ENT 401, Honey Bee Biology and Management (Spring 3 credits; lecture and lab; Instructor – David R. Tarpy): ENT 401 is a newly designed Distance Education course that is an upper-level class that focuses on the biology and management of honey bees. Students will learn the fundamentals of honey bee life history, development, and behavior in an effort to understand how colonies function. Based on this knowledge, students will learn practical aspects of beekeeping such as disease treatments, pollination, and honey production. There will be three mandatory laboratory sessions that will train students in how to become active beekeepers.

The final grade is determined by two (non-cumulative) midterm exams, three online quizzes, six individual- or group projects/assignments, and three laboratory checklists. For students on or near campus, laboratories will be held at the Lake Wheeler Honey Bee Research Facility on three separate Saturdays in the latter part of the semester. For distant students enrolled in the course, we will coordinate with them to locate a suitable beekeeping mentor to conduct analogous laboratory activities.

ENT 401 Honey Bee Biology and Management
Weekly Schedule

1. Introduction to the course
2. Life history
3. Development and anatomy
4. Queens, drones, and mating
5. Division of labor
6. Foraging
7. Pheromone communication and genetics
8. Honey bees of the world
9. Allergies and establishing a new hive
10. Seasonal management
11. Diseases, parasites, and disorders
12. Spring management and queen breeding
13. Pollination and bee botany
14. Honey and other hive products
15. Africanized honey bees and importance of bees