

**ART 3807C-** (3 credit hours) is an International Study abroad course: Art and Scientific Illustration in Costa Rica. This program provides students the opportunity to acquire skills of observation while illustrating a wide range of organisms within the tropical rainforest. Students will explore the unique ecosystems of Costa Rica and the multitude of species of flora and wildlife. Exploration may include plants, birds, insects, mushrooms, reptiles, 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.

**Instructor's contact info:**

Mindy Lighthipe

<http://www.MindyLighthipe.com>

Students may contact Mindy via email at:

[MLighthipe@arts.ufl.edu](mailto:MLighthipe@arts.ufl.edu)[mighthipe@mac.com](mailto:mighthipe@mac.com)**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.
- Understanding how to collect field notes and field sketches.

**Prerequisites:**

None, all skill levels are welcome.

**Method of instruction:**

Each day will be a combination of lectures, hikes with a naturalist with discussion, demonstrations of art techniques, study of illustrations, group and individual critiques, and individual work on illustrations.

**Attendance policy:**

This is a **Study Abroad**, therefore students **MUST** be present for the entire 7 days 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.

**Assignments:**

Class assignments will be given daily and students must complete these assignments in a sketchbook to be handed in on the last day of the course.

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, 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 explored during this course. For this class, this process of field sketching and not taking are 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.

**Suggested reading materials: (There is no required Textbook)**

1. The Handbook of Scientific Illustration. 2003. Edited by Elaine R. S. Hodges, with Steve Buchanan, John Cody, and Trudy Nicholson. John Wiley & sons, Inc. New Jersey, USA.
2. Amazing Rare Things: The Art of Natural History in the Age of Discovery. David Attenborough, Susan Owens, Martin Clayton, and Rea Alezandratos.
3. Manual of Scientific Illustration. Charles S. Papp. 1976. American Visual Aid Books. Sacramento, California, USA.
4. The Art of Botanical and Bird Illustration. 2017 Mindy Lighthipe, Walter Foster Publishing

**Suggested online resources:**

Guild of Natural Science Illustrators: [www.gnsi.org](http://www.gnsi.org)

Scientific Illustration Consortium: [www.scientificillustration.org](http://www.scientificillustration.org)

Science + art: [www.science-art.com](http://www.science-art.com)

Science and art: [www.sciencefriday.com/arts/](http://www.sciencefriday.com/arts/)

Association of Illustrators: [www.theaoi.com](http://www.theaoi.com)

Every picture tells a story: [www.everypicture.com](http://www.everypicture.com)

The science picture company: [www.sciencepicturecompany.com](http://www.sciencepicturecompany.com)

**Grading: Class Participation & Sketchbook Assignments - 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.



There is no final exam.

**Skills Taught:**

- Perspective, measuring, and accurate drawing related to scientific illustration
- Specific light source used in scientific illustration
- Working from Photography
- Field Sketching and Accurate Field Note Taking

**Techniques Taught:**

- Graphite
- Pen & Ink
- Colored Pencil or Watercolor

**Subjects:**

- Plant Morphology and Botanical
- Insects- Butterflies, Beetles
- Mammals
- Amphibians & Reptiles
- Birds

**Final Project/Exam:**

At the end of the course on the last day students will turn in their sketchbooks: