BIOL 411 – Insect Ecology

General Course Syllabus (as of June 2019)

About the Course

Course Description: A course on the population, community, and evolutionary ecology of insects, and the application of the principles of insect ecology to applied questions.

Course Format: Lecture Credits: 3 Prerequisites: Either (a) BIOL 205 or (b) all of AGRO 327, BIOL 327. Equivalents: APBI 427

Learning Objectives

By the end of the term, students should be able to:

- Discuss and critique key topics in insect ecology.
- Find, read, interpret, and summarize primary literature in insect ecology.
- Conduct an original research project in insect ecology, including collecting original data, analyzing data, and writing a scientific paper in journal submission format.
- Conduct basic statistical analyses in R.

Textbooks and Additional Resources

There is no textbook for this course. <u>Course materials and readings</u> are posted on Canvas.

Lecture Topics

Population biology, Predator-Prey Dynamics, Insect-Plant Interactions, Thermal Ecology, Pollinator Ecology, Disease Vectors, Biological Control, Invasive Species

Evaluation

Students will be evaluated on:

- Critiquing and presenting papers from the primary literature.
- Research Project Collecting original data, statistical analysis, writing up the project in manuscript format.
- Midterm Exam long and short-answer questions.
- Final Exam long and short-answer questions.

University Policies:

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence.

UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom.

UBC provides appropriate accommodation for students with disabilities and for religious, spiritual and cultural observances.

UBC values academic honesty and students ae expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions.

Details of the policies and how to access support are available on the UBC Senate website.