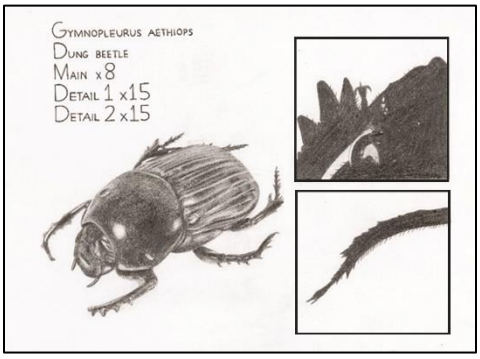
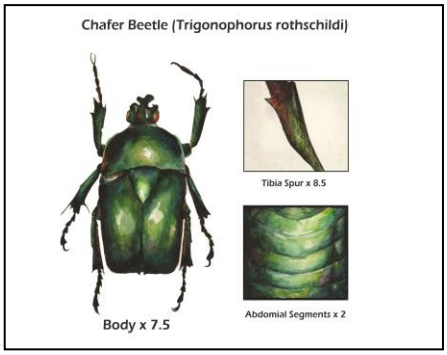
Hemipteran/Hexapods Graphic Drawings/Drawing Bugs/Insects

Project 3





Brief Description: Working from an actual specimen create a n insect/bug drawing of their full body and least one detail of a unique feature. Keep in mind this only for identification of the species. Therefore **you do need exact measurements** of each feature along with exact ratios.

Goals: Become conscious of the characteristics of the species you are drawing using graphite as a medium. Refine skills and perceptions involved in creating and controlling details of the specimen.

Objectives: Create a detailed oriented drawing of a Hemipteran/Hexapods from specimen.

Problem Statement: Make a drawing in which anyone can look at your drawing and easily identify the specimen. You will need to draw 100% of specimen the entire figure along with a unique feature. You need to draw in the correct ratio. To make you drawing work more simply you will need to draw at a ratio or 300% for your bug/insect and 500% and up for your detail. (Pending your bug/insect.)

Standards:

In Observational Drawing we will be following Illinois State Standards in Visual Arts. Please note bullets points listed under each standard are setup as to how students are being assessed, either formative assessment or summative assessment.

- *Formative assessment has no grades attached, and is solely for the student to acknowledge personal progression*
- *Summative assessments let them show what they've learned*

Standard 1: Generate and conceptualize artistic ideas and work.
Enduring Understanding: Creativity and innovative thinking are essential life skills that can be developed.

Enduring Understanding: Artists and designers shape artistic investigations, following or breaking with traditions in pursuit of creative art-making goals.

- 1.1 Use multiple approaches to begin creative endeavors. ***Summative***
- 1.2 Individually or collaboratively formulate new creative problems based on student's existing artwork. ***Summative***

Standard 2: Organize and develop artistic ideas and work.

Enduring Understanding: Artists and designers experiment with forms, structures, materials, concepts, media, and art-making approaches

Enduring Understanding: Artists and designers balance experimentation and safety, freedom, and responsibility while developing and creating artworks

- 2.2 Through experimentation, practice, and persistence, demonstrate acquisition of skills and knowledge in a chosen art form. ***Summative***
- 2.6 Demonstrate understanding of the importance of balancing freedom and responsibility in the use of images, materials, tools, and equipment in the creation and circulation of creative work. ***Formative***

Standard 3: Revise, refine, and complete artistic work.

Enduring Understanding: Artists and designers develop excellence through practice and constructive critique, reflecting on, revising, and refining work over time.

- 3.1 Apply relevant criteria from traditional and contemporary cultural contexts to examine, reflect on, and plan revisions for works of art and design in progress. ***Summative***
- 3.2 Engage in constructive critique with peers, then reflect on, reengage, revise, and refine works of art and design in response to personal artistic vision. ***Summative***
- 3.3 Reflect on, reengage, revise, and refine works of art or design considering relevant traditional and contemporary criteria as well as personal artistic vision. ***Summative***

Standard 4: Select, analyze, and interpret artistic work for presentation.

Enduring Understanding: Artists and other presenters consider various techniques, methods, venues, and criteria when analyzing, selecting, and curating objects, artifacts, and artworks for preservation and presentation

- 4.1 Analyze, select, and curate artifacts or artworks for presentation and preservation. ***Formative***
- 4.2 Analyze, select, and critique personal artwork for a collection or portfolio presentation. ***Formative***

Standard 7: Perceive and analyze artistic work.

Enduring Understanding: Individual aesthetic and empathic awareness developed through engagement with art can lead to understanding and appreciation of self, others, the natural world, and constructed environments

- 7.1 Hypothesize ways in which art influences perception and understanding of human experiences. ***Summative***
- 7.2 Recognize and describe personal aesthetic and empathetic responses to the natural world and constructed environments. ***Formative***
- 7.3 Analyze how responses to art develop over time based on knowledge of, and experience with, art and life. ***Summative***

Standard 8: Construct meaningful interpretations of artistic work.

Enduring Understanding: People gain insights into meanings of artworks by engaging in the process of art criticism.

- 8.1 Communicate feelings when engaging works of art and describe subject matter, formal characteristics, and art-making approaches to discuss meanings of artwork. ***Summative***

Standard 9: Apply criteria to evaluate artistic work.

Enduring Understanding: People evaluate art based on various criteria

- 9.1 Evaluate an artwork based on given criteria. ***Summative***
- 9.2 Apply one set of criteria to evaluate more than one work of art ***Summative***

**Note: National Standards are being used for Scientific Illustration as parts of this course are currently being shared, assessed and taught globally.

Materials:
Sketchbook
Bristol board
Ink Pens Points; .8, .5, .1, .05

Centimeter ruler
Grid paper
Number H pencil
Kneaded eraser
Specimen

Project: The project is to complete an ink drawing of your specimen. In a step by step system like drawing will make the final drawing easy.

1. Complete research, both written and visual.
2. Complete all sketches. Sketches are to include 24 details and 1 final sketch. Your final sketch must to the size in which your final drawing will be.
3. Final drawing size must be at least 8.5 inches by 11 inches up to 14 inches by 17 inches.
4. Work out which type of hatching you will be using to create shading. This is to be completed on a separate sheet of Bristol board.
5. In many cases you may need to enlarge your drawing of the specimen to 150% to 200% of the actual specimen. You can do this by;
    - Using the 1 centimeter grid paper, measuring one cm on actual specimen to equal 1.5 cm or 2 cm.
    - You will need to trace your final sketch on to the Bristol Board.
    - Make sure you use the H pencil to make your sketch onto the Bristol board.
6. Now that you have the sketch on your Bristol board, you can now start inking, keep in mind that you are not to have heavy outlines. See examples on top of first page..
7. Remember to consider the features of the leaves as shown below.

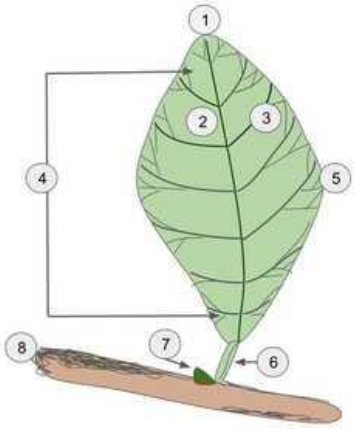
Checklist of Leaf Characteristics

- Shape
- Edge (margin)
- Tip
- Base
- Surface
- Hairiness
- Timing
- Vein patterning
- Size
- Texture
- Tone
- Stem

- Joints

Samples of sketches

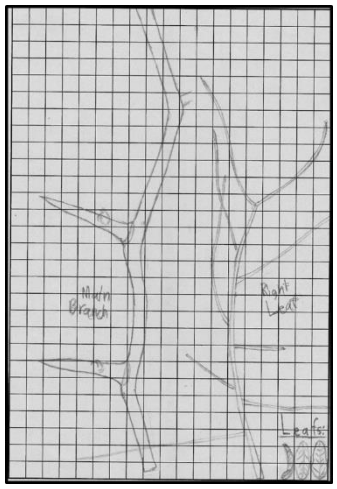
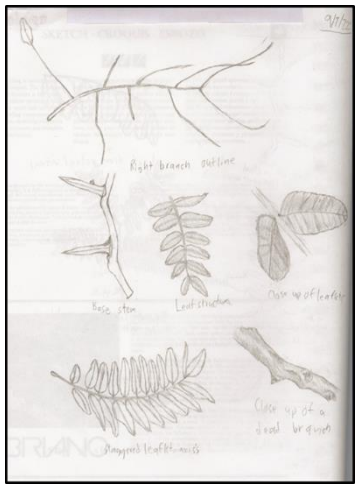
8. Keep in mind when drawing your final product you must show the items as listed in the sketch at right.
    1. Apex
    2. Midvein (Primary vein)
    3. Secondary vein.
    4. Lamina.
    5. Leaf margin
    6. Petiole
    7. Bud
    8. Stem



9. Once your ink is dried, use the kneaded eraser and erase all pencil lines.
10. Put your name and the name of the specimen you drew on the back, along with the scale in which you drew your specimen.

Examples:

1. Research/visual research paper should be set up as we did in project 1, no exceptions.
2. Sketchbooks must have 24 sketches and one final sketch. Within the sketchbook be sure to focus on the details and the scale and proportions, see below. Include both in your sketchbook.

Measurements   Details

3. Complete your final sketch, this too should be in your sketchbook, however if needed tape it into the book. See below.

4. Complete you drawing. You can start by using the light box to trace over your final sketch. Your final sketch should be of exact size, scale and proportions. Make sure that you erase all your pencils marks prior to turning it in.

NOTE: You need not draw every single leaf, as that is just too much. You are to have enough leaves so the final drawing can be recognized and the live specimen. While we are working with dried specimens

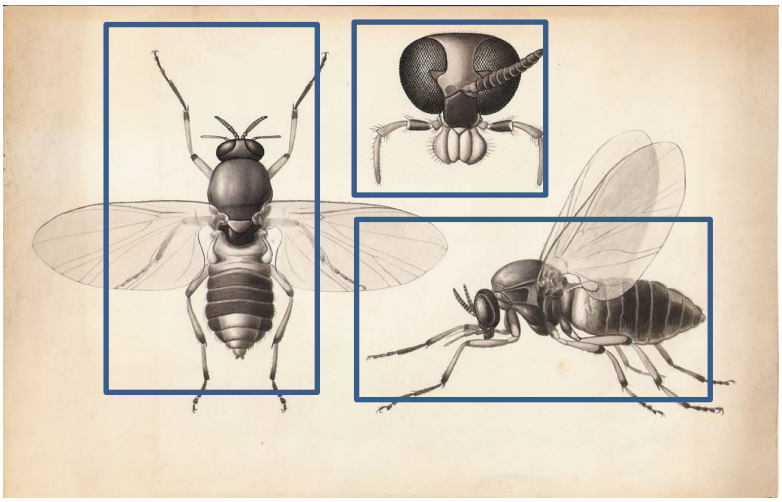
your final drawing must represent a living specimen. See the attached rubrics, for the research paper, sketchbook and final drawing.

Layouts and Inserts

Page layout is equal parts art and science. Creating something that's visually attractive and unique takes an artist's eye. However, there are several very easy to follow guidelines that you can use to create solid layouts that work for any number of cases. These principles include choosing and sticking to an alignment, structuring your whitespace properly and highlighting important elements through size, positioning, etc.

Designers often stress out far too much about the layout process. We have a tendency to approach a project while thinking that it needs to be completely unique in every respect to be worth our time and the client's money. However, if you have a good look around the web you'll see that this isn't necessarily the case. Great looking websites often use layouts that are fairly simple and not the least bit unique. It's true that the pages we designers marvel at the most are often from the peculiar sites that break the mold, but your average client just wants something usable, clean and professional.

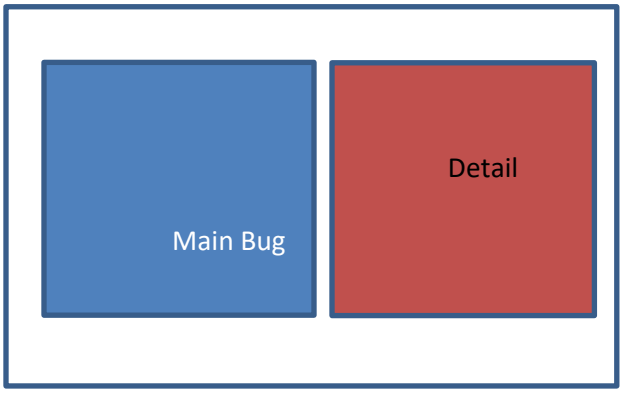
For part of this project you will be laying out your illustrations to have 2 boxes. You can create a 3 box layout, however only 2 are required. You will need to incorporate one full size bug/insect and one detail of the bug or insect. Below is an example of the three box layout if you chose to create one. Other examples how a 2 box layout would or might be set up. Keep in mind the size of your final required drawing before completing your box layout.

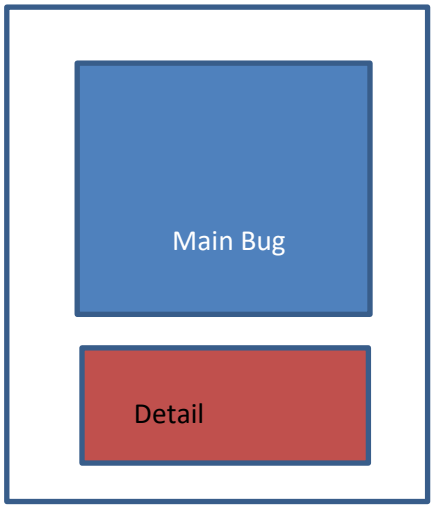


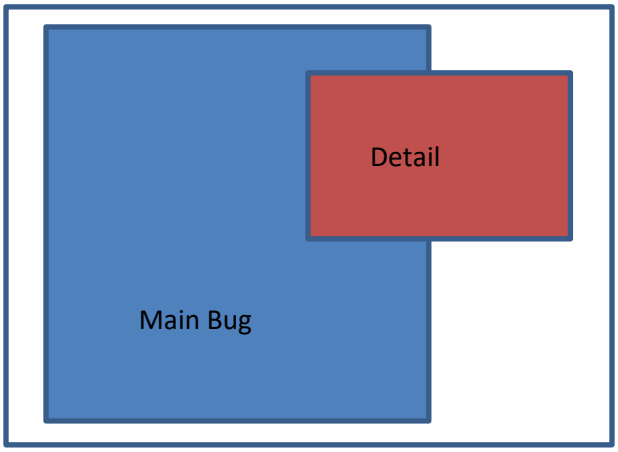
2 Box Layout Examples

Two Boxes

This is probably the simplest layout on the list. In fact, you'll be tempted to think that it's far too simple to ever fit your own needs. If this is the case, you'll be surprised if you really put some thought into how versatile the arrangement really is. The three boxes layout features one main graphic area followed by two smaller boxes underneath. Each of these can be filled with a graphic, a block of text or a mixture of both.







The two box layout is where we want to start. Using grid paper decide where you would want your three boxes. Keep in mind baseline layouts are important to the three boxes rule.

Design your boxes having alignment within the page. Consider balance within your layouts, and start your overall final sketches.

Lab Assignment

Prior to setting up your drawing, set up your grid. Draw out your grid and set it up for placement of your illustration.

Set your grid for the size and placement of your drawing. Remember we are working at a higher than 100% of the bug size, therefore you must figure on the enlarged ratio to actual the bug size. This is all part of the process. Sketch out your 2 box layout just using the grid paper, remember it must fit within your drawing paper.

Keep in Mind

We are working with bugs, in many cases very small bugs so let's rethink the unit of measure we want to use. We can use inches however, an inch is a rather large unit of measure, it is suggested you use centimeters, or picas. If your bug/insect is 3 centimeters you should be able to quantify the enlargement easily. For example, you can use a the 1 centimeter grid paper, and assume that for one centimeter of the bug you may want to enlarge it 4 times, or from one centimeter you draw within 4. When enlarging the details you must also quantify it giving it a set enlargement scale.