

Global Change and Insects Declines

ENY 4932/6934 & ZOO 4926/6927

Spring 2022

General Class Information:

Course Summary

This course will introduce graduate students to the global impacts of anthropogenic change on insect diversity and abundance. Each week we will give lectures, and ask students to read pertinent papers, on important topics such as pollution, pesticides, and climate change, and we will then have group discussions on how these factors are impacting insects in Florida.

Credits:

3 credit hours

Instructors

Dr. Akito Kawahara

Associate Curator of Entomology

Florida Museum of Natural History

Email: kawahara@flmnh.ufl.edu

Office hours: By appointment. Office: 218 McGuire Hall

Dr. Lary Reeves

Assistant Professor

Entomology and Nematology Department

Florida Medical Entomology Laboratory

200 9th St. SE, Vero Beach, FL 32962

Office hours: By appointment.

Dr. David Plotkin

Postdoctoral Fellow

Florida Museum of Natural History

Email: dplotkin@flmnh.ufl.edu

Office hours: By appointment. Office: 221 McGuire Hall.

Course Meetings

Monday and Wednesday, Period 5 (11:45 am – 12:35 pm).

The course will meet twice each week, online only. For most weeks, one class (Monday) will be a lecture and the other (Wednesday) will be a student-led presentation and paper discussion. Readings will be distributed by Canvas before each class.

Grading and Exams:

Grades will be based on a student presentation (40% of final grade), weekly participation (30% of final grade), and a final exam via Canvas (30% of final grade).

The student-led presentations should include a short (~10 minute) summary of the paper assigned for that week's discussion, using Powerpoint. The student leading the presentation should also prepare to initiate further discussion by asking a few open-ended questions about the paper, or questions about topics closely related to the paper. A list of papers will be provided at the start of the semester, and students will sign up to present one of those papers on a specific Wednesday.

Participation implies attendance and active participation in all classes. Students will be expected to read assigned course materials before each class.

Attendance Policy:

Students are expected to attend all classes. Absences will be excused with a doctor's note provided within 1 week or if previously arranged with the instructors.

Course Details

Schedule

Week	Date	Topic	Lecturer	Reading
1	January 5	Intro	Akito Kawahara	TBD
2	January 10	Evaluating and addressing declines	Lary Reeves	Kawahara et al. (2021)
	January 12	Discussion		
3	January 19	Habitat destruction	Guest Lecture (Jaret Daniels)	TBD
4	January 24	Habitat destruction 2	David Plotkin	TBD
	January 26	Discussion		
5	January 31	Pesticides – vector control	Lary Reeves	TBD
	February 2	Discussion		
6	February 7	Pesticides 2 - bees	Guest Lecture	TBD
	February 9	Discussion		
7	February 14	Water pollution	David Plotkin	TBD
	February 16	Discussion		
8	February 21	Light pollution	Guest Lecture (Yash Sondhi)	Owens et al. (2020)
	February 23	Discussion		
9	February 28	Noise pollution	Akito Kawahara	TBD
	March 2	Discussion		
10	March 14	Global warming	Guest Lecture	TBD
	March 16	Discussion		
11	March 21	Global warming 2	David Plotkin	TBD
	March 23	Discussion		
12	March 28	Droughts and rainfall impacts	Akito Kawahara	TBD
	March 30	Discussion		
13	April 4	Invasive species	Lary Reeves	TBD
	April 6	Invasive species 2	David Plotkin	

14	April 11	Over-collecting	Akito Kawahara	TBD
	April 13	Discussion		
15	April 18	Environmental change and Florida insects	Lary Reeves	TBD
	April 20	Discussion		
16	Exam Week	Final Exam		

Final Exam: TBD (time to be informed in class)

University of Florida Policy Statements

Grades and Grade Points

For information on current UF policies for assigning grade points, see:
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Absences and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at:
<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *"On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see:
<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead

to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/
 - Counseling Services
 - Groups and Workshops
 - Outreach and Consultation
 - Self-Help Library
 - Training Programs
- U Matter We Care, www.umatter.ufl.edu/
- Career Resource Center, First Floor JWRU, 392-1601, www.crc.ufl.edu/

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 392-8565, www.dso.ufl.edu/drc/

Student Complaints

Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See <http://www.distance.ufl.edu/student-complaint-process> for more details.

Sexual Harassment

It is the policy of The University of Florida to provide an educational and working environment for its students, faculty, and staff that is free from sex discrimination and sexual harassment. In accordance with federal and state law, the University prohibits discrimination on the basis of sex, including sexual harassment. Sex discrimination and sexual harassment will not be tolerated, and individuals who engage in such conduct will be subject to disciplinary action. The University encourages students, faculty, staff, and visitors to promptly report sex discrimination and sexual harassment. If you believe you have been subjected to

sex discrimination or sexual harassment please report the incident to me or any University official, administrator, or supervisor. The Office of Human Resource Services investigates all complaints. Incidents should be reported as soon as possible after the time of their occurrence (larry-ellis@ufl.edu).