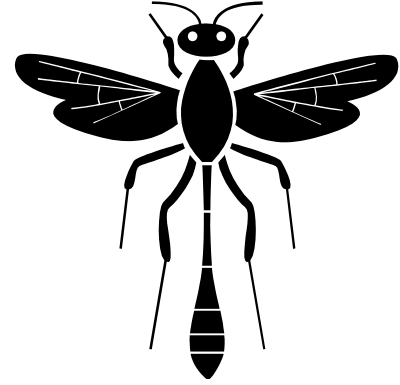


**BIOL 4410 General Entomology
Class Syllabus and Course Explanation
Undergraduate Spring 2018**

GENERAL INFORMATION:

INSTRUCTOR:

Dr. Sibyl Bucheli (bucheli@shsu.edu)
Office: Lee Drain Building, room 142
Phone: 4-1550
Office Hours: Tuesdays from 9 – 11 am



CLASS SCHEDULE:

LDB, room 130
Lecture: Mon, Wed, Fri 11:00 am – 11:50 am
Lab: Mon 2:00 pm – 3:50 pm

I TAKE ACADEMIC HONESTY VERY SERIOUSLY and will pursue any violations. All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The university and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

COURSE DESCRIPTION: A study is made of insect morphology, taxonomy, development, and life histories. Collection and identification by use of keys are stressed. Prerequisite: Minimum grade of C in BIO 161/111, 162/112. Junior standing. Two-hour laboratory dealing primarily with identification and curation of insects.

COURSE OBJECTIVES:

By the end of this course, you should be able to:

1. **Explain** the importance of insects as members of ecosystems.
2. **Gain** an appreciation of insect biology, diversity and ecology.
3. **Describe** the basic anatomy, morphology, taxonomy, development, life histories and key characteristics of different insect groups.
4. **Identify** common orders and families of insects.
5. **Demonstrate** the ability to properly collect and curate insects.

PREPARATION AND EXPECTATIONS: You are expected to attend all lecture and laboratory sessions and I will take your attendance into consideration when considering grades. Entomology is an advanced course where good attendance is essential for success in meeting the basic requirements in the course. I will periodically provide you with reading from the literature. All material in the textbook chapters as well as additional reading assignments are fair game for exams.

MAKE UP POLICY: Make-up exams will only be given for excused absences (Doctor's excuse, obituary, etc.) deemed valid at my discretion. Make-up exams will not be given without written notification **prior to the exam** by the student and approval from the instructor. I am under no

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obligation to provide the student with the opportunity to make-up exams due to unexcused absences. Make-up exams will not be the same exam given to the rest of the class.

COURSE RESOURCES:

Required Texts:

TITLE	Entomology: Daly and Doyen's Introduction to Insect Biology and Diversity
AUTHOR	James B. Whitfield and Alexander H. Purcell III

TITLE	Lab Manual on Blackboard
AUTHOR	Bucheli

Additional Media: Blackboard

UNDERGRADUATE EVALUATION METHODS: I reserve the right to assign additional work as necessary. I will calculate your grade to the nearest tenth of a point (00.00%). That means if you earned 79.59%, you earned a C, not B and if you earned a 79.99%, you earned a C, not B. You can track your score throughout the semester by checking your scores on Black Board. Adding up your total score and dividing it by the total possible (at that point) will give you're your percentage grade. A note about "curving": the instructor reserves the right to curve the grading scale downward just as they do to curve upward.

GRADING: A = 90.00%&above; B =80.00-89.00%; C =70.00-79.00%; D =60.00-69.00%;
F =59.00%&below

Evaluation:

4 Lecture Exams @100 pts	400 pts
6 Lab Quizzes @20 pts each, lowest dropped	100 pts
1 Preliminary Collection	50 pts
1 Final Collection	150 pts
Total	700

1. **Lecture Exams/Final:** There will be four (4) exams during the semester (100 points each). The fourth will occur during your scheduled final time. All exams are cumulative. All exams will assess your understanding of the factual material as well as your ability to understand meaning and context and to synthesize information from more than one lecture. Exams will typically (but not always) consist of definitions and concepts, short answer and two major essays. Please note, you will only have the regularly scheduled class time to complete exams.
2. **Lab Quizzes:** There will be a total of seven lab quizzes throughout the semester. Each quiz will be in practical form and written form where you will be asked to identify specimens and answer questions. They are worth 20 points each. The lowest score will be dropped. Spelling will count. If I cannot understand your answer for any reason, points will be deducted even if you believe it is correct. **There will be NO MAKE-UP quizzes**

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given, even upon presentation of a valid excuse. If you miss the quiz, you will receive zero credit for that quiz.

3. **Insect Collection:** THIS IS THE FUN PART!! You are required to present a preliminary insect collection mid-semester and a properly curated insect collection at the end of the semester. There will be no exceptions to this requirement. Since you live in Texas and it is warm here all the time, you should be able to make a lovely insect collection. Materials necessary to make this collection will be provided on loan from the Department of Biology at SHSU to you for the duration of this class. There will be a loan form made available to you at your first lab session. You will be required to turn in your equipment at the end of the semester along with your collection. **Failure to do so will result in subtraction of 10 points per lost item.** We will review in detail the requirements of the collections during the first lab session. Detailed handouts outlining my expectations will be made available to you and will be thoroughly explained at the time of their distribution.

Penalty for late materials will 10% per day (the days start/stop at midnight).

Tentative Class (Lecture and Laboratory) Schedule
 (Subject to change based on lecture and class progression)

SPRING 2018

WEEK	DAY	LECTURE TOPIC	LAB TOPIC and ACTIVITY
Week 1	Wednesday	IT WAS COLD AND THERE WAS SNOW AND ICE AND NO SCHOOL	
	Friday	Syllabus; Introduction	
Week 2	Monday	Arthropod Evolution and Systematics I	
	Wednesday	Arthropod Evolution and Systematics II	
	Friday	Insect Evolution and Systematics I: Entognatha, Hemimetabola	
Week 3	Monday	Insect Evolution and Systematics II: Holometabola	Collection and Curation; Pinning
	Wednesday	Insect Evolution and Systematics II: Holometabola	
	Friday	EXAM I	
Week 4	Monday	Insect Evolution and Systematics III: THE PHYLOGENY!!!! BOOYA!!!	QUIZ 1; Modifications: legs, wings, antennae, mouthparts
	Wednesday	External Anatomy I: The Integument and Cuticular Structures	
	Friday	External Anatomy II: The Head and Modifications	
Week 5	Monday	External Anatomy III: The Thorax and Modification	External Anatomy of a Grasshopper; Internal Anatomy of a Cockroach
	Wednesday	External Anatomy IV: Abdomen and Modifications	
	Friday	Internal Systems I: Digestion	
Week 6	Monday	Internal Systems II: Excretion	Quiz 2; Insect Orders
	Wednesday	Internal Systems III: Circulation and Respiration	
	Friday	EXAM II	
Week 7	Monday	Internal Systems IV: Muscles and	Field Trip to SHSU CBFS

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		Locomotion	<u>REQUIRED</u>
	Wednesday	Internal Systems V: Sensory Systems	
	Friday	Growth and Molting I: Courtship and Copulation and Reproductive Systems	
Week 8	Monday	Growth and Molting II: Insect Development and Life Histories	Preliminary Collection Due; Identification of Hemimetabola I
	Wednesday	Hormones, Pheromones and Allomones I	
	Friday	Hormones, Pheromones and Allomones II	
Week 9	SPRING BREAK		
Week 10	Monday	General Insect Behavior	Quiz 3; Identification of Hemimetabola II
	Wednesday	Insect Ecology I	
	Friday	Insect Ecology II	
Week 11	Monday	Aquatic Insects I	Quiz 4; Identification of Coleoptera
	Wednesday	EXAM III	
	Friday	No Class	
Week 12	Monday	Aquatic Insects II	Quiz 5; Identification of Lepidoptera
	Wednesday	Insects and Plants I	
	Friday	Insects and Plants II	
Week 13	Monday	Insect Societies I: Termites	Quiz 6; Identification of Diptera
	Wednesday	Insect Societies II: Ants	
	Friday	Insect Societies III: Bees	
Week 14	Monday	Insect Predation	Quiz 7; Identification of Hymenoptera
	Wednesday	Insect Parasitism	
	Friday	Forensic Entomology I	
Week 15	Monday	Forensic Entomology II	
	Wednesday	Forensic Entomology III	
	Friday	Medical Entomology I	
Week 16	Monday	Medical Entomology II	Insect Collection Final Curation Time
	Wednesday	Medical Entomology III	
	Friday	Insect Collections Due	
Week 17	FINALS WEEK	LECTURE EXAM IV	

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Date	Day	Event
17-Jan	Wednesday	- Daytime on-campus and off-campus classes begin
1-Feb	Thursday	Thursday, February 1, is the 12th class day of the Spring term and represents the last day to drop a course without a "Q" grade and receive a 100% refund.
March 12 - March 16	Monday - Friday	Spring Recess for Students and Faculty
30-Mar	Friday	Good Friday - Holiday for Students and Faculty
6-Apr	Friday	Deadline to Drop 15-Week Spring Courses or Labs with a "Q" grade
4-May	Friday	Last Class Day
May 7 - May 10	Monday - Thursday	Final Exams
May 10 - May 12	Thursday - Saturday	Commencement

RESIGNATION NOTE: Students may resign with a "W" grade from the 13th class day through the last class day, but prior to any final exams being taken or course completion.

SAM POLICY

Academic Honesty: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The university and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. **Visitors in the classroom:** Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office. **Students with Disabilities:** It is the policy of the university that no otherwise qualified disabled student shall, solely by reason of his/her handicap, be excluded from participation in, or denied benefits of, or be subject to discrimination under any academic or Student Life program or activity. Disabled students may request help with academically related problems stemming from individual disabilities by contacting their instructor, school/department chair, or by contacting the university Chair of the Committee for Continuing Assistance for Disabled Students/ Director of Counseling Center (located in Lee Drain Annex, phone 936-294-1720). A student with a disability is encouraged to register with the university Counseling Center, as well as contacting their instructor about assistance needs. Accommodation cannot be made until the student has initiated the request with the Counseling Center. Every semester that the student desires accommodations, it is the student's responsibility to complete a Classroom Accommodation Request Form at the Counseling Center and follow the stated procedure in notifying faculty. Accommodations for disabled students are decided upon documentation and need on a case-by-case basis by the Counseling Center. All requests are handled with confidentiality according to university procedures. **Religious Holy Days Policy:** Section 51.911(b) of the Texas Education Code requires that the university excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. University Policy 861001 provides procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first 15 days of the semester or the first 7 days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

Class Attendance

<http://www.shsu.edu/catalog/scholasticrequirements.html>

1. Regular and punctual class attendance is expected of each student at Sam Houston State University.
2. Each faculty member will keep a record of student attendance.
3. Each faculty member will announce the policies for accepting late work or providing makeup examinations. Students are expected to show appropriate cause for missing or delaying major assignments or examinations.
4. A student shall not be penalized for three or fewer hours of absences when examinations or other assigned class work has not been missed; however, at the discretion of the instructor, a student may be penalized for more than three hours of absences.
5. Each instructor is obligated to clarify in writing to each student enrolled in class at the beginning of the semester or summer session the instructor's classroom policy regarding absences.
6. Class absences will be recorded and counted only from the actual day of enrollment for the individual student in that specific class.
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