ENTO 4000/6000, General Entomology
Fall 2020 Tifton and Griffin Campus
Syllabus

Time:
Lecture: Tuesday, Thursday 12:30- 1:45 PM
Laboratory: Thursday 2:00- 4:00 PM

Locations:
Tifton Lecture and Laboratory: 201 NESPAL
Griffin Lecture: SLC Room 215
Griffin Laboratory: 301 Flynt building

Instructors:
Tifton Lecture: Angelita L. Acebes, Assistant Professor, 315 Agricultural Research Building 4603 Research Way, Tifton Campus, (229) 386-3059, aacebes@uga.edu
Tifton Lab: Kyle Slusher, Teaching Assistant, (859) 242-2782, eks29261@uga.edu

Griffin Lecture: Shimat V. Joseph, Assistant Professor, Turfgrass Research and Extension Facility, 1109 Experiment Street, Griffin, GA 30223, (470) 629-6287, svjoseph@uga.edu
Teaching Assistant: **Midhula Gireesh,** (770) 282-0946, Midhula.Gireesh@uga.edu

Griffin Lab: Lisa M. Ames, lames@uga.edu
Teaching Assistant, **Yi-Ju Chen,** (470) 601-1720, yijuchen@uga.edu

Office Hours: By appointment. Please do not hesitate to see us to arrange a time.

Text Book: Daly and Doyen's Introduction to Insect Biology and Diversity. **Third Edition**. 2012. J. B. Whitfield and A.H. Purcell III

Supplemental Reading Material:
Triplehorn, C.A. and N.F. Johnson. 2005. Borror and DeLong's Introduction to the Study of Insects. 7th ed. Thomson Brooks/Cole, Belmont CA, 864 pp.

Course Objectives: The goal of this course is to make you familiar with the fundamentals of insect biology and relationships among insects, plants and other organisms. It will also introduce you to the different specialization within the field of entomology including agriculture, medical and veterinary, apiculture, etc. We hope to give you an appreciation for the diversity of form and function in the insect world by presenting both beneficial and detrimental effects of insects. Hopefully, you will leave this course with a better understanding of how insects affect all other forms of life on the planet.

Laboratory Objectives: In the laboratory, you will learn how to identify commonly encountered insects. We will introduce basic elements of insect morphology and taxonomy. Learning to distinguish unique features of insects will also allow an increased appreciation for insect diversity and a sense of where insects fit in to the animal kingdom.

Attendance:
Students are expected to attend class on a regular basis in person or via zoom. If absent from class, it is the responsibility of the student to make up any work that is missed.

Grades will be based on the following items:

1. Lecture Exams (3)
2. Laboratory Quizzes (5)
3. Laboratory Exams (2)
4. Insect Collection (1)

Lecture Exams

There will be three lecture exams including the final exam, each worth 100 points for ENTO 4000. Exams will be given in class and will test your knowledge of the material presented during the lecture portion of the class. The first two lecture exams will be given during the semester while the third will serve as the final exam for the course. Students registered for ENTO 6000 will have additional 25 points of questions for each exam. These questions usually will involve an essay-type answer.

Laboratory Quizzes

You will be given five - 10 point quizzes that will be worth a total of 50 points. Quizzes will be administered at the beginning of five labs and will cover insect taxonomy.

Laboratory Exams

There will be two laboratory exams worth 50 points. These exams will test your knowledge of the material presented in the laboratory during the course of the semester.

Insect Collection

You will be required to make an insect collection that will be turned in for grading at the end of the semester. This collection will be worth a total of 100 points. Details on collection requirements and grading will be presented in laboratory.

Grading Policies

First, a review of point values for each required item in the course:

	Maximum Point Value	
ITEM	**Ent 4000**	**Ent 6000**
Lecture Exam 1	100	125
Lecture Exam 2	100	125
Lecture Final (Exam 3)	100	125
Laboratory Quizzes	50	50
Laboratory Exam 1	50	50

Laboratory Exam 2	50	50
Insect Collection	100	100
TOTAL	**550**	**625**
Term Paper (Extra Credit, Optional)	30	30

Hypothetical Student's Scores

ITEM	
Lecture Exam 1	80
Lecture Exam 2	85
Final Exam 3	85
Laboratory Quizzes	42
Laboratory Exam 1	45
Laboratory Exam 2	48
Insect Collection	90
TOTAL	**475**

Calculating a Grade

1. Add total points accumulated and divide by 550 (the maximum possible number of points for ENTO 4000) and convert to a percentage.

2. Calculate grade, based on percentage distribution presented below

In the example above, the Ent 400 student had 475/550 points, which is rounded to 86%. This is a "B". Plus and minus grades also will be applied according to UGA guidelines.

Table for Finals Grades

Course Percentages (Approximate)

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	<60%

University Honor Code and Academic Honesty Policy

Students are reminded that they are bound by the University's Academic Honesty Policy. This policy is posted on the Web at: http://www.uga.edu/honesty/

Students are responsible to become informed about the standards provided in the "Culture of Honesty", a document outlining the academic honesty policy of the University of Georgia.

Food and Drink in the Classroom

University policy prohibits smoking, food and drink in all labs and classrooms.

Cell Phones:

Please leave cell phones off or on silent during class, and do not text-message during class.

Zoom Meeting Details:
https://zoom.us/j/95693577072 Meeting ID: 956 9357 7072
+13017158592,,95693577072# US (Germantown)
+13126266799,,95693577072# US (Chicago)

Class Schedule
Lecture Schedule: Tuesday, Thursday 12:30- 1:45 PM
Tifton: 201 NESPAL
Griffin: SLC Room 215

Date	Day	Lecture	Topic	Pages in Text
20-Aug	Thu	1	Introduction	3-10, 13-17
25-Aug	Tue	2	Systematics of Organizing a million species: Arthropoda classification	10-13, 311-341
27-Aug	Thu	3	Insect Collection Activity	
1-Sep	Tue	4	Insect External Anatomy: Head	18-35
3-Sep	Thu	5	External Anatomy: Thorax & Abdomen	35-62
8-Sep	Tue	6	Internal Anatomy and Insect Locomotion	92-130
10-Sep	Thu	7	Life Cycles, Development and Metamorphosis	63-77
15-Sep	Tue	8	Insect Reproductive Biology	78-91
17-Sep	Thu	9	Insect Nervous System and Sensory Reception	131-161
22-Sep	Tue	10	Social Insects	162-179
24-Sep	Thu	11	**FIRST LECTURE EXAMINATION**	
29-Sep	Tue	12	Protura through Blattodea	351-421
1-Oct	Thu	13	Psocoptera through Hemiptera	425-476
6-Oct	Tue	14	Coleoptera	493-529
8-Oct	Thu	15	Neuroptera, Mecoptera, Diptera, Siphonaptera	481-492 & 561-599
13-Oct	Tue	16	Lepidoptera, Trichoptera	600-640
15-Oct	Thu	17	Hymenoptera	530-560
20-Oct	Tue	18	Review Session for Exam 2	
22-Oct	Thu	19	**SECOND LECTURE EXAMINATION**	
27-Oct	Tue	21	Insect Ecology: Population Biology	183-211
29-Oct	Thu	22	Insects and Plants	212-231
3-Nov	Tue	23	Insects and Vertebrates	232-244

			(Medical and Veterinary)	
5-Nov	Thu	24	Forensic Entomology	260-272
10-Nov	Tue	25	Insect Pests - Problems (IPM principles for Crops and Urban)	273-296
12-Nov	Thu	26	Insect Pests - Solutions (Host Plant Resistance)	273-297
17-Nov (ESA)	Tue	27	Agricultural Crops and Pest Management	273-297
19-Nov (ESA)	Thu	28 Lecturer: Jim Quick	Apiculture	175-179
24-Nov	Tue	29 Lecturer: Dr. Elizabeth McCarty	Forest Insects: Cultural, Chemical and 'No' Management	
Nov 25-27	Wed - Fri	No classes	**THANKSGIVING BREAK**	
1-Dec	Tue	30 Lecturer: Dr. David Shapiro-Ilan	*Biocontrol using Entomopathogens	
3-Dec	Thu	31	*Entomophagous and Beneficial Insects (Biocontrol)	245-259
8-Dec	Tue	32	Review Session for Finals LAST DAY OF CLASSES	
10-Dec	Thu	33	Reading Day, Term Paper Due	
Dec 17	Thu	34	**Final Exam (Time: 12nn – 3pm)**	**Online Proctored**

*** All classes after Thanksgiving will be online.**

Laboratory Schedule: Thursday 2:00 - 4:00 PM
Lab Instructor/Teaching Assistant: Kyle Eddie Slusher (Tifton)

Date	**Laboratory Number**	**Topic**
Aug 20	1	Collecting and mounting techniques; Hand out equipment
Aug 27	2	Field collection
Sep 3	3	Insect morphology
Sep 10	4	Orders: Other Arthropod Groups: Collembola, Diplura, Thysanura
Sep 17	5	Orders: Ephemeroptera, Odonata, Phasmatodea, Dermaptera, and Plecoptera
Sep 24	6	**QUIZ 1** Orders: Orthoptera, Phthiraptera, Blattodea, Mantodea
Oct 1	7	**LAB EXAM I**
Oct. 8	8	Orders: Hemiptera and Neuroptera **Preliminary Collection Due**
Oct. 15	9	**QUIZ 2** Order: Coleoptera
Oct 22	10	**QUIZ 3** Order: Coleoptera continued
Oct 29	11	**QUIZ 4** Collection Review (Mandatory) Order: Diptera
Nov 5	12	Order: Lepidoptera
Nov 12	13	**QUIZ 5** Orders: Siphonaptera and Hymenoptera
Nov 19 (ESA)	14	LAB EXAM II
Nov 26		**No Class Thanksgiving Holiday**
Dec 3	15	Free Lab: Work on collections
Dec 10	16	Insect Collection Due

Laboratory Schedule: Tuesday 2:00 - 4:00 PM
301 FLYNT Building
General Entomology, Fall 2020
Lab Instructor/Teaching Assistant: Lisa Ames / Yi-Ju

Date	Laboratory Number	Topic
Aug 25	1	Collecting and mounting techniques; Hand out equipment
Sept 1	2	Field collection
Sep. 8	3	Insect morphology
Sep 15	4	**QUIZ 1** Other Arthropod Groups: including Collembola, Diplura, Thysanura and primitive insects - Orders: Ephemeroptera, Odonata, Phasmatodea, Dermaptera, and Plecoptera
Sep 22	5	**QUIZ 2** Orders: Orthoptera, Phthiraptera, Blattodea, Mantodea
Sep 29	6	Order: Hemiptera
Oct. 6	7	**LAB EXAM I**
Oct. 13	8	Order: Coleoptera
Oct 20	9	**QUIZ 3** Collection Review (Mandatory) Order: Diptera
Oct 27	10	**QUIZ 4** Order: Lepidoptera
Nov. 3	11	**QUIZ 5** Orders: Hymenoptera
Nov. 10	12	Orders: Neuroptera, Mecoptera, Tricoptera, Thysanoptera, Siphonaptera
Nov 17	13	Free lab: No new material; work on collection in lab; study for exam II
Nov 24	14	**LAB EXAM II**
Dec 1	15	Online Lab Lecture: Subject to be determined.
Dec 10		Insect Collection Due

Coronavirus Information for Students

Face Coverings:

Effective July 15, 2020, the University of Georgia—along with all University System of Georgia (USG) institutions—requires all faculty, staff, students and visitors to wear an appropriate face covering while inside campus facilities/buildings where six feet social distancing may not always be possible. Face covering use is in addition to and is not a substitute for social distancing. Anyone not using a face covering when required will be asked to wear one or must leave the area. Reasonable accommodations may be made for those who are unable to wear a face covering for documented health reasons. Students seeking an accommodation related to face coverings should contact Disability Services at https://drc.uga.edu/.

DawgCheck:

Please perform a quick symptom check each weekday on DawgCheck—on the UGA app or website—whether you feel sick or not. It will help health providers monitor the health situation on campus: https://dawgcheck.uga.edu/

What do I do if I have symptoms?

Students showing symptoms should self-isolate and schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5 p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see https://www.uhs.uga.edu/info/emergencies.

What do I do if I am notified that I have been exposed?

Students who learn they have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for 14 days consistent with Department of Public Health (DPH) and Centers for Disease Control and Prevention (CDC) guidelines. Please correspond with your instructor via email, with a cc: to Student Care & Outreach at sco@uga.edu, to coordinate continuing your coursework while self-quarantined. If you develop symptoms, you should contact the University Health Center to make an appointment to be tested. You should continue to monitor your symptoms daily on DawgCheck.

How do I get a test?

Students who are demonstrating symptoms of COVID-19 should call the University Health Center. UHC is offering testing by appointment for students; appointments may be booked by calling 706-542-1162.

UGA will also be recruiting asymptomatic students to participate in surveillance tests. Students living in residence halls, Greek housing and off-campus apartment complexes are encouraged to participate.

What do I do if I test positive?

Any student with a positive COVID-19 test is **required** to report the test in DawgCheck and should self-isolate immediately. Students should not attend classes in-person until the isolation period is completed. Once you report the positive test through DawgCheck, UGA Student Care and Outreach will follow up with you.