

BIOLOGY 870

Insect Biology

Spring 2022

Professor **Bryan Drew** (344 Bruner Hall of Science). Molecular systematics; biogeography; speciation; phylogenetics of Lamiaceae; • 308-865-8883 • drewbt@unk.edu

Course Materials:

- Required Texts: The Insects: An Outline of Entomology.
- Voicethreads, announcements and extra readings for this class will be available on Canvas
- E-mail: All students must use their UNK email (or other email) account so I can reach you.

Schedule: We may occasionally deviate from below...

	Date	Topic	Assignment/Reading*
Week 1	Jan. 24-28	Introduction; Arthropods ~Lab: Cockroach☺	Chapters 1-2; Science & Insect apocalypse Assignment 1
Week 2	Jan. 31-Feb. 4	Arthropod phylogeny/evolution External Anatomy (head)	Chapter 3; Assignment 2 Millipede article
Week 3	Feb. 7-11	External Anatomy (thorax and abdomen) Internal Anatomy/Morphology 1	Chapter 4; Assignment 3
Week 4	Feb. 14-18	Internal Anatomy/Morphology 2	Chapters 8 & 18; Assignment 4?
Week 5	Feb. 21-25	Development & metamorphosis	Chapter 6
Week 6	Feb. 28- March 4	Classification; Palaeoptera, Dermaptera Embioptera, Zoraptera, Plecoptera	Chapters 7 & 8; Taxoboxes 1-8, 10
Week 7	March 7-11	Midterm 1 Grylloblattodea, Mantophasmatodea Orthoptera	Chapter 10; Taxoboxes 9, 12, 13
Week 8	March 14-18	Phasmatodea, Blattodea, Mantdodea	Taxoboxes 11, 14, 15
Week 9	March 21-25	Isoptera/Hemipteroids	Chapter 12; Taxoboxes 16, 17, 18, 19; Death of the Superhopper
Week 10	March 28-	Hemipteroids/Neuroptera/ Strepsiptera	Taxoboxes 20, 21, 23

	April 4		
Week 11	April 4-8	Midterm Exam 2 Coleoptera	Chapter 10; Taxobox 22
Week 12	April 11-15	Hymenoptera	Chapters 12-13; Taxobox 29
Week 13	April 18-22	Trichoptera/Lepidoptera	Chapters 12-13; Taxoboxes 27 & 28
Week 14	April 25-29	Diptera, Mecoptera, Siphonaptera	Chapter 14; Taxobox 24, 25, 26
Week 15	May 2-6	Plant-insect interactions; wrap up	Chapter 11; May 6th: Insect Collections Due
Week 16	May 7-13	Final Exam	

Exams: week of February 28th & March 28th

*Readings from “The Insects: An Outline of Entomology” unless otherwise noted. Additional readings will be assigned as the semester progresses.

Course Description: This course will examine the most diverse groups of macro-organisms, the insects. As part of this class you will be required to make an insect collection**. This collection must have 50 different insects from 10 different orders, with 35 specimens identified to family. More information on this will follow. It shouldn't be hard!

**The class cannot be passed without making an insect collection.

Course Objectives:

- Gain an appreciation for the incredible diversity of Arthropods, specifically insects
- Understand what the major insect groups are and how they are related
- Learn to associate morphological characters with corresponding insect orders/families

GRADES:	Midterm I	15%
	Midterm II	15%
	Final Exam	20%
	Assignments and Discussion	15%
	Insect Collection	35%

The grading scale used for this class is as follows:

A (92-100%), A- (90-91%), B+ (88-89%), B (83-87%), B- (80-82%), C+ (78-79%), C (73-77%), C- (70-72%), D+ (68-69%), D (63-67%), D- (60-62%), and F (below 60%).

Plagiarism and cheating: Anyone found plagiarizing or cheating will receive a 0 for that assignment; subsequent violations will result in referral to the Vice Chancellor for Academic Affairs for dismissal from the university.

Students with Disabilities

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services for a disability, students must be registered with the UNK Disabilities Services for Students (DSS) office, 175 Memorial Student Affairs Building, 308-865-8214 or by email unkdso@unk.edu

UNK Statement of Diversity & Inclusion:

UNK stands in solidarity and unity with our students of color, our Latinx and international students, our LGBTQIA+ students and students from other marginalized groups in opposition to racism and prejudice in any form, wherever it may exist. It is the job of institutions of higher education, indeed their duty, to provide a haven for the safe and meaningful exchange of ideas and to support peaceful disagreement and discussion. In our classes, we strive to maintain a positive learning environment based upon open communication and mutual respect. UNK does not discriminate on the basis of race, color, national origin, age, religion, sex, gender, sexual orientation, disability or political affiliation. Respect for the diversity of our backgrounds and varied life experiences is essential to learning from our similarities as well as our differences. The following link provides resources and other information regarding D&I: <https://www.unk.edu/about/equity-access-diversity.php>

Students Who are Pregnant

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact Cindy Ference in Student Health, 308-865-8219. The following link provides information for students and faculty regarding pregnancy rights. <http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students>

Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

Local Domestic Violence, Sexual Assault Advocacy Agency 308-237-2599

Campus Police (or Security) 308-865-8911

Title IX Coordinator 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

University Policies Related to COVID-19: The university community is deeply concerned for the well-being of its students, faculty, and staff. Keeping each other as safe as possible will require commitment from each of us; failure to do so will literally place lives in danger. The full policy relating to mitigation of the spread of infectious diseases can be found at <https://www.unk.edu/coronavirus/> Policies that apply to all courses (online, remote, blended, or face-to-face) include:

- Students shall monitor their health daily. No student shall attend classes in person while sick. Those who have had contact with positive-tested individuals or show COVID-19 related symptoms must have clearance from the Public Health Center prior to returning to face-to-face classes. There will be no penalties for missing classes for COVID-19 related absences. Students will still be responsible for course content through alternative attendance or other options arranged with the instructor.

Additional policies specific to face-to-face instruction include the following:

1. During Phases I and II, all students are **required** to wear masks that cover the nose and mouth at all times during class and at any time, inside or outside, where physical distancing of at least 6' is not possible. Instructors shall maintain 16' of distance from students while lecturing but may be closer, if masked. Instructors have the authority to direct students who refuse to wear masks to leave the classroom. Students who have medical issues that make masks inadvisable should contact Disability Services for Students at 308-865-8214 to request an exemption.
2. You are **required** to wear both a face mask and protective eye wear during laboratory.
3. Students shall not arrive for class more than 5 minutes before the scheduled start time for the course. Instructors shall dismiss students promptly at the end time and all shall leave the classroom promptly. Students who have questions should use office hours rather than before/after class times.
4. Instructors and students should clean their desks prior to class. Cleaning materials will be provided.

All vaccinated faculty, staff and students, as well as visitors to campus, are encouraged, but not required, to wear face masks indoors. Unvaccinated individuals should continue to wear masks. (Masks are required indoors for all individuals at the University of Nebraska Medical Center.) <https://nebraska.edu/news-and-events/news/2021/08/university-of-nebraska-system-updates-covid-19-protocols>

Consistent with the University of Nebraska's guiding protocols, there are circumstances in which many people in our community may not be able to be vaccinated. Faculty may request, not require, that students wear masks in class under circumstances that clearly

indicate unnecessary yet controllable risk of infection. Please note that pandemic precautions are subject to change.

Questions regarding COVID-19 should be directed to the Public Health Center unkhealth@unk.edu or 308-865-8254. Questions regarding the COVID-19 academic policy should be directed to Sr. Vice Chancellor Bicak at bicakc@unk.edu. Questions regarding department specific requirements should be directed to the chair of the Biology department – Dr. Julie Shaffer, BHS 335, 308-865-8661, shafferjj@unk.edu

The above directions must be followed by everyone for the health and safety of our University. Students who do not comply may face disciplinary action from the university. Violations of any University or Campus Policy is a violation of the Student Code of Conduct.