

INSECTS AND PLANTS

Fall 2022

Credits: 1

Course number: IDH 2930, Class Number: 27567

Schedule: Thursday, period 3 (9:35 am – 10:26 am)

Location: Room 1027 Entomology Department

See attached map

Instructors

Dr. Andrei Sourakov

Dr. Keith Willmott

McGuire Center for Lepidoptera, Room 212 (second floor)

Florida Museum of Natural History

PO Box 112710

TEL: (352) 273-2013

Email: asourakov@flmnh.ufl.edu; kwillmott@flmnh.ufl.edu

Office hours

By appointment

Course description

Insects and plants are intimately connected and have been so for 300 million years. During this time, the evolutionary arms-race between the two groups has produced examples of co-existence more fantastic than any science-fiction. During this course, we will use the textbook to stimulate more in-depth discussions of diverse topics linked to insect-plant interactions, including co-evolution, chemical ecology, predator-prey relationships, mimicry, natural selection, camouflage, host-mediated speciation and adaptive radiation. In addition to lectures and discussion sessions, students will have a chance to visit the collections of the Florida Museum of Natural History and of the Division of Plant Industry, in addition to the Natural Area Teaching Laboratory located behind the Florida Museum of Natural History, and the Chemical Ecology Laboratory of USDA. Students will gain an appreciation and understanding of the evolution of two of the most important groups of organisms on the planet, in addition to developing their ability to think critically about scientific research. This course is intended to stimulate interest in the natural world, in which insects and plants form the great majority of species, and there are no prerequisites beyond a fascination in the diversity of life.

Objectives and basis for grading

Lectures

Short lectures during each class will provide an introduction and describe classical and contemporary research relevant to each week's topic. Students will be introduced to a broad variety of research methods and will learn common empirical patterns, processes and theories proposed to explain them. Additional articles from the primary scientific literature may be suggested or required as background reading in preparation for each lecture.

Class discussion

During each class, we will have time for discussions of the course textbook. All students are expected to contribute in class and the overall grade will reflect this contribution. Students are not expected to fully understand any set literature, but are expected to come to class with at least two questions prepared about aspects of the literature reviewed, including concepts that they do not understand or would like to discuss further.

Grading % by activity

Activity	% of final grade
Attendance	50
Class discussions	50

A = 95-100%

A- = 90-94%

B = 85-89%

B- = 80-84%

C = 75-79%

C- = 70-74%

D = 65-69%

D- = 60-64%

E = <60%

Current UF grading policies

See: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Class attendance, work and exam policies

Students are expected to attend all classes unless there are valid reasons for absence, and part of the grade will reflect class attendance. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Textbook will be provided to students on loan hence not required.

Edward S. Ross (2014). *Insects and Plants. A Living Theater*. Mariposa Press. 214pp.

CLASS READING ASSIGNMENTS

WEEK 1

August 25

Introduction

WEEK 2

September 1

CLASS DISCUSSION: *Insects and Plants*: pp. xix-xxv, 1-18

WEEK 3

September 8

CLASS DISCUSSION: *Insects and Plants*: pp. 19-37

WEEK 4

September 15

CLASS DISCUSSION: *Insects and Plants*: pp. 38-54

WEEK 5

September 22

CLASS DISCUSSION: *Insects and Plants*: pp. 55-69

WEEK 6

September 29

CLASS DISCUSSION: *Insects and Plants*: pp. 70-85

WEEK 7

October 6

CLASS DISCUSSION: *Insects and Plants*: pp. 86-105

WEEK 8

October 13

CLASS DISCUSSION: *Insects and Plants*: pp. 106-112

WEEK 9

October 20

CLASS DISCUSSION: *Insects and Plants*: pp. 113-126

WEEK 10

October 27

CLASS DISCUSSION: *Insects and Plants*: pp. 127-141

WEEK 11

November 3

CLASS DISCUSSION: *Insects and Plants*: pp. 142-155

November 10

Holiday

WEEK 12

November 17

CLASS DISCUSSION: *Insects and Plants*: pp. 156-169

November 24 - **Holiday (note a larger reading assignment due Dec 2)**

WEEK 13

December 1

CLASS DISCUSSION: *Insects and Plants*: pp. 170-205

