

BSCI 120 The Insects: Pollinators in Crisis
MARQUEE COURSE in SCIENCE and TECHNOLOGY

****Note this is a new course description for a course that has
been previously offered.**

Fall 2007 Syllabus

Lectures:

TuTh 9:30-10:20 a.m. (3201 J.M. Patterson Building)

Discussions:

Tu. 11:00am-11:50am (PLS 1161)

Tu. 12:00pm-12:50pm (PLS 1161)

Th. 11:00am-11:50am (PLS 1161)

Th. 12:00N-12:50pm (PLS 1161)

Th. 1:00pm- 1:50pm (PLS 1161)

Instructor:

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Teaching Assistants:

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Required Textbook:

Title: Status of Pollinators in North America
Author: National Research Council
ISBN-10: 0309102898

Course Description:

We are losing our pollinators to environmental stress and disease. Who cares? Anyone who likes to eat! Pollinators are required for growth of about 30% (the healthy 30%) of our food. In this course we will dissect the pollinator crisis, and in the process learn about insects, about the interaction of organisms in complex ecosystems, and about the human-nature interface. Students will work in groups that specialize in an aspect of pollinator

biology and their challenges. Instruction in the lecture and discussion sections will target methods for collecting information, interpretation of scientific information and the professional presentation of findings.

Course Goals:

The goals of this course are for students to understand and appreciate the important role of pollinators in natural and managed ecosystems. Upon completion of this course, students should:

- Understand some of the principles of scientific inquiry, including methods for obtaining and presenting scientific information.
- Appreciate the tremendous importance of pollinators, including insects, birds and bats.
- Comprehend strategies that pollinators and plants use to facilitate this interaction.
- Recognize the importance of pollinators in providing ecological services in natural and human-controlled environments.
- Analyze some of the threats currently facing wild and managed pollinators.

Class attendance and participation:

To perform well in this course, students should attend every lecture and discussion period. The course draws heavily on visual aids (including Powerpoint presentations, videos, insect exhibits, living specimens, etc.) that students will be responsible for understanding.

Students are expected to participate fully in the discussion periods, which will involve discussions, writing assignments, a group debate, and laboratory exercises. Students will be evaluated for their participation in each discussion recitation period using criteria described in the first discussion meeting.

Academic Honesty:

Academic dishonesty corrodes the value of all that we do here. The Instructor and Teaching Assistants take this seriously and will challenge and report acts of academic dishonesty. Be sure that you know what constitutes academic dishonesty. It includes cheating on exams, plagiarizing written work, submitting the same work for two classes without authorization, buying written work, submitting fraudulent documents, forging signatures etc.

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.shc.umd.edu>.

From the Introduction: *The University is an academic community. Its fundamental purpose is the pursuit of knowledge. Like all other communities, the University can function properly only if its members adhere to clearly established goals and values. Essential to the fundamental purpose*

of the University is the commitment to the principles of truth and academic honesty. Accordingly, The Code of Academic Integrity is designed to ensure that the principle of academic honesty is upheld. While all members of the University share this responsibility, The Code of Academic Integrity is designed so that special responsibility for upholding the principle of academic honesty lies with the students.

CORE:

BSCI 120 qualifies as a Distributive Studies course in the CORE Liberal Arts and Sciences Studies Program. The category is CORE Life Sciences Non-Laboratory (CORE Code: LS). Distributive Studies courses are designed to ensure that students take a look at several different academic disciplines and the way they create and analyze knowledge about the world. A committee composed of faculty and students approved this CORE Distributive Studies course because it introduces ideas and issues that are central to a major intellectual discipline and because the course promises to engage students actively in the learning process.

Support for Students with Disabilities:

Students with documented disabilities should notify the Instructor and their teaching assistant as soon as possible. The University provides a range of support services for students with disabilities. For these services, please contact the Disability Support Services at 301-314-7682, or visit them on the Web: www.counseling.umd.edu/DSS.

Grading:

The course grade will be based on points earned on four lecture exams and on your work in the discussion sections. Additional points will be offered for in-class quizzes and bonuses at the instructor's discretion. The course grade will be calculated using the point system described below.

Exams: Use best three scores.

Exam 1	100 pts
Exam 2	100 pts
Exam 3	100 pts
Final Exam (Comprehensive)	100 pts
Misc.	50

Discussion Sections:

Individual assessment (participation, quizzes, written critiques):	130 pts
Group Assessment (Group presentations, group quizzes):	220 pts

90 – 100%	A	The top 25% of each grade range will get a “+”, the bottom 25% of each grade range will get a “-“.
80 – 89%	B	
70 – 79%	C	
60 – 69%	D	
0 – 59%	F	

Format of Exams:

The regularly scheduled exams 1, 2 and 3 will not be comprehensive. The final exam will be comprehensive. The exams will cover material from lectures and discussions and other sources as mentioned in class. The final exam is scheduled for Friday December 14, 8:00 – 10:00 a.m.

Make-up Exams:

Students who miss an exam and fail to provide the instructor a legitimate written excuse within 7 days of the missed exam (for exams 1,2 and 3) or within 24 hours of the final exam, will receive “0” points for that exam and will not be eligible for a make-up.

Students who provide a legitimate excuse within the time limit may take a make-up exam. The students will all take the same make-up exam regardless of which exam was missed. The make-up exam will be offered once only: 7:00 – 7:50 pm on December 17, in room 4102 Plant Sciences Building.

Lecture Schedule (Subject to adjustment and modification):

Week	Tuesday	Thursday	**Reading	Discussion
1		Welcome & Overview		No Discussion
2	What is pollination and why do we care?		13-30*	Walk, Group formation
3	Who are the pollinators?		34-74	Team Project Organization
4	Exam 1	Exam feedback		Merge Information & Plan Presentation
5	Pollination mechanisms and strategies			Prepare and Practice Presentation
6	Parasites and diseases of pollinators		75-103	Presentation and Critique
7	Ecological interactions, invasions, pesticides and habitat loss.			Presentation and Critique
8	Specialists Conference	Guest Lecture		Specialists Meet
9	Presentations	Exam 2		Team Project Organization
10	Apiculture		104-130	Team Analysis and Synthesis
11	Apiculture & Economics of pollination			Merge Information & Plan Presentation
12	Measuring pollinator populations		STUNG	Prepare and Practice Presentation
13	Exam 3	Thanksgiving!	TBA	No Discussion
14	CCD	CCD	155-195	Presentation and Critique
15	Are pollinators in decline? Causes and policy options.		196-207	Presentation and Critique
16	Scientific outreach-Taking it to the streets and the schools		131-154	No Discussion
Dec. 14	Final Exam 8:00 – 10:00 a.m.			

*Status of Pollinators in North America

**Additional reading will be announced as the semester progresses