

NATURAL SCIENCE ILLUSTRATION (NS) | Amy Bartlett Wright, Certificate Advisor

From Lady's Slipper Orchids to Eastern Painted Turtles to Ruby-throated Hummingbirds, scientific illustrators must communicate accurate natural science information while applying artistic skills of design, drawing and painting. In this program, students develop the observational skills necessary for realistic depiction while they hone their artistic abilities to create visually powerful illustrations. Students work from nature at all times and render in a variety of media and techniques to find their chosen medium. The program uses unique RISD facilities, such as the Edna Lawrence Nature Laboratory, and local resources, including the Roger Williams Park Museum of Natural History, Zoo and Greenhouse, to aid students in the process of observing and depicting the natural world. Students create portfolios of their strongest work, demonstrating competency in traditional and digital rendering of Natural Science subjects for the purpose of professional marketing and potential publication.

ADVISOR BIO:

Amy Bartlett Wright: BA, University of Maryland; Certificate, Scientific and Technical Illustration, RISD|CE. An accomplished muralist and scientific illustrator, Wright has painted commissions for the Smithsonian Institution, Staten Island Zoo, Roger Williams Park Zoo, Buttonwood Park Zoo, New England Aquarium, Museum of Science Boston, US Fish and Wildlife Service, Save The Bay and National Geographic Society. She is a member of the Society of Animal Artists and a 2009-2010 RISD|CE Teacher of Excellence.

REQUIRED COURSES	PREREQUISITES	SEMESTER	HOURS
Foundation Level			
Drawing I	None	All	36
Two-Dimensional Design	None	All	36
Color Theory	None	All	36
Introduction to Illustration	None	F	18
Level One			
Drawing II	Drawing I	All	36
Digital Tools for Print Design	None	All	36
Adobe Photoshop I	Digital Tools for Print Design	All	36
Level Two			
Drawing from Nature: Form + Structure	All above courses	F	36
Painting from Nature: Color + Light	All above courses	SP	36
Preliminary Portfolio Review	All above courses	*	
Professional Practices			
How Professionals Design Their Portfolios: Natural Science Illustration	All above courses	W	3
Professional Practices for the Visual Arts or the equivalent	None	W, SU	18
Portfolio			
Final Projects Studio: Natural Science Illustration	All above courses	SP	36
Final Portfolio Review	All above courses	SP	
Electives			
Courses designated NS-E (varies by semester) totaling 72 contact hours	Level one	All	72

* Individually scheduled.

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total contact hours: **435**

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FOUNDATION LEVEL

Drawing I

FOUND-2214

For amateur and professional alike, drawing skills are fundamental to the artist's visual education. Through guided practice, beginning students sharpen their powers of observation as they learn to translate what they see into drawings. Using basic tools and materials, students develop their drawing skills by exploring concepts such as line, form, value, proportion, perspective and composition. Through a series of graduated exercises, students learn to draw the figure, still lifes and the environment with confidence and prepare for further work in a variety of art media.

Two-Dimensional Design

FOUND-1815

Design is the discipline underlying all forms of visual expression, and an understanding of two-dimensional design principles is the basis for all 2D art forms. This course introduces students to the formal elements of design: line, shape, pattern, value, texture, color and space. Working through a variety of challenging exercises, students use these elements to solve problems of visual organization. The placement of visual elements into an organized whole is the basis of composition, and skills acquired in this class have direct applications to anyone working in two-dimensional media, from advertising art directors to illustrators, interior designers and painters.

Color Theory

FOUND-2215

Van Gogh, Matisse, Titian and even Warhol were masterful colorists who used color quite consciously to create powerful drama in their work. Indeed, the dynamics of color are fundamental to virtually all design, illustration and painting. In this course, students explore how the concepts of value, hue and intensity relate to design and how the use of color is integral to a piece's effect and ultimate success. As students explore the specific applications of color used by professionals in advertising, illustration and two- and three-dimensional design, they come to understand the integration of art and science we call color theory.

Introduction to Illustration

ILUS-3580

From Maurice Sendak's *Where the Wild Things Are* to Audubon's naturalist watercolors, to Mike Mignola's *Hellboy* creation, illustration encompasses many approaches to making pictures tell stories. This course introduces the fascinating relationship between image and text, and investigates the multi-faceted process of interpreting and translating words into pictures. Projects are designed to ignite the imagination, help students gain skills and gather information they need to begin illustrating. With a focus on children's books, comic books and natural science applications, students are able to tailor projects to their specific interests, and considerations of composition, medium, personal style and ways to draw and hold viewers' attention are part of the discussion. Additionally, the business side of illustration, including the art of marketing and pitching your work to publishing houses, is addressed.

LEVEL ONE

Drawing II

DWG-2260

This next-step course is a continuation of *Drawing I* and is designed to further strengthen and refine drawing and compositional abilities. Students explore the descriptive and expressive manipulation of materials such as charcoal, graphite pencil, pen and ink, Conté crayon, and colored media, while learning to create more volumetric and spatial drawings through the use of value and composition. In the process, students work from still lifes, interiors and models as they consider gesture and contour, planar analysis, foreshortening, proportion, and volumetric rendering of forms. Ultimately students develop confidence approaching a wide variety of subject matter as part of a well-composed drawing.

Digital Tools for Print Design

DFOU-3543

This course helps novice users become more confident – and intermediate students more competent – with computer-based design. We introduce the Apple computer and its operating system along with Adobe Photoshop, Illustrator and InDesign, and discuss the capture, transfer, manipulation and delivery of images. Proper digital workflow is revealed through class exercises and lecture, as students learn to output content for the printed page. Completion of this course provides you with valuable skill sets relied upon by all productive graphic designers, illustrators and draftsmen.

Adobe Photoshop I

DFOU-2533

Whether images are scanned, photographed or digitally drawn, Adobe Photoshop is the industry-standard program for manipulating them. This introduction to Photoshop focuses on combining, retouching and modifying images through class exercises and projects in which students work with Photoshop tools like the airbrush, paintbrush, cloning and pattern stamps, eraser and crop tool. By the end of the course, students understand Photoshop's capabilities and are able to handle basic file formats and layers, combine images, and create effects using grayscale, color and filters.

LEVEL TWO

Drawing from Nature: Form + Structure

NATUR-2285

This course guides students as they learn to create accurate drawings from nature. Focusing on the definition of form and structure, students carefully observe birds, shells, insects, bones, plants, flowers and more with the objective of translating proportion and depth onto the two-dimensional page and creating realistic renderings. Line, tone and value are explored through work in pencil, pen and ink, and ink wash. Design and composition are also covered. Although the course is highly specialized in subject matter, skills attained here are applicable to a wide range of drawing subjects, media and styles. *Note: This is the first semester of a two-part course. Certificate students enrolled in the fall must also register for the spring course, Painting from Nature: Color and Light.*

Painting from Nature: Color + Light

NATUR-2286

How does one choose, mix and apply color to depict a natural object's form, structure, texture and pattern? This course helps students develop the means to achieve these and other representational goals. Through demonstrations and hands-on exercises, students explore the principles of color while learning rendering techniques for colored pencil, watercolor and acrylic. Lighting is emphasized as a means of heightening the realistic qualities of a specimen. Plants, birds, insects and other animals are the subjects, but the objectives may include creating visuals for children's books and commissioned paintings as well as publication in scientific journals.

PROFESSIONAL PRACTICES

How Professionals Design Their Portfolios: Natural Science Illustration

NATUR-3505

These workshops, offered every winter, demonstrate how professionals in various fine art and design fields market their work and themselves. Current and potential students – as well as those considering a career change – have the opportunity to meet practitioners in select disciplines and to see actual portfolios or demo reels that have proven successful.

Professional Practices for the Visual Arts

PRAC-2639

The practicing artist has no choice but to learn the survival skills necessary for a successful commercial art career. Specific topics covered in this six-session course include interacting with clients, financial planning and record keeping, billing and collections, copyrights, contracts and legal issues, marketing and promotion, and time management. Tax, accounting and legal experts serve as guest lecturers. The material covered is suitable for designers, illustrators, photographers, and all other commercial artists.

PORTFOLIO

Final Projects Studio: Natural Science Illustration

NATUR-0928

Students in the Natural Science Illustration Certificate Program complete their studies with a final independent project or by serving as an intern with a scientist. In the first option, under the supervision of an instructor, students write a proposal describing the goals, educational objectives and body of work they intend to produce. Instructor and student then meet during the semester to monitor progress and evaluate work. Alternatively, with permission of the Certificate Advisor, students may take part in an internship with a scientist. This internship offers students an opportunity to gain professional illustration experience and to have their work appear in scientific publications. Student and scientist are matched according to the student's interests and the scientist's needs, and work is periodically reviewed by the Certificate Advisor or supervising instructor. *Note: Meeting times are individually scheduled.*