

Syllabus
ENTO/FIVS 431 The Science of Forensic Entomology

Spring Semester 2014
Three Credit Hours
M,W,F 1:50-2:40
Room 101 Heep Center-West Campus

Instructor: Dr. Aaron Tarone, Assistant Professor

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Office Hours: Tuesday 8:30AM-9:30AM, 11-12 AM (or by appointment)

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Description/Expectations: This is an introductory course designed to provide students with a basic understanding of the interaction between the discipline of entomology and the legal system. Students will be taught the basic entomology concepts necessary to understand forensic entomology. They will also gain an understanding of how knowledge of insects and other arthropods is important to criminal and civil litigation surrounding death investigations, stored products, and urban environments.

Warning: This course deals with the use of arthropod evidence in death investigations. Accordingly, you will be exposed to disturbing images from actual death scenes. If you do not want to view such material, you should not take this course.

Student Learning Outcomes: Students will be expected to recognize, recall, and synthesize information pertaining to the application of entomology to criminal and civil litigation.

Prerequisites: Registration at Texas A&M University.

Required Reading: Forensic Entomology: The Utility of Arthropods in Legal Investigations. Jason H. Byrd and James L. Castner. 2010. Second Edition. This text is available online through the library for free. Students that take the lab may want to purchase this text or print out the taxonomic key from the online version available through the library.

Grading: Students will take 3 equally weighted mid-terms (100 pts each). If exam scores are low, exams will be weighted to a mean of 78. There will be one 75 point assignment requiring students to critique the depiction of decomposition in a zombie short story. There will be three 25 point assignments requiring students to summarize scientific research from the primary literature. There is no final for this course. Attendance at lectures is not mandatory. However, sympathy toward requests for leniency in grading will be strongly positively correlated with attendance. In addition, material from lectures and guest lectures may not appear in the text, but will appear on the exams. I reserve the right to take attendance at either the beginning or end of lecture days with low attendance, which will result in one point of extra credit. Extra credit points cannot be earned in this manner if you have an excused absence; you must be present at class at the time that attendance is taken. I reserve the right to give additional assignments during the semester, as deemed necessary to improve student comprehension of the material.

These will be assigned in class and emailed to the class via the Howdy (howdy.tamu.edu) portal of eCampus. Accordingly, make sure that the email address that you have given Texas A&M University is one that you use and check regularly. You are responsible for guaranteeing that the information you give the university is correct and you will not be allowed to make up assignments that are missed for this reason.

Zombie Short Stories: Students have been assigned 3 short stories to read as examples of the short story in the text. One is due Jan. 17, the others should be read by Mar. 3. While the actual assignment (75 points) is not due until Apr. 21, students are strongly encouraged to start reading short stories in advance to avoid problems with the assignment.

Forensic Entomology Scientific Article Reviews: Students will read three forensic entomology articles from **primary literature** (25 points each). They will summarize the results of these articles in a review following instructions that will be provided in class. Due dates are listed below. Please attend office hours or schedule other visits with Dr. Tarone or your TA if you need assistance understanding literature.

Extra Credit: Students can earn extra credit. These assignments will follow the same format as the Forensic Entomology Scientific Article Reviews. Each extra credit assignment is worth 10 points. Each student can only earn 30 points of extra credit in this manner. Each student can only earn 10 points per exam cycle (First cycle will be due Feb. 14, the next two will be due Mar 7, final assignment will be due on last day of class). This means that students who wish to earn all possible extra credit should be regularly reading and summarizing forensic entomology literature.

Grading Scheme:

A=90-100% of cumulative points; B=80-89; C=70-79; D=60-69; F=<60.

Reading Assignments: Reading assignments (found in the “Reading” column) pertain to chapters in the textbook. Chapters should be read by the beginning of the class on the day that the assignment is listed (e.g. the Acarology chapter in the text should be read by 2/10/2014). Students should be ready to discuss readings on their due dates or on any day after that. Questions related to chapters in the book will appear on exams, even if they are not presented in lectures.

Classroom Expectations: Be in class on time and be prepared for classroom discussion/participation. Turn off all cell phones, pagers, and other communication devices that would cause interruptions. Gentlemen remove caps. Be aware of and observe all classroom safety rules and regulations. Assist and respect others.

Make ups: No make ups are given without a University Approved Excuse. University policy also requires that students contact the instructor within two business days of the absence to inform the instructor of their intention to make up the activity, assignment, or exam. Make up exams must be taken within 2 weeks of missed date or a “0” will be given. Make up assignments must be turned in within 1 week of missed date or a “0” will be given. Late assignments will lose one full grade (A downgraded to a B, etc.) per day, starting at the beginning of the course on the due date of an assignment. Yes, that means that, if you are late to class, your grade will drop one full grade. If you do not get the assignment to me within 24 hours of the beginning of the course on the due date, you will lose two full grades.

Americans with Disabilities Act (ADA) Policy

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Cain Hall or call 845-1637.

Academic Integrity Statement

“An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit:

www.tamu.edu/aggiehonor.

Estimated Schedule of Classroom Activities (Schedule and Assignments are Subject to Change; Students are Held Responsible for Keeping Track of Updates to the Schedule and Assignments):

<u>Month</u>	<u>Week</u>	<u>Day</u>	<u>Subject</u>	<u>Reading or Written Assignment Due</u>
January	1	13	Intro	
	1	15	Focus 1	
	1	17	Urban examples	Read Zombie Short Story #1 by this date
	2	20	No Class (MLK Holiday)	
	2	22	Focus 2	
	2	24	General, Reading Scientific Papers	Read Tarone and Foran 2007 by this date
	3	27	Christine Ramirez - Crime Scene Investigation	
	3	29	General	
	3	31	Collection	
February	4	3	Meteorology	
	4	5	Development	
	4	7	Orders	
	5	10	Dr. Teel - Acarology	
	5	12	Exam #1	No notes
	5	14	Microbiology	Forensic Entomology Paper #1 Due
	6	17	Forensic Pathology	AAFS
	6	19	Wrap, Bury, Water	AAFS
	6	21	Succession	AAFS
	7	24	Succession	
	7	26	Succession	
	7	28	Dr. Deborrah Pinto - Medical Examiner / Anthropology	
March	8	3	Dr. Michelle Sanford	Read Zombie Stories #2-3, Mid-semester Grades Due
	8	5	Calliphoridae	
	8	7	Calliphoridae	Forensic Entomology Paper #2 Due
	9	10	Spring Break	
	9	12	Spring Break	
	9	14	Spring Break	
	10	17	Dr. Jacqui Peterson - Soil Science	
	10	19	Dr. Daniel Wescott - Anthropology	
	10	21	Muscidae	
	11	24	Beetles	

	11	26	Other Forensically Important Insects	
	11	28	Exam #2	Open Note
	12	31	Accumulated Degree Day Calculations	
April	12	2	Toxicology	
	12	4	Dr. Tomberlin - Testimony	
	13	7	432 presentations	
	13	9	432 presentations	
	13	11	Carrion Mimicry	
	14	14	Dr. Vaughn Bryant - Palynology	
	14	16	Barney Lipscomb - Botany	Tarone at University of Houston
	14	18	Reading Day, No Classes	
	15	21	Molecular Biology	Zombie Assignment Due
	15	23	Next-Generation Sequencing	
	15	25	Quantitative and Population Genetics	
	16	28	Prep Day (Monday) No Exams, Q and A for Final Exam	Forensic Entomology Paper #3 Due, Turn in Final Exam
May	17	6	Final Exam Scheduled (3:30-5:30)	Final Exam Due