Entomology 313 – Introductory Entomology

Syllabus (subject to change)

Instructor: Dr. Tanya Renner Email: <u>tur158@psu.edu</u> Office hours: By appointment

Lecture: Monday & Wednesday, 1:25-2:15pm Thomas Bldg 201 Lab: Friday by Section Assignment: 12:20 – 2:15 pm ASI 015 2:30 – 4:25 pm ASI 016

Graduate Teaching Assistants:

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Course description and goals:

- Introduce you to the diversity of insects
- Teach you to identify the most common groups of insects
- Help you understand the beneficial and detrimental roles insects play in our lives
- Introduce you to responsible methods of pest management

Recommended (Not Required) Text:

- Kaufman Field Guide to Insects of North America (Kaufman Field Guides)
- PUBLISHER: Mariner Books



Course Information

Course communication

If you need to communicate with Dr. Renner or the teaching assistants, please use email. Please use your own Penn State email account to send and receive messages. Office hours are by appointment. Barring unusual circumstances, expect a reply within 24 hours during the work week, and 48 hours over the weekend. **Please be aware that we do not check email between 6pm-8:30am**. We will occasionally email members of the class. Please check your email regularly to be sure you get the info we send out. Each student is responsible for reading and following the instructions, guidelines and schedules in this

syllabus and on the course webpage or announced in class. Not having read the information in this syllabus, on the webpage or in course announcements will not constitute an excuse for missing deadlines, assignments, or other assessments. Please set your preference in Canvas so that you receive timely notifications of course announcements and other information.

Expectations

<u>Students</u> are expected to attend class regularly with motivation to engage and learn the course material. There is a clear relationship between class attendance and performance on exams and assignments. Students are encouraged to participate, discuss and ask questions during lectures and labs. All questions, discussion, etc. by all participants should be valued and respected. Students are equally expected to dedicate time outside of lecture to read and review course material, as this is required for mastery of the subject. As a rule of thumb, students should be spending at least 2-3 hours studying course material for every hour of lecture.

Equally, the <u>instructor</u> is expected to be prepared and organized for each lecture, to furnish resources required to understand the material (i.e. readings, lecture notes, and other material that's appropriate), to be reasonably available outside of class to assist student learning in areas where they have difficulties, and to help guide students through a successful and satisfying term paper.

Collaborative learning

We use collaborative learning strategies throughout lecture to solidify concepts and understanding of the material. For example students may be asked to work individually to answer a multiple choice question related to the lecture material, report back to the instructor, and work with their peers on a problem.

Electronics Use Policy

Use of electronic devices in class to take notes is approved and encouraged, especially during the laboratory period. Approved electronic devices are laptop computers, tablets, and smart phones. Other uses of these devices or the use of unapproved devices will be considered disruptive.

Course resources

Relevant **readings** are posted on Canvas under lecture **Modules**. An outline of the **PowerPoint slide presentations** used in lecture will be posted to Canvas the evening before any given lecture. You should make it a habit to visit the website before class and print the outline. This will make it easier for you to listen to information presented in lecture, as you will not have to write down the contents of each slide. **Not all the information is included on these outlines.** Past experience has demonstrated that students who study from only these outlines score **60-70%** on the exams. Your instructor makes an effort to add important details to the outline as part of the lecture experience. **Practice quizzes** will be made available on Canvas following each lecture. **Laboratory worksheets** are posted on Canvas under Modules for the laboratories. Laboratory hand-outs will be provided in lab, but you can refer to the material and keys digitally.

Grading Procedures

Your grade in this course will be based upon exams and assignments set forth in this syllabus. The points and percentage of the final grade is indicated for each assignment.

Make-ups

Late assignments will be accepted but will be penalized 25%. Assignments will not be accepted more than one week late. After this period in time, a score of 0 will be assigned. If you have a serious illness,

major family problem (for example, a death in the family), conference, or fieldwork and must miss an exam please contact the instructor as soon as possible to make other arrangements. In order to compensate for the missed exam you may be given an alternative assignment such as an all essay exam. Unavoidable conflicts with religious holidays, major sporting events for student-athletes, or academic activities should be kept to a minimum and documented by the appropriate university office. Documentation should be presented to the instructor during the first two weeks of class. Events that require prolonged absence (more than three lectures or more than two activity sections) should be discussed with the instructor.

Rebuttals

If you think you were graded unfairly (or erroneously) on an assignment or exam, please turn in a written explanation (rebuttal) with your graded assignment/exam to the instructor within two weeks. The instructor or graduate student instructor will write a response and return it to you. You may set up an appointment if you disagree with the resolution.

Popular press extra credit assignment

First you need to find an article in the popular press about insects. Examples: invasive insect species and how they affect ecosystem health, insect behavior, honey bee health, insect decline, how global climate change affects insects, etc. Write a one page summary of this article, then based on material in our text and from lecture (in no more than one additional page) explain if you think the author has presented the science accurately or not. Please provide me with a copy of the article. Examples of places to look: The New York Times (Tuesday is Science News day), Centre Daily Times, Time, Newsweek, or National Geographic. Other sources are acceptable but avoid strange websites - try for more mainstream journalism. **This extra-credit assignment is worth 10 points.**

Be courteous

Every student is expected to contribute to a positive, distraction-free learning environment. Laptops and other electronic devices may be used for taking notes during the lecture, but please refrain from activities not directly related to the course. Please do not talk while the instructor or another student is talking to the class. In general, please be respectful of other students and the educational process.

Technical Requirements

This course is offered online and it assumed you possess the minimum system requirements and computing skills to participate effectively.

Minimum Skills

- You should understand basic computer usage (creating folders/directories, switching between programs, formatting and backing up media, accessing the Internet).
- You must be able to conduct word processing tasks such as creating, editing, saving, and retrieving documents.
- You must be able to use a web browser to open web pages, download files, and search the Internet.
- You must be able to use an e-mail program to send and receive messages and to attach and download documents/files.

Accessibility Information

• Accessibility statement for <u>Canvas</u>.

Netiquette

The term "Netiquette" refers to the etiquette guidelines for electronic communications, such as e-mail and discussion postings. Netiquette covers not only rules to maintain civility in discussions, but also special guidelines unique to the electronic nature of messages. Please review Virginia Shea's "<u>The Core Rules of Netiquette</u>" for general guidelines that should be followed when communicating in this course.

Support Services

As a Penn State student, you have access to a variety of services and resources, including advising, tutoring, library services, career services, and more. Please visit the <u>Student Support Resources</u> page for more information.

If you experience technology problems of any kind in Canvas, please select the Help icon and select "Report a Canvas Problem," "Chat with Support," or "Call Support." It is in your own best interest to be as specific as you possibly can. Vague descriptions of a problem only delay assistance. Try to include information such as: the specific course page, quiz question, etc. you were on; what you attempted to do when that failed; the exact language of any error message displayed on your screen; the date and time when your problem occurred; and any other pertinent information (does the problem happen consistently and always in the same way, etc.).

Online Students Use of the Library

As Penn State students, you have access to many of the materials that the library offers to students. Please visit the <u>University Libraries</u> website as it provides services including tutorials, peer reference consultants, an ask-a-librarian chat service, and data support to students from all campuses.

Penn State Policies

COVID-19 Policies & Masking

While COVID-19 cases have decreased substantially since fall of 2021, COVID-19 remains a pandemic. More transmissible variants are a major concern. Penn State urges everyone to continue to take steps to protect not only themselves, but their colleagues, friends, and the campus by practicing good hand hygiene, staying home if you are sick, being up to date on vaccinations and boosters, and wearing a mask indoors. There is evidence that masks are effective in reducing the transmission of COVID-19 (e.g., Li et al., 2020, Lima et al., 2020, Talic et al., 2021) and everyone is strongly encouraged to wear masks while indoors. Please wear a mask during our class sessions while we are inside the classroom. Let's do our part to keep each other safe!

Proper masks and mask-wearing are critical as semester begins [click for Penn State article]

What kind of mask should I wear?

-- Multi-layered procedure masks (such as disposable surgical masks) or respirators (such as KN95 masks) are preferred; cloth masks made of multi-layered, washable, breathable fabric are sufficient if those are not available.

-- Though not required by the Centers for Disease Control and Prevention (CDC) or Penn State, the CDC notes that two masks may also be worn: a disposable mask beneath a multi-layered cloth mask.

What kinds of masks should I avoid?

-- According to CDC guidance, masks with valves are not acceptable, and there is evidence that singlelayer face coverings, including many types of neck gaiters, are not as effective in stopping respiratory droplets as multi-layer face coverings.

-- Avoid specially labeled "surgical" N95 respirators, as those should be prioritized for health care

Log-In Policy

Students are expected to log-in regularly to keep up-to-date with announcements, discussions, etc. The class will progress at a regular pace throughout the semester and there are specific due dates and times for assignments, etc.

Academic Integrity

Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, students should act with personal integrity, respect other students' dignity, rights, and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others (see Faculty Senate Policy 49-20, G-9 Procedures and the Code of Conduct).

Read the <u>Academic Integrity Guidelines for the College of Agricultural Sciences</u>

A lack of knowledge or understanding of the University's Academic Integrity policy and the types of actions it prohibits and/or requires does not excuse one from complying with the policy. Penn State and the College of Agricultural Sciences take violations of academic integrity very seriously. Faculty, alumni, staff and fellow students expect each student to uphold the University's standards of academic integrity both inside and outside of the classroom.

Educational Equity Statement

Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, or harassment due to age, ancestry, color, disability, gender, gender identity, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity at the <u>Report Bias</u> webpage.

Copyright Notice

All course materials students receive or to which students have online access are protected by copyright laws. Students may use course materials and make copies for their own use as needed, but unauthorized distribution and/or uploading of materials without the instructor's express permission is strictly prohibited. University Policy AD 40, the University Policy Recording of Classroom Activities and Note Taking Services addresses this issue. Students who engage in the unauthorized distribution of copyrighted materials may be held in violation of the University's Code of Conduct, and/or liable under Federal and State laws.

Counseling and Psychological Services (CAPS)

Many students at Penn State face personal challenges or have psychological needs that may interfere with interfere with their academic progress, social development, or emotional well-being. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

- Counseling and Psychological Services (CAPS) (814) 863-0395
- Penn State Crisis Line (24 hours/7 days/week) (877) 229-6400
- Crisis Text Line (24 hours/7 days/week) Text LIONS to 741741
- Mental Health Services

Accommodations for Persons with Disabilities

Penn State welcomes students with disabilities into the University's educational programs. Every Penn State campus has an office for students with disabilities. The Student Disability Resources Web site provides <u>contact information for every Penn State campus</u>. For further information, please visit the <u>Student Disability Resources Web site</u>.

In order to receive consideration for reasonable accommodations, you must contact the appropriate disability services office at the campus where you are officially enrolled, <u>participate in an intake interview</u>, <u>and provide documentation</u>. If the documentation supports your request for reasonable accommodations, your <u>campus's disability services office</u> will provide you with an accommodation letter. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. You must follow this process for every semester that you request accommodations.

Privacy Policies

For information about Penn State's privacy statement and what it encompasses, please read their policy concerning <u>web privacy</u>. Visit Penn State's <u>Family Educational Rights and Privacy Act</u> (FERPA) page for information regarding its rules on governing the privacy of student educational records.

Accommodations for Military Personnel

Veterans and currently serving military personnel and/or spouses with unique circumstances (e.g., upcoming deployments, drill/duty requirements, disabilities, VA appointments, etc.) are welcome and encouraged to communicate these, in advance if possible, to the instructor in the case that special arrangements need to be made.

Use of Trade Names

Where trade names are used, no discrimination is intended and no endorsement by the World Campus, Outreach and Cooperative Extension, the College of Agricultural Sciences, or The Pennsylvania State University is implied.

Subject to Change Statement

Please note that this Course Syllabus is subject to change. Students are responsible for abiding by such changes.

ENT 313 Grade Tracking Sheet

Exams = 300 points (3 exams @ 100 points each)

Exam 1 (100) _____ Exam 2 (100) _____ Lab Practical Exam (100) _____ Total exam score ____

Quizzes = 40 points (4 quizzes @ 10 points each)

Quiz 1 (10) _____ Quiz 2 (10) _____ Quiz 3 (10) _____ Quiz 4 (10) _____ Total quiz score _____

Laboratories = 150 points (6 Labs @ 25 points each)

Lab 1: Lab Basics / External Morphology (25) _____ Lab 2: Insecta Diversity Lab I (25) ____ Lab 3: Insecta Diversity Lab III (25) ____ Lab 4: Insecta Diversity Lab III (25) ____ Lab 5: IPM Case Studies (25) ____ Lab 6: Internal Morphology (25) ____ **Total lab score ____**

Extra-credit (popular press article) = 10 points Report with press article (10)

Total points = _____ (exams, quizzes, labs, participation, IPM project, extra-credit) Grade percent = Grand total ____/ points possible = ____ x 100 = _____ %

Final grade (percentage of total points):

Α	100 %	to 94.0%
A-	< 94.0 %	to 90.0%
B+	< 90.0 %	to 87.0%
В	< 87.0 %	to 84.0%
B-	< 84.0 %	to 80.0%
C+	< 80.0 %	to 77.0%
С	< 77.0 %	to 70.0%
D	< 70.0 %	to 60.0%
F	< 60.0 %	to 0.0%

Fall 2022 M/W/F Tentative Schedule Lecture: Monday & Wednesday, 1:25-2:15pm Thomas Bldg 201 Labs: Fridays in ASI 015 (12:20pm section) or ASI 016 (2:30pm section)

Date	Day	Торіс	Format	Assignments	Quiz
9 Jan.	М	Course Introduction: Why study insects and what do you and insects have in common?	Lecture		
11 Jan.	W	External Anatomy & Diversity I: Classification, Body Parts and Modifications	Lecture		
13 Jan.	F	Lab #1: Lab Basics/External Morphology	Lab	Turn in Lab #1 (to Canvas by 11:59pm)	No
16 Jan.	М	No Class	Martin Luther King Day	. /	
18 Jan.	W	Diversity II: more ancient orders of Hexapoda (Class Entognatha, Class Insecta)	Lecture		
20 Jan.	F	Lab #2: Insecta Diversity I	Lab	Turn in Lab #2 (to Canvas by 11:59pm)	Yes
23 Jan. 25 Jan.	M W	Diversity III: Hemiptera & remaining Hemi-metabola Diversity IV: Holometabola	Lecture		
27 Jan.	F	Orders Lab #3: Insecta Diversity II	Lab	Turn in Lab #3 (to Canvas by 11:59pm)	Yes
30 Jan.	М	Diversity V: Holometabola Orders	Lecture	1.000111	
1 Feb.	W	Lecture Exam 1	Exam		
3 Feb.	F	Lab #4: Insecta Diversity III	Lab	Turn in Lab #4 (to Canvas by 11:59pm)	No
6 Feb.	М	Insect Behavior	Lecture	. ,	
8 Feb.	W	Social Insects	Lecture		
10 Feb.	F	Lab Practical	Exam		No
13 Feb.	М	Plant-Insect Interactions	Lecture		
15 Feb.	W	Biological and Chemical Control	Lecture		
17 Feb.	F	Lab #5: IPM Case Studies	Lab	Turn in Lab #5 (to Canvas by 11:59 pm)	Yes
20 Feb.	Μ	Internal Anatomy & Physiology I	Lecture		
22 Feb.	W	Internal Anatomy and Physiology II	Lecture		
24 Feb.	F	Lab #6: Internal Anatomy	Lab	Turn in Lab #6 (to Canvas by 11:59 pm)	Yes
27 Feb.	М	Insect Engineering	Lecture	. ,	
1 Mar.	W	Medical Entomology	Lecture		
3 Mar.	F	Lecture Exam 2	Exam		