

Biology with Laboratory

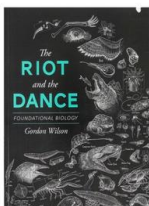
Instructor: Jill Cooke

Tuition: \$330 (½ due at registration; ½ due first day of classes in August)

Credit: 1 Credit

Prerequisites: none

Textbook: The Riot and the Dance (ISBN: 9781591281238)—Required purchase



Lab Manual: The Riot and the Dance (ISBN: 9781591281948)—Required purchase



Lab Notebook: 3-ring binder that student will fill with both printer paper (for drawings of specimen and slides) and lined paper –Required purchase

Additional books: Life in a Bucket of Soil (ISBN: 978-0486410579), A World in a Drop of Water (ISBN: 978-0486403816, The Outermost House (ISBN: 978-0805073683)—ALL Required

Where books can be found: The Riot and the Dance text and Lab Manual can be found on the website Rainbow Resource. The three other additional books can be found inexpensively on Amazon and/or McKays, some you can read on a Kindle or Audio book sources.

Materials: All provided by teacher: Lab equipment: microscope slides, dissection materials including earthworm, starfish, clam, grasshopper, crayfish, perch, frog, flowers/seeds/fruit/fungi– DNA extraction, and other lab materials.

Average homework: 4 hours/week, 1 hour/day Monday-Thursday. Study guides are assigned to go along with reading the text. This must be filled out by student as they are reading the text. There will be labs and tests of the material – study guides need to be reviewed daily the week before the test. Students will keep notebooks of drawings and observations of lab assignments (slides, dissections, observations of live specimen).

Student expectations: To complete text, study guides, tests, dissections, and relevant lab experiments and reports. To give two class presentations (one each semester, each will be a short, five-minute presentation).

Course objectives/description:

- 1) To study the 5 Kingdoms of Biology as well as provide a general understanding of the scientific method, genetics, cellular structure, mitosis, meiosis, and other biological topics.
- 2) To complete text, study guides, and experiments along with viewing microscopic slides and performing dissections.
- 3) To understand and perform dissections on 6-7 animal specimens.
- 4) To encourage class participation with bi-yearly class reports and study guide input.
- 5) To motivate and encourage interest and the desire to learn and understand the study of Biology and its relevance to everyday life.
- 6) To lift up the Creator and His ways and design as related to the study of science.
- 7) To promote each student's participation and ownership of the learning process.