

Course Outline: ENTO 330, Insect Biology (Fall 2013)

Instructor: Prof. Chris Buddle (MS2-071, 514-398-8026, chris.buddle@mcgill.ca)

Teaching Assistant: TBA

Lectures: Mon., Wed., Fri. 1135-1225, R3-048). **Laboratories:** TBA (see below)

Office Hours: Wed., 1230-1330 (or by appointment).

Course Overview: An introduction to the biology of insects. **Lectures** will cover different topics including but not limited to: importance and diversity of insects; insect morphology, anatomy and physiology; reproduction; metamorphosis; insect classification and survey of the Orders; insect ecology; insect behaviour and insect pest management. Some Friday lectures will be devoted to discussions around primary literature about Entomology. The **laboratories** are an introduction to the external anatomy of insects in relation to ecology and life history; recognition of the major groups of insects, and recognition of common insect species. Laboratories will be set-up as “drop-in” labs in the CC basement (Days, times **To Be Announced**).

Learning Outcomes: By the end of this course students will:

- (1) Explore and discover insect diversity and biology via lectures, discussions and a laboratory, on topics ranging from anatomy and physiology to diversity and life-history.
- (2) Gain in-depth and working knowledge of major Insect Orders, including opportunity to teach peers about the biology and diversity of Orders, drawing upon personal experience, primary literature, web-based resources, specimens, and textbooks.
- (3) Write about an insect species, from its evolutionary history to its biology, natural history and diagnostic characteristics.
- (4) Discuss, debate, and write about current research in Entomology, from the primary literature
- (5) Appreciate the important role of insects in society, from economics to art.

Course Materials: There is no required textbook, but various materials (e.g., handouts, primary scientific literature, web links) will be available through the **mycourses** site for this course. Laboratory materials will be available at the Lyman Entomological Museum

Evaluation:

1. Teaching the Insect Orders (20%): Students will give lectures on some of the different insect orders. This will involve group work. Students will present lecture(s), provide handouts, and links to resources (including primary literature). Additional details to be provided in class.

2. Entomology Research Papers (10%): Students will propose, defend, and vote on the ‘top 5’ research papers in Entomology from the last three years. On-line discussions will be graded (5%), as will a final, (group-based) blog post on the papers (5%) (due date TBD*).

2. Insect Natural History written assignment (15%, before midnight on Sunday 17 November*). Additional details to follow.

3. Laboratory Tests (2x10%=20%). These will be ‘hands-on’ examinations involving laboratory materials (Dates/Times TBA).

4. Final Examination (35%). Held during the final examination period (Date, Time TBA)

McGill University Statements:

“McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/students/srr/honest/ for more information).

“In accord with McGill University’s Charter of Students’ Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

*Late Policy: there is no late policy. Late assignments are not accepted & will receive a grade of zero