

COURSE TITLE: Gateway to Graduate Studies in Biology
COURSE NUMBER: Biol-824
TERM OFFERED: Fall 2016
INSTRUCTOR: F. Bonier (bonierf@queensu.ca; Biosci 3523)

TENTATIVE SCHEDULE: QUBS weekend, 22-23 October 2016, 90-minute class sessions twice weekly (days and times TBD) from 17 October through 25 November, in BIOSCI (ROOM TBD).

Outline of Topics:

The overall goal of this course is to introduce intellectual and professional skills important for success in graduate school and in careers in Biology. Course structure and content is applicable to all fields of biology, from ecology and evolution to cell biology, biochemistry, and molecular biology.

Topics will include:

The scientific method, strong inference, study design, natural history, statistical analysis, communication in science (written and oral), the publishing process, scientific misconduct, work-life balance, mentoring, and more. The final assignment for the course will be a research proposal for the student's graduate thesis project.

Method of Instruction and Hours Per week:

The course will include a mandatory weekend at QUBS (22-23 October 2015), and 6 weeks of twice weekly 90-minute class sessions. The combined hours for the QUBS weekend, in-class portion, and independent work (hands-on work, readings, and writing assignments) is expected to sum to approximately 110-120 hours for the semester (so this is a full 3cr course).

Student Assessment: Tentatively, students will be marked on participation in discussion, activities (10%), QUBS project (15%), draft of abstract (5%), final abstract (10%), draft of proposal (10%), final oral proposal presentation (20%), peer evaluations of 3 draft proposals (5%), and final proposal (25%). *NOTE:* Students enrolled in the accelerated MSc program may not submit their BIOL537 proposal or present their BIOL537 oral presentation to satisfy the requirements of this course.

Readings from the primary and secondary literature. No required text.

Prerequisite and Assumed Background: This course is appropriate for all MCIB and EEB graduate students, and is particularly recommended for new students. PhD students are welcomed.

Other Instructions for Students: The QUBS weekend is mandatory, and a small cost-recovery fee (~\$60) will be applied.

Equivalent: none