, if it's not yours, don't forget to include the image credit. Save it as a jpeg and include it with your submission.

How does that image incorporate the various design elements?