

Entomology

May 4th , 2026

Flint Hills Room, Union

Time of check-in: Section (A) 9:45-10:00, (B) 1:15-1:30

Time of event: (A) 10:00-11:30, (B) 1:30-3:00

Dr. Jeremy Marshall (cricket@ksu.edu)

College Contact: Interim Associate Dean Jon Ulmer (julmer@ksu.edu)

January 19th, 2026

General Information

Date of last update: 1 December 2025

Team information (how many members constitute a team; how many scores count if not all):

FFA Chapters can register a team composed of up to 4 members for the Entomology CDE. All team members must take the exam during the same exam period. The top 3 individual scores will be used to assess and rank the Chapter's team. All individual scores will be posted.

Test form used: Universal D 705D-1

Is official dress required for your event: No

Equipment needed: No equipment is needed, but students can use a small magnifying glass for the identification portion of the exam.

Other general announcements (updates, changes, phone rules, etc):

Online course for the Entomology CDE: We designed a course to help teachers guide their students through learning about entomology. In our conversations with teachers, we realized most of you don't have access to good materials and don't have the time to develop them on your own. So, this course is a direct response to the needs of our Kansas teachers.

As for course structure, it is designed like a typical online course. There are brief lectures followed by a quiz. There are also guided notes for many lectures for students to fill out while they watch the videos. These are designed to help students learn all the material, as well as the material that is covered on the quizzes.

The great part about this online structure is that students can move at their own pace, or teachers can decide on a pace that works for them and their students. The course is equivalent to a semester long, introductory College course. However, the material and level of instruction is High School appropriate, as we've had our high school teaching experts evaluate the material.

Also, the Digital collection is divided into different groups based on biology (metamorphosis type and mouthparts), so it should be easier to focus on particular groups. They are even color coded to help facilitate associative learning. There are Quizlet resources, as well, so students can practice in class or on their own. These could also be fun class or group activities. We have even provided powerpoint slides with the raw images in them so teachers and their students can manipulate them in any educational process or project they like.

If grades are needed, each quiz is automatically graded. It also allows students to retake the quiz as many times as they like, thus allowing them to learn from their mistakes. The quiz will show them the questions they got wrong, but not the correct answer. This means students will need to engage with the lecture material again to get the correct answer. The Canvas Pro software we are using also mixes up the questions and order of possible answers. Questions are also designed to reduce "googling answers" and use of AI. This was a time consuming process, so hopefully it pays off for your students! They should have the opportunity to learn!!

Lastly, as an added goal, students can earn the official K-State badge for each course. Individuals that complete the course will also get an official certificate of completion. If you have any questions, please feel free to reach out to me, Dr. Jeremy Marshall, at insectsandyou@ksu.edu.

How students and teachers can enroll in the free micro courses for the Entomology CDE.

To enroll, follow the link below. You will need to "add to cart" and go from there. There is no charge. Students/Teachers will need to enroll in this course to access all the material on the CDE.

<https://www.enrole.com/ksu/jsp/session.jsp?sessionId=2026101062106&courseId=ENTROCOMBINED&categoryId=35A853C0#sessInfo>

Sections/points for each section

The Entomology CDE is scheduled as a 90-minute exam, consisting of two parts: (A) Identification and (B) Written. Students will be randomly split into two groups to start with either the Identification or Written portion of the exam. After 40 minutes, the two groups will switch to the other portion of the exam and be granted 40 minutes to complete the second half. Students are permitted to leave once they have completed both portions of the exam.

NO CELL PHONES OR ELECTRONIC DEVICES PERMITTED. THE USE THEREOF WILL RESULT IN AUTOMATIC DISQUALIFICATION!

Exam Details

A. Identification

The species, Orders, and Classes covered on the Identification exam are covered in the **"Introduction to Entomology"** course and listed in the file named, **"Digital Collection List.pdf"**. There are materials that cover the Classes of Arthropods, Orders of Insects, and species of interests. Everything needed to be successful on the identification part of the CDE is in the online course.

There will be 40 specimens, parts of specimens, or pictures from the digital collection, with one question at each station. For each station, students will have 45 seconds allotted to identify the target specimen/specimen by either the proper common name, Order, Class of Arthropod, or appropriate answer based on the **FFA CDE Digital Collection List or defining characteristics**. For specimens listed as a specific species, only the species name will be accepted as the correct answer even if the specimen belongs to a larger group of insects as well. An example would be if the station had an alfalfa weevil. Only "alfalfa weevil" would be accepted as the correct answer, not "weevil," even though this specimen also belongs to the larger group.

There will be no duplicate specimens. Once a station has been visited, *there will be no "return-visits" to re-examine specimens*. Students are permitted to bring magnifying glasses if desired; however, stations for which a magnifying glass is considered necessary will have a magnifying glass provided by the exam administrators. Past year's exams are provided as examples.

The file listed as “**FFA CDE Specimens 2025-2026 FINAL.pdf**” contains the list of “real” insect specimens that could be on the CDE. The Insect Kits can be purchased from the KSU Popenoe Club (popenoe@ksu.edu), as they are available.

B. Written

Under Exam 1 on the scantron, the written portion of the CDE will be based on the “Introduction to Entomology” course and the identification material that we have developed for the Kansas State Entomology CDE (see above). The quizzes at the end of each lesson are a great place to start, but students are responsible for all the material in all lectures in the course. The course provides a solid background in general entomology.

There will be 40 multiple-choice questions drawn from the online course. Approximately 40 minutes are allowed to complete the written exam. Past year’s exams are provided as examples. After the entire 90-minute examination period and all students have completed the exam (from both the morning and afternoon exam sessions), participants may ask questions regarding the insect specimens on the Insect ID Test, or the answers to questions appearing on the Written Test. Students and instructors are NOT permitted to take photos of specimens or written exam during or after the exam but may go over the specimens with the Entomology CDE volunteers if desired.

Tiebreakers

1. **Under Exam 2 on the scantron**, an additional 20 written questions, chosen for difficulty, will be optional. These must be answered during the 40 minutes allowed for the written exam – no additional time is given for these questions. Results from these questions will only be used to break tie scores.
2. The next tie breaker after EXAM 2, is the score on the written exam.
3. If still tied, the latest missed question on the written exam will be used. For example, if ‘student X’ answered questions 1 through 8 correctly and missed #9, while ‘student Y’ answered questions 1 through 10 correctly, and missed #11, then ‘student Y’ would win the tie break. This process would continue on each missed question until a winner is determined. In the rare case that students are still tied after the written exam, the same process would extend to “Exam 2” questions and then the identification exam.
4. If somehow tied after all scores and examining the order of missed questions, then the Organizers will examine each missed question (which would be exactly the same) and determine how wrong each question was starting with the first missed question and continuing as needed. This will be an assessment from a PhD Entomologist. Say the following is the question:

Which mouthpart type is specially adapted for siphoning liquids such as nectar?

- A. Chewing
- B. Piercing-sucking
- C. Siphoning
- D. Sponging
- E. Cutting-sponging

The correct answer is “C.” If ‘student X’ answered “B” and ‘student Y’ answer “A” then ‘student X’ would win the tiebreak, as piercing-sucking is a better wrong answer than chewing. The advantage in this rare case is that it will be an Entomologist determining the winner.