ART 2936c- (3 credit hours) is an introductory course to Scientific Illustration, providing students the opportunity to acquire skills of observation while illustrating a wide range of organisms. Students will explore the unique ecosystems of Florida and the multitude of species of flora and wildlife. Exploration may include plants, birds, insects, mushrooms, reptiles, fish, amphibians and mammals. Scientific Illustration offers students the opportunity to observe, study, analyze, and visually illustrate species. The skills taught in this course will further expand knowledge to offer career options in the biological workplace.

In collaboration with the Florida Museum of Natural History, the UF Natural Area Teaching Lab and the Harn Museum students enrolled in this class will have the opportunity to work from the vast collections at UF.

Instructor’s contact info:
Mindy Lighthipe
http://www.MindyLighthipe.com

Students may contact Mindy via email at: MLighthipe@arts.ufl.edu

Course objectives:
• Familiarity with the field of Scientific Illustration and its history.
• Improvement in the observation, appreciation, and analysis of the natural world.
• Learning principles of illustration such as layout design, sketching, research processes, development of ideas, and effective science communication.
• Learning techniques that are currently being used in digital media as well as traditional applications.

Prerequisites:
None, all skill levels are welcome.

Method of instruction:
Each class will be a combination of lectures, discussion, demonstrations of art techniques, study of illustrations, group and individual critiques, and individual work on illustrations. We will also visit the Harn Museum of Art, the Florida Museum of Natural History, and the Florida Natural Area Teaching Lab during the course.

Attendance policy:
This is a STUDIO CLASS, therefore students MUST be present in the classroom for the entire class period and for every class. Attendance is expected and mandatory, so you need to bring a signed medical excuse if you are sick and can’t come to class.
Please be aware of the attendance rules:

a. Two unexcused absences are allowed. A third will drop your final grade one grade, and fourth will drop your final grade two grades. Five or more absences will result in failing the course.

b. Since most of the important information about the assignments for each class will be given in the first 15 min of the class, tardiness will also affect your final grade in the following way: being more than 15 min late or leaving class early 3 times will constitute one absence.

c. There will be no make-ups for this class; if students miss classes they are responsible for completing the class assignments on their own and handling them in time.

Assignments:
Class assignments will be given every week, and class time will be used for working on these assignments, although additional time outside the class may be needed for completing each illustration. Due dates will be announced at each class, and assignments submitted after the due date will be downgraded one grade. Illustrations will be evaluated on:

a. **Communicative Ability**: Assignments must be effective at communicating a specific scientific concept, as this is the main purpose of scientific illustration. Examples of concepts are natural processes, species identification, laboratory procedures, and form and function.

b. **Accurate Drawing**: Each assignment needs to be informative and representational. Therefore, a level of accuracy in the drawings should show the subject in proper proportion, scale, color and detail.

c. **Research**: Every assignment must be the result of a process of research and should communicate specific ideas and concepts. For this class, this process may be even more important than the final result, as the main purpose is to learn to observe, study and be able to visually illustrate different components of nature.

d. **Execution & Technique**: Each assignment must be clean and well presented. Each assignment should display the proper usage of each technique taught in class.

Suggested reading materials:

Suggested online resources:
Guild of Natural Science Illustrators: [www.gnssi.org](http://www.gnssi.org)
Scientific Illustration Consortium: [www.scientificillustration.org](http://www.scientificillustration.org)
Fall 2017 Introduction to Scientific Illustration with Mindy Lighthipe

Science + art: www.science-art.com
Science and art: www.sciencefriday.com/arts/
Association of Illustrators: www.theaoi.com
Every picture tells a story: www.everypicture.com
The science picture company:
www.sciencepicturecompany.com

Grading:
Grades will be based on the following:
Class Participation  20%
Class Assignments    60%
Final Project        20%
100%

Grades-
95% - 100% (4.0) A
90%-94% (3.67) A-
86%- 89% (3.33) B+
85% (3.0) B
80%-84% (2.67) B-
79%- 76% (2.33) C+
75% (2.0) C
70%-74% (1.67) C-
66%- 69% (1.33) D+
65% (1.0) D

In this course students will be exposed to the following Skills, Techniques and Subjects.

Skills Taught:
• Perspective, measuring, and accurate drawing related to scientific illustration
• Specific light source used in scientific illustration
• Dissection of specimens and how to effectively illustrate them on an illustration plate
• Working from Photography

Techniques Taught:
• Graphite
• Pen & Ink
• Colored Pencil

Subjects:
• Bones & Fossils
• Plant Morphology and Botanical
• Insects- Butterflies, Beetles
• Shells
Fall 2017 Introduction to Scientific Illustration with Mindy Lighthipe

• Mammals- Taxidermy and skins
• Amphibians & Reptiles
• Birds- Taxidermy and skins

Final Project/Exam:
At the end of the semester the students will be given a choice of one of the following final projects:

• Scientific Illustration with dissection of parts of specimen in Black & White
• Field Guide Illustrations of 3 same species- Color or B&W
• EcoSystem- Animal, Insects, Plants in their Environment- Color or B&W

This project is the last class of the semester. There is no final exam.

Students with Disabilities- Anyone who is requesting classroom accommodation must register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this document to the Instructor when requesting accommodation.

Health and Safety Here is a link and information regarding the SA+AH H&S policy and handbook for Health and Safety in the Art Studio. (http://www.arts.ufl.edu/art/healthandsafety)

Art Supply List- *To be purchased by the 2nd class.
All other supplies will be discussed in class and information on where to purchase them.

• *1 Strathmore drawing pad 14'' X 17''. Series 400…. NOT SKETCH

• *1 pad of tracing paper or tracing vellum, same size as pad or smaller. Canson Vidalon Vellum Each 50-sheet pad is tape-bound on the short side for easy removal of pages. Sheets are 55 lb (90 gsm) weight. This is my preference.

• *Variety of Drawing Pencils. 2H, HB, 2B.

• *Assortment of erasers: kneaded, white plastic, and pink pearl

• *1 small clear plastic 6'' ruler

• *1 roll of Artist’s Repositionable Tape

• * Eraser Shield
TORTILLIONS/MEDIUM PK4 CRD- Paper Stumps for blending

Hunt crow quill pen holder + assorted nibs (not calligraphy nibs)- Nibs 102 & 107

FW Acrylic Ink or Speedball India Ink-- waterproof

Micron Pen .03 or Copic Multiliner .03 or .025 Black only

1 Journal for recording for sketching and taking field notes- Can be hard bound or spiral.

Supplies can be purchased online at [http://www.DickBlick.com](http://www.dickblick.com). There is a complete list of supplies at this link:


You may also find the supplies at:

Michael’s
3644 SW Archer Rd
Gainesville, FL 32608-2420
Phone: (352) 377-9797
Mon-Sat: 9:00am - 9:00pm
Sun: 10:00am - 7:00pm