Roger Williams University **Course Syllabus – *1-p. version – Full version provided electronically***

BIO/VARTS 235 Biological Illustration (3 credits)

Time: Mondays & Thursdays, 3:20-4:50 Location: MNS 213

Instructor: Dr. Loren B. Byrne Phone: X 3890 Email: lbyrne@rwu.edu
Office: 227 MNS Office Hours: Mon & Wed 11-12; Mon & Thurs 1-2; or by appt.

Course description:

Scientific illustrations are useful means of communicating information about biological subjects, especially in reports and publications; often, it is easier to explain and understand something with a drawing than via words. In a complementary way, illustrations are also legitimate art works that can move the viewer to contemplate the beauty and wonder of nature. Further, scientists and artists can utilize the practice of illustration to improve their critical observation and thinking skills. This course serves all of these purposes by training students in the scientific, artistic and technical aspects of "seeing" biological subjects and creating realistic illustrations that convey basic scientific information about them (i.e., the drawing as data) in interpretable and visually appealing ways.

A range of subjects and media will be explored to expose students to a variety of illustration techniques. The course will begin with a series of basic exercises to help students improve their critical observation, visual interpretation and drawing skills. Subsequently, a series of projects will help students iteratively refine their skills for finishing illustrations in forms suitable for exhibition or publication. A final project will allow students free reign for exploring more personal, creative and expressionistic dimensions of biological illustration. Throughout the course, the practice of illustration will be complemented by discussions about relationships between art and science. Also, critique sessions will allow students to discuss and evaluate each other's work.

No prior drawing experience is required; the instructor will work with students individually to improve their skills beyond those they already possess.

Note: *This course does NOT fulfill requirements for the Biology or VARTS majors, minors or core concentrations*

Required materials:

No required textbook. Reading selections will be provided.
Students are responsible for obtaining all materials required for completing exercises and projects. (See appended list.)
Students may also obtain their own biological subjects but some will be provided.

Course outcomes:

After this course students should be able to:

1. Create detailed and realistic illustrations in a range of media (including pencil, pen and ink, color) that clearly convey essential scientific information about the subjects
2. Explain essential considerations for making decisions about effective illustration methods (e.g., choice of medium, scaling, reduction, scientific goals) & provide constructive critique of their own and others' illustrations
3. Describe the intent of their work and assess its success for communicating both scientific information and representing artistic presentations
4. Situate their work in a historical and contemporary cultural context relating to the value of conveying visual scientific information, the beaty of nature and the expressive abilities of themselves as artists
5. Discuss relationships between art and science, including their personal reflections about the value of exploring these relationships for both artists and scientists
6. Present a portfolio of work from across the semester, including chosen pieces for the final exhibition, and explain how the work reflects themselves as individual artistic and scientific thinkers and communicators

Assessment:

Students will be assessed using the following criteria (with percent of final grade):

- Completion of all in-class and homework exercises & assignments 30%
- Numbered projects (% equally divided among them) 30%
- Attendance & participation in discussions & critiques 15%
- Demonstrated awareness of the student's own evolving abilities (via one-on-one discussions, reflective writing & critique contributions) 15%
- Observed commitment to & improvements in basic skills through the semester 10%

Grading scale and the meaning of grades:

A= $\geq$ 93% Excellent A- = 90-92.9% Great B+ = 87-89.9% Very Good B= 83-86.9% Good B- = 80-82.9% Good
C+= 77-79.9% Average C= 73-76.9% Average C- = 70-72.9% Average D= 60-69.9% Poor F= $\leq$59.9% Failure

Important dates:

Feb 19 - last day to drop without receiving a W March 20 - last day to drop and receive a W

Essential info. about the following topics is provided on the electronic version sent via email and located in Bridges. You are <u>fully responsible</u> for reviewing this information and will be held accountable to all official policies provided there: Assignment submission, class communications; attendance policy; academic integrity; academic support services.

Critical Reminder: Do NOT plagiarize! This course uses a program in *Bridges* to identify it and will document any instances of academic dishonesty in any student's permanent file and/or will allow a student to fail the course. *<u>You are fully responsible for knowing what constitutes all types of plagiarism</u>, as described here:* https://www.turnitin.com/static/plagiarism-spectrum/.

Course schedule:

Week	Main Topics	Exercises & Projects (some may be homework)
1&2	Introduction & goals Drawing as seeing Right & left brain modes	Making marks on paper – intro exercises The power & meaning of lines Vase, Upside-down & blind & modified contour drawings Negative space and still life
3	Importance of light & shadow Rendering, shading and blending Drawings as data: measuring & scaling Proportion & perspective	Clay "amoeba" drawings Invertebrate and/or skull drawings
4 & 5	What's the scientist's story? Clear and interpretable illustrations Reducing & the publication process	Project # 1 (pencil)
6 & 7	Ink & stippling	Projects #2a and 2b (ink)
8 & 9	The biological world is colorful	Project #3 (color, student choice of medium)
10 & 11	The biological world is dynamic Conveying dynamism, process & change	Project #4 (student choice of medium)
12 & 13	Stop moving! Drawing living organisms	Sketching in the field (incl. required zoo trip)
14 & 15	Creative expression with illustrations See how far we've come!	Final Project #5 Revisit the beginning exercises

Final exam period: Required final critique session: Friday May 8, 5-7pm

*****The professor reserves the right to adjust this schedule and modify, add or reorder exercises or projects as needed.*****