

BIOLOGICAL CONTROL COURSE (ENTO 4500) SYLLABUS SPRING SEMESTER 2008

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Course objectives:

The students will be able to recognize key groups of arthropod natural enemies and will understand the basic biology of natural enemies of pests, as well as the ecological principles underlying the use of biological control for managing pest insects, plants, and pathogens. Students also will gain practical experience in recognizing and manipulating some natural enemies in the laboratory and greenhouse. Students will further develop communication and critical thinking skills through interactive activities and presentations in class

Lectures: Monday and Wednesday, 8:00- 8:50 a.m., 301 Flynt

Laboratory: Friday, 8:00-9:55 a.m., 301 Flynt

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Readings: Course Textbook :
Natural Enemies, by Ann E. Hajek (2004, Cambridge Univ. Press). Cost is ca. \$42.00

Grading: Each student will complete a lab project (details below), will complete 1 research paper and accompanying presentation, and will take 3 exams during the semester and a non-comprehensive final.
Grades will be earned on a points basis. A total of 1000 points is possible. Grades will be awarded based on portions of the 1000 point total:

A = 900-1000
B = 800-899
C = 700-799
D = 600-699
F = anything below 600

Lab project (20% of grade = 200 points)

- A. Conduct a laboratory or greenhouse experiment selected from a list of possible projects provided during the semester
- B. Collect data, analyze and present results in written and oral format

Exams: 3 during semester and a non-comprehensive final, worth 15% of grade each (150 points each)

One research paper will be required, which is worth 20% of grade (200 points). The topics will be provided during the semester and will be current issues in biological control.

Make-up Exams and Quizzes: In order to retake a missed exam or quiz, students must have a legitimate, documented excuse and make every effort to contact the instructor prior to the test to be missed.

Honor Code: All academic work must meet the standards contained in “A culture of Honesty.” Students are responsible for informing themselves about those standards before performing any academic work. Links for more detailed information can be found at:
<http://www.uga.edu/ovpi/honesty/acadhon.htm>

Documented Disability Statement for Griffin Campus: Students with a documented disability must inform the instructor at the close of the first class meeting. You will be referred to the Office of Academic Programs, Room 107 in the Flynt Building for consultation regarding evaluation, documentation of your disability, and a recommendation as to the accommodation, if any, to be provided. Students must provide instructors with an accommodation form from the Office of Academic Programs listing reasonable accommodation to sign and return to the Office of Academic Programs. Students who do not wish to receive services are still strongly encouraged to register with the Office of Academic Affairs.

BIOLOGICAL CONTROL- ENTO 4500
LECTURE/LAB SCHEDULE – SPRING 2007

Date	Class No.	Subject	Text Pages
M Jan 7	1	Course introduction, overview, context; History and philosophy of integrated pest management	4-17, 318-337
W Jan 9	2	History and philosophy of biological control	19-30
F Jan 11	3	Lab: Project assignments; “Lions and Tigers and Bears”	
M Jan 14	4	Ecology of biological control	101-123
W Jan 16	5	Ecology of biological control	101-123
F Jan 18	6	Lab: What’s in a crop?	
M Jan 21		Martin Luther King Jr Day	
W Jan 23	7	Ecology of biological control	101-123
F Jan 25	8	Biology of parasitoids; Lab: Who are the parasitoids?	145-168
M Jan 28	9	Biology of parasitoids	145-168
W Jan 30	10	Parasitoids in biological control: Case studies	145-168
F Feb 1	11	EXAM 1	
M Feb 4	12	Biology of predators	124-143
W Feb 6	13	Predators in biological control: Case studies	124-143
F Feb 8	14	Biology of predators; Lab: Who are the predators?	124-143
M Feb 11	15	Biology of nematodes	170-179
W Feb 13	16	Biology of pathogens: Bacteria	180-189
F Feb 15	17	Lab: Functional response	105-106
M Feb 18	18	Biology of pathogens: Viruses	190-202
W Feb 20	19	Biology of pathogens: Fungi	203-213
F Feb 22	20	Lab: Independent paper and project work	
M Feb 25	21	Biology of herbivores: Animals	233-249
W Feb 27	22	Biology of herbivores: Animals, Pathogens; check caterpillars	233-257
F Feb 29	23	Lab: Fungi and caterpillars	
M Mar 3	24	Exam 2 (Take home)	
W Mar 5	25	Exam 2 (Take home)	
F Mar 7	26	Research Paper presentations; discussion	
M Mar 10		Spring Break	
W Mar 12		Spring Break	
F Mar 14		Spring Break	
M Mar 17	27	Discussion/debate: Is classical biological control risky?	297-317
W Mar 19	28	Biology of herbivores: Pathogens	251-257
F Mar 21	29	Classical biological control	39-61
M Mar 24	30	Lab: Lacewing cage releases	
W Mar 26	31	Classical biological control	39-61
F Mar 28	32	Augmentation biological control	62-79
M Mar 31	33	Augmentation biological control; check lacewings	62-79
W Apr 2	34	Exam 3	
F Apr 4	35	Conservation biological control	80-96
M Apr 7	36	Conservation biological control ; Lab: Pesticides and BC	80-96

W Apr 9	37	Conservation biological control	80-96
F Apr 11	38	Conservation biological control : Plant resistance	80-96
M Apr 14	39	Work on lab projects	
W Apr 16	40	Case studies: Biological control in perennial crops	
F Apr 18	41	Case studies: Biological control in row crops	
M Apr 21	42	Project presentations	
W Apr 23	43	Case studies: Biological control in Med/Vet	
F Apr 25	44	Case studies and Review	
M Apr 28	45	Classes End; Apr 29 Reading Day	
May 02 8:00-11:00		Final Exam	