

Seminar: Risk and Ethics in Biological Control

ENY 6934, 1 credit

Synchronous Zoom

TH 3-4:45

Instructor: Dr. Carey Minter
Biological Control Research and Containment Lab Room 104
UF/IFAS Indian River Research and Education Center
2199 S. Rock Rd.
Fort Pierce, FL 34945
c.minteerkillian@ufl.edu
772-577-7379

Class period: Thursdays, 3-4:45

Room: Via Zoom

Office hours: Immediately after class and by appointment

Course Description: This course is one of the seminar courses offered each semester in the Department of Entomology & Nematology to meet the core course requirements. The purpose of these seminars is to give students practice in preparing and presenting a 30-35-minute seminar on a topic of interest. Master's students are required to take one credit of seminar and PhD students to take two credits. This seminar focuses on the risks and ethics involved with the practice of classical biological control through weekly discussion of controversial biological control programs and student debates.

Distance access:

Join from PC, Mac, Linux, iOS or Android: <https://ufl.zoom.us/j/92507138952>

Meeting ID: 925 0713 8952

Please mute your microphone when not speaking.

Objectives and Goals:

- Demonstrate an understanding of the risk and underlying ethical concerns associated with classical biological control programs and how these have changed over time.
- Assess factors such as benefit ratios, conflicts of interest, and “do-nothing” costs associated with the complexities of classical biological control programs.
- Develop familiarity with current and past classical biological control projects and conflicts associated with each.

- Demonstrate improved interpersonal communication, especially about controversial issues in science.

Grading: This ENY 6934 seminar is a S/U graded course. Students will earn a satisfactory grade by earning points in attendance, delivery of one presentation, participation in article review discussions, and participation in student debates. Unless an acceptable excuse is presented to the course instructor within one week of an absence, a student will receive a 5-point deduction for a missed class. Students may also receive a point deduction for late arrival to class. If a student does not post his/her journal article for discussion by at least 5pm on the Monday prior to the designated course period, a 10-point deduction of their presentation score will occur.

Grading Scale:

Participation (article discussion)	50
Submission of presentation topic to instructor	20
Submission of debate references on time	30
Attendance.....	50
Presentation	100
Debate participation	100
Total Points	350

Course grades are listed as S/U. A grade \geq 80% is a S. A grade $<$ 80% is a U.

Week	Activity/ topic	Required reading/ assignment
Sept. 3	Seminar overview	None
Sept. 10	Introduction to classical biological control. Risk and ethics in biological control paper discussion.	Delfosse, E.S., 2005. Risk and ethics in biological control. <i>Biological control</i> , 35(3), pp. 319-329.
Sept. 17	Guest lecture- Dr. Tolulope Morawo: Biological control of arthropods	Submission of preferred presentation topics (3) to instructor by 8 pm.
Sept. 24	Student presentation 1	Assigned by student presenter.
Oct. 1	Student presentation 2 and 3	Assigned by student presenters.
Oct. 8	Student presentation 4 and 5	Assigned by student presenters. Debate references (3) submitted by 5 pm, Friday Oct. 9.
Oct. 15	No class- debate preparation	
Oct. 22	Student Debate 1	Readings assigned by students. Group A: Pro Biological Control; Group B: Con Biological Control

Oct. 29	Student presentations 6 and 7	Assigned by student presenters.
Nov. 5	Student presentations 8 and 9	Assigned by student presenters.
Nov. 12	Student presentations 10 and 11	Assigned by student presenters. Debate references (3) submitted by 5 pm, Friday Nov. 13.
Nov. 19	No class (debate prep and EntSoc National Meeting)	None
Nov. 26	No class (Thanksgiving)	None
Dec. 3	Student debate 2	Readings assigned by students. Group B: Pro Biological Control; Group A: Con Biological Control

Presentations: The student presenter will choose a controversial biological control program of a plant or arthropod and will give a 30–35-minute presentation discussing the program and the controversy surrounding it. **Each student will submit three potential presentation topics to the instructor via e-mail by 8 pm on September 17.** The instructor will attempt to assign each student with their first choice of topic, but this may not be possible based on the choices submitted. Presentation scoring rubric is available on Canvas.

Article review: The student presenter will assign fellow students one research article, so that they may better understand the biological control program controversy being presented. Articles should be uploaded into the appropriate folder on Canvas **no later than 5 pm Monday** before the scheduled presentation. Please name the file “YourLastName_presentationdate” (ex: Smith_4Sept.pdf). After a student’s presentation, the student presenter will moderate a ~15-minute critical discussion of the paper/presentation topic with the class.

Student debates: Students will debate classical biological control using the information about the biological control programs presented in class. Two debates will occur. Debate teams and stances are assigned at the beginning of the term by the instructor.

Each debate team will provide three references that support their position. Debate references should be uploaded into the appropriate folder on Canvas by the deadlines specified above. Reference files should be named “Teamname_ref#” (ex.: TeamA_Ref1). Each team may use their references as well as the references provided by the weekly student presenters to craft their argument. During the counter arguments, a team may rely on the opposing team’s references.

Student debates will follow the rules and timelines as outlined below. Debate framework modified from the Entomological Society of America Student Debate guidelines (<https://www.entsoc.org/sites/default/files/files/Student%20Debates%20Guidelines%202020%20vs2.pdf>). Debate scoring rubric is available on Canvas.

1. Pro Team: 7-minute statement (with PowerPoint)

Each debating team will prepare a 7-minute PowerPoint presentation. Each presentation

should have no more than two colors (including background and text; to see your chosen colors from a color-blind perspective visit davidmathlogic.com/colorblind) and is without images or animations. However, tables and graphs may be used. These restrictions are designed to keep the focus of the debate on the topics, not on any emotional impact. **Each team is limited to the references assigned by the previous student presenters and 3 additional references chosen by the team.**

References must be cited in-text during the presentation with ESA-style formatting (e.g., Smith et al. 2010). Please include a references cited slide at the end of the presentation to be left up during the cross examination by the other team.

2. Con Team: 7-minute statement (with PowerPoint)

3. Cross examination by Con Team: 3 minutes (clarification questions, not debating!)
The team conducting the cross examining of the opposing team may ask questions. If needed, the opposing team being cross examined may ask clarification questions such as “can you repeat that?”, “can you clarify”, “can you define that term?”. Remember that it will reflect poorly on your team if you interrupt each other.

4. Pro Team rebuttal: 3 minutes

Use rebuttals to respond to questions/arguments, clarify your points and strengthen your argument. Rebuttals can and should be presented by more than one person from the same team. During rebuttals, you may make statements to support your point or ask the other team questions, but they will be unable to respond until their rebuttal. Similarly, if your team is asked a question during rebuttals, do not answer until your rebuttal period.

5. Cross-examination by Pro Team: 3 minutes (clarification questions, not debating!)

6. Con Team rebuttal: 3 minutes

7. Pro Team rebuttal: 3 minutes

8. Con Team rebuttal: 3 minutes

9. Questions: 10 minutes for instructor and for audience members

The instructor and any audience members will ask any questions they have. Questions may be directed at either team or both teams. Anyone from a team may answer. If you are asked a question, please respond to that question only. Do not use the question and answer session to continue debating the other team.

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standard of honesty and integrity.

Academic Honesty: As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

Copyrighted Materials and Software Use: All students are required and expected to obey the laws and legal agreements governing copyrighted material and 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.

Accommodations for Students with Disabilities: Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

University Counseling Services: Resources are available on-campus for students having personal problems or lacking clear career and academic goals which interfere with their academic performance. These resources include:

1. University Counseling Center, 301 Peabody Hall, 392-1575, personal and career counseling;
2. Student Mental Health, Student Health Care Center, 392-1171, personal counseling;
3. Sexual Assault Recovery Services (SARS), Student Health Care Center, 392-1161, sexual counseling; and
4. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.