# Bugs and People

# **ENY 1001**



Instructor: Dr. Rebecca Baldwin

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ELearning site (grades): https://lss.at.ufl.edu/

Class Information:

http://entomology.ifas.ufl.edu/baldwin/webbugs/

Fall 2012 5<sup>th</sup> Period (11:45-12:35)

**Turlington Hall L007** 

#### **Office Hours:**

ENY 2208 MW --2:00 -4:00

Other times are available by appointment.

Please come by for a visit!

TA: Eddie Cayia - ejcayia@ufl.edu

# **Course Description and General Education Statement**

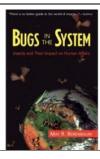
Bugs and People will credit you with three hours of Biology (B) General Education credits. General Education courses in the biological sciences introduce students to the basic concepts of science and the scientific method and enhance awareness of scientific developments and their impact on society and the environment. This area provides students with an understanding of scientific terms, concepts and theories, and the ability to formulate empirically testable hypotheses derived from the study of living things.

In this course, you will be educated to the myriad of creatures in the "bug" world and how they interact with you by eating your food, your animals, your homes, and sometimes even you. You will learn about bugs from around the world and how various human cultures fight them, worship them, eat them and live with them. You will learn to appreciate the role many bugs play in human history, misery, and disease on a global scale. You will learn vocabulary related to arthropod taxonomy, and will be challenged to use both the critical and creative parts of your brain as you prepare models and presentations for the "Bugge Faire". This course does not have a lab requirement, but you will have the opportunity to explore the "bug" world and submit insects, insect damage, predation videos, and original songs using your class notes as extra credit projects.

# **General Course Objectives**

- 1. To categorize a "bug" using taxonomic terms approved by the International Code of Zoological Nomenclature.
- 2. To understand the components in the process of science and be able to write a hypothesis.
- 3. To understand the impacts, both pest and beneficial, "bugs" play in human history and culture including examples from current news events, government policies, art, music, folklore, film and literature.
- 4. To appreciate how "bugs" impact society by competing with people for food, shelter, clothing, and health.
- 5. To comprehend the beneficial nature of "bugs" and how, due to their biology, they are important research models.

- 6. To recognize biological processes and how humans use bugs for nutrition in various global cultures.
- 7. To explain "bug" diversity in various ecosystems and be able to identify trophic interactions in those systems.
- 8. To critically evaluate research effectively using both observational and written skills.
- 9. To communicate "bug" morphology, physiology, and behavior effectively through modeling and oral communication.



#### Required Text:

Berenbaum, May R. 1995. <u>Bugs in the System: insects and their impact on human affairs</u>. Helix Books. ISBN Number 0-201-40824-4 (paperback – cost ~\$16.00, ~\$10 on Kindle)

# **Exams and Grading**

• Ungraded Study Guides will be provided in Sakai to guide you through the chapter readings.

#### **Research Review Assignment:**

Each student will receive a container of insect larvae to rear throughout the semester. You will be required to read a research article relating to the organism and write a two page summary of the article. Articles will be posted to the homepage in Sakai. In your discussion of the article, you must list an alternative experiment and list a workable hypothesis for your proposed experiment. Grammar, syntax, flow and readability will be considered in each section. The summary paper should be uploaded to sakai under the assignments tab and should be uploaded as a .doc or .docx file. Please see the class schedule for due dates. The paper should be double spaced, have 1" margins, and be typed in 12 pt font. No title page is required. Sources should be cited using the MLA style.

# **Paper headings**

- 1. Background information (10 points)
- 2. Research Paper Hypothesis and Design (10 points)
- 3. Summary of Research Results (10 points)
- 4. Strengths and Weaknesses of the Research Design (10 points)
- 5. Alternative Hypothesis and Experimental Design based on your observation of your organisms and the knowledge you gained from the research paper. (10 points)

#### **Exams:**

- Each regular exam will consist of 50 multiple-choice, short answer, matching, and/or true-false questions. Scantrons will be provided by the instructor.
- When your exam is completed, take exam and answer sheet to front of the room, place them in the appropriate stack and exit quietly.
- If you choose to miss class, it is your responsibility to discover missed information from classmates. There will be no make-up lectures. If you miss a video, slide presentation or demonstration, you cannot borrow those resources to catch up.
- You will be responsible for assigned readings from <u>Bugs in the System</u> and any slide, video or materials presented during lecture. There are additional readings you can access through Sakai. <u>We will discuss</u> <u>aspects from the required readings during lectures, but you are responsible for that material in its entirety</u>. Your exams will be composed from all these sources; thus, you will need to read and comprehend text information as well as take notes during slides, videos and presentations.

## **IMPORTANT PROCEDURES FOR EXAMS**

- You will not be allowed into the classroom seat with backpacks or any other paraphernalia. All materials
  must be deposited in the back of the classroom before you take your seat. You are to bring to your seat
  ONLY a pencil and your ID. Please be sure to silence your cell phone before leaving it in your backpack.
  These are closed book exams.
- You will NOT be admitted to any exam if you arrive late. This is a large class, so out of courtesy to your classmates and the class after ours, if you are not in your seat and prepared to take the exam when the class period begins, you will receive a grade of 0 on that exam. If you do not participate with your team on the Bugge Faire, you will receive a 0 on the project. A grade of 0 is final and cannot be made-up or replaced, so please do not ask.

## **Exam Make-Up Policy:**

To make up a missed examination, you will be required to provide appropriate written documentation (e.g., from a doctor in case of severe illness or a funeral notice or obituary in case of the death of a close relative). If you miss an examination for one of the valid reasons listed above, you must contact Dr. Baldwin immediately (prior to or the day of the scheduled exam) to receive permission to take the make-up examination. If you miss an exam without such proof, your score for that exam will be computed as 0. It is your responsibility to discuss your proof with the professor.

Bugge Faire: During the semester, you will learn about many organisms. You will work as a group to research a "bug" of your choice. During the Bugge Faire on the last day of the semester, your group will present a poster of the data you collect to a group of judges. You will also create a model of your selected organism using food items. The model must closely resemble the organism, and your poster must contain a photo of the organism you are modeling. At the conclusion of the Bugge Faire, you will have the opportunity to share your model "bugs" with others in the class. This is a chance for you to show your creativity, your communication skills, your teamwork, as well as your scientific knowledge about "bugs" to the class. If you dress up like a "bug" you will receive ten additional points for your project.

**Grading**: There are a total of 400 possible points. Your grade in *Bugs and People* will be computed as follows:

	Points
Exam 1	100
Exam 2	100
Exam 3	100
Research	50
Review	
Class Project*	50

\* Note that the Bugge Faire can be worth 50 points if you wear a costume. If you don't, it is worth only 40 points. Your course grade is based on total points accumulated out of 400 possible points. If you do not sign up for a, do not participate, or miss the Bugge Faire, you will receive a 0 on the project.

If you have a disability, please register it with the DRC <a href="http://www.dso.ufl.edu/drc/">http://www.dso.ufl.edu/drc/</a> and schedule a meeting with me to discuss and sign paperwork within the first two weeks of class. Accommodations may not be made later in the semester.

FINAL GRADING		Points	
Scale: Perc	Scale: Percentage		
100-93	A	372-400	
90-92	Α-	360-371	
87-89	B+	348-359	
83-86	В	332-347	
80-82	В-	320-331	
77-79	C+	308-319	
73-76	c	292-307	
70-72	C-	280-291	
67-69	D+	268-279	
63-66	Þ	252-267	
60-62	D-	240-251	
0-59	E	<236	

Grades will be posted online using Sakai at <a href="https://lss.at.ufl.edu">https://lss.at.ufl.edu</a>. Log in with Gatorlink. Please visit <a href="http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html">http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html</a> for the UF policy on grading.

REMINDER: Check your e-mail and the course website on a regular basis for changes to the schedule and important announcements. In particular, check prior to examinations for changes to the material to be covered, and after examinations to check your recorded grades!

#### E-mail Protocol:

- Please check the syllabus for an answer to your question before sending an e-mail. This is much appreciated.
- E-Mail Format: (Gatorlink e-mail must be used.)

  This is a large class, so please follow this format for e-mails to Dr. Baldwin. If this format isn't followed, your message may not receive a reply.
- **Subject line**: Must be in the format "1001 Last name, First name: Subject." Example: 1001 Mantid, Ima: Grade not posted
- **Body of the Message:** Must contain the message in standard plain-text. Please minimize attachments and avoid messages in all caps. Always include your name and your UF-ID. This helps to keep the messages organized so they can be answered in a timely manner.



# ENY 1001 Class Schedule

Note: You are expected to attend class each week. You will have textbook readings as well as readings online. Extra credit opportunities are listed below. \*You can make some of the 5 point bonus assignments 10 point assignments by incorporating a UF Tradition into the activity (marked with \*). See your F Book for details on UF Traditions. All bonus activities are listed, so be sure you participate.

Date	Day	Lecture Topic and Activities	Textbook Reading
August 22	Wednesday	Course Introduction: How do "bugs" fit into human culture? (Syllabus Overview)	
		Topic 1: Arthropod Classification and Nomenclature	Chapter 1
August 24	Friday	What is a "Bug"?	
August 27 Monday	Monday	The Cameraman's Revenge - Early film using insects	
		Class Project Planning and Team Formation	
		Print Team Form from Sakai and bring to class. Do NOT miss this class!	
August 29	Wednesday	Arthropod Evolution	Read: Research Paper (on Sakai)
August 31	Friday	What is a "Bug"? (continued) Receive pet insects for paper!	
Sept 3	Monday	HOLIDAY	
Sept 5	Wednesday	Overview of Taxonomy and Common Insect Orders	Appendix
Sept 7	Friday	Insect Orders	
		Topic 2: Insect Physiology	Chapter 2
Sept 10	Monday	Insect Growth and Reproduction (Highlight: Bed Bugs and You)	
Sept 12	Wednesday	Bizarre Bugs	
Sept 14	Friday	Extra Credit - Submit Strange or Unusual Bug (During class 5 pts.)	
		Bring in a clearly identified, strange looking bug that you collected personally. It must be alive, and you must describe the collection technique. (*UF Tradition Accepted)	
Sept 17	Monday	Insects and Research	
		Topic 3: Insect Behavior	Chapter 3
Sept 19	Wednesday	Insect Sights, Sounds, Taste and Smell and Strange Things Bugs Do	
Sept 21	Friday	EXAM 1	
		Topic 4: Insect Sociality	Chapter 4
Sept 24 Mo	Monday	Insects and Economics – Insect Products Used by People	
		Pollination, Silk, Beekeeping	
Sept 26	Wednesday	Attractive and Pleasurable Bugs	
Sept 28	Friday	Insect Communication	
		Topic 5: Insect Habitats	Chapter 5
October 1	Monday	Bugs that eat your food	
October 3	Wednesday	Bugs that eat your home and possessions	
October 5	Friday	Extra Credit - Submit bug damage and card including description of the damage. What	
		is the damage and what caused the damage? (During class 5 pts) (*UF Tradition)	
		Topic 6: Entomophagy and Public Health	Chapter 6
October 8	Monday	Insects as Food and Medicine	
		Topic 7: Parasites and Hosts	Chapter 7

October 10	Wednesday	Worldwide Neglected Diseases (video in class – CDC/WHO)	
October 12	Friday	Bugs that Eat Blood and Spread Disease	
October 15	Monday	Bugs that Eat Blood and Spread Disease (continued)	
October 17	Wednesday	The Winged Scourge – (movie in class)	
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October 19	Friday	EXAM 2	
		Topic 8: Ecological Roles of Insects	Chapter 8
October 22	Monday	Biblical Bugs and Bugs in Mythology, Bugs in Songs and Literature	
0 1 1 24	\\\\ - \  - \  - \  - \  - \  - \  - \	Reference: http://bible.christiansunite.com/Torreys_Topical_Textbook/ttt307.shtml	
October 24	Wednesday	Ecosystems: Soil Dwelling and Aquatic Insects	
October 26	Friday	Extra Credit - Group Songs, Story or Poem (from notes) -	
		(During class 10 pts.)	
		Feel free to make up a song using notes from the class. You may not perform the traditional versions of "Itsy Bitsy Spider", "Bringing Home a Baby Bumble Bee", "Ants go	
		Marching." Or "La Cucaracha." You must be in a group and must have an instrument or	
		accompaniment.	
		Topic 9: Insects and People	
October 29	Monday	Bug Phobias and Delusions	Chapter 9
October 31	Wednesday	Live Arthropods	
Nov 2	Friday	Fighting Back against Bugs – Pesticides and Health	
		Topic 10: Appreciating Insects	
Nov 5	Monday	Insects in History	Chapter 10
Nov 7	Wednesday	Extra Credit –Interpreting Pesticide Labels (During Class 5pts.)	
		Pesticide labels will be provided from household products. Describe what the pesticide does, what is in it and how it kills.	
Nov 9	Friday	HOLIDAY	
Nov 12	Monday	HOLIDAY	
Nov 14	Wednesday	Extra Credit – Predation video with commentary (During Class 5 pts)	
Nov 16	Friday	Class Dismissed for Work on Class Project – Meet with your group	Research Review due
1404 10	Triday	class Distrissed for Work on class Project Wice War your group	by 11:55 PM!
Nov 19	Monday	Recording Setting Bugs (Online Lecture and Reading)	
Nov 21	Wednesday	HOLIDAY	
Nov 23	Friday	HOLIDAY	
		Topic 11: The Insect Perspective	Chapter 11
Nov 26	Monday	Forensic Science and Entomology	
Nov 28	Wednesday	Insects and the Law	
Nov 30	Friday	Review - Complete class evaluations online.	
1101 30	, mady	If 75% of the class completes the evaluation before exam 3, two extra credit awards will be given at the Bugge Faire. <b>evaluations.ufl.edu.</b>	
Dec 3	Monday	EXAM 3	
Dec 5	Wednesday	BUGGE FAIRE – Turlington Plaza	
		Poster/model = 40 pts, Costume = 10 pts, Best costume +10 Most like the "Bug" model dish +10 for the group	

### **Classroom Courtesy:**

- Talking: Please be considerate of your classmates by not chatting during lecture. –Coming to class late: Please enter quietly and take a seat in the back. A banging door is very distracting to the class. Please do not leave class early. <a href="#ff">If</a> you feel you must consistently disturb class by leaving early, please drop the class. That behavior is unacceptable.
- Please silence cell phones before entering the classroom. If you disturb class, you may be asked to leave.
- UF prohibits food in the classroom and prohibits tobacco products on campus.

**UF POLICIES** - If you are having problems in school, please make an appointment to see me, or if appropriate, call one of the counseling services below. Do not wait until the end of the semester!

#### **UF Counseling Services:**

- 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 assault counseling.
- 4. Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

Academic Honesty: As a result of completing registration at the University of Florida, every student has agreed to 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." We, the members of the University of Florida community, pledge to hold our peers and ourselves to the highest standards of honesty and integrity. Plagiarism in this class will not be tolerated. For more information about plagiarism, please see the information on the class homepage. 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.