ENY 2041C
Practical Beekeeping
Summer B 2023
3 credits

Instructor: Cameron Jack, PhD
Office Room #: ENY (Bldg 964), room 114
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Office Phone #: 352-294-6926 (Please email to set up a phone appointment.)
E-mail: cjjack@ufl.edu

TA: Laura Kalthoff
E-mail: laura.kalthoff@ufl.edu

Special Note on Contact via Email: Due to UF privacy laws, you must use your GatorLink account or the Canvas mail system when emailing the Instructor or TA. Emails sent from other accounts (gmail, hotmail, etc.) will not be answered by the Instructor or TA. Emails from a GatorLink account will be responded to within 48 hours, excluding extraneous circumstances.

Office Hours: Please schedule by appointment.

Course Description: The overall course goal is that students be able to establish colonies of European-derived honey bees and manage them to be healthy and productive. To achieve this goal, this class is organized as a combined, hybrid course with online lectures and in-person field experiences.

Course Learning Objectives:
1. Recognize and use beekeeping-related jargon,
2. Identify common beekeeping tools and equipment,
3. Identify the members of a honey bee colony and describe the primary role each member plays within a colony,
4. Recognize relevant biological properties of honey bees and their colonies in order to utilize this knowledge to manage colonies properly,
5. Evaluate the health and strength of honey bee colonies accurately,
6. Employ colony management techniques to prevent swarming and maximize honey production,
7. Combine preventative methods and treatments to control common honey bee pests and diseases, and
8. Manage honey bee colonies to produce honey, wax, and value-added hive products.

Students’ successful achievement of these learning objectives will be evaluated via online lecture quizzes, field journal entries, and a practical assessment.

Suggested Readings:
2. American Bee Journal articles written by Dr. Jamie Ellis which are appropriate for the content of this course.

Lectures: Lecture videos will be available through Canvas in an effort to maximize class time for hands on experiences. Students will be expected to watch the recorded lecture prior to each class. Lecture videos are no more than 20 minutes in length and can be viewed on most devices that have access to the internet.
Supplemental material will be made available throughout the course via Canvas to enhance student comprehension of the topics covered. Concepts covered in the online lectures will be reinforced during in-person classes.

Please note that all video clips and photographs are copyrighted and are NOT to be used outside of this class and may be used only this semester. Please do not copy or distribute these photographs or video clips. All class notes are provided for educational use only.

**Course Notifications and Communication:** All course communications (assignments, announcements, test information, etc.) will be made via the Announcements in Canvas. Please ensure that your Canvas profile is set to receive notifications (i.e. please check the appropriate box to receive all notifications). To do this, click on your name in the upper right corner of the Canvas homepage after logging into Canvas. Next, click “notifications” on the left. This will take you to the Notification Preferences page. Then, click the check symbol for at least the following notifications: Due Date, Course Content, Announcement, and Grading.

**Appropriate Attire:** Students will interact with European honey bees regularly throughout the course. Protective equipment, such as beekeeping suits, veils, and gloves will be provided. Students are required to wear closed-toed shoes. Shoes that cover the ankles (such as hiking boots) provide the most protection from stings around the ankle area. We also recommend that students wear pants (rather than shorts, dresses, skirts, etc.) to class.

**Honey Bee Stings:** Stings are likely to occur when working in/around honey bee colonies. Working directly with live honey bee colonies is a significant component of the course. **Students with severe (anaphylactic) allergies to honey bee stings should not take this course.** If you have never been stung and are unsure of your allergy status, we recommend that you visit an allergist to obtain precautionary allergy response training/treatment (e.g. an EpiPen). All students are required to read the provided document on honey bee stings prior to attending the first day of class. Questions related to this assignment will be included in the first quiz.

**Evaluation:** The course grade is based on total points earned out of 400 possible points.

<table>
<thead>
<tr>
<th>Attendance/Participation</th>
<th>10 points each × 10 class periods</th>
<th>100 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Assessments</td>
<td>10 points each × 10 quizzes</td>
<td>100 points</td>
</tr>
<tr>
<td>Field Experience Discussion Posts</td>
<td>10 points each × 10 posts</td>
<td>100 points</td>
</tr>
<tr>
<td>Practical Exam</td>
<td>100 points</td>
<td>100 points</td>
</tr>
<tr>
<td><strong>Total Course Points</strong></td>
<td></td>
<td><strong>400 points</strong></td>
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</tbody>
</table>

**Grades and Grade Points**

For information on current UF policies for assigning grade points, see [catalog.ufl.edu/UGRD/academic-regulations/grades-gradingpolicies/]({catalog.ufl.edu/UGRD/academic-regulations/grades-gradingpolicies/}).

<table>
<thead>
<tr>
<th>% grade</th>
<th>Letter grade</th>
<th>Points needed to achieve letter grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-90</td>
<td>A</td>
<td>≥ 360</td>
</tr>
<tr>
<td>87-89</td>
<td>B+</td>
<td>348 – 359</td>
</tr>
<tr>
<td>80-86</td>
<td>B</td>
<td>320 – 347</td>
</tr>
<tr>
<td>77-79</td>
<td>C+</td>
<td>308 – 319</td>
</tr>
<tr>
<td>70-76</td>
<td>C</td>
<td>280 – 307</td>
</tr>
<tr>
<td>67-69</td>
<td>D+</td>
<td>268 – 279</td>
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<tr>
<td>60-66</td>
<td>D</td>
<td>240 – 267</td>
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<tr>
<td>0-59</td>
<td>E</td>
<td>0 – 239</td>
</tr>
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</table>

**FINAL GRADING**
<table>
<thead>
<tr>
<th>Class #</th>
<th>Day/Date</th>
<th>Topic</th>
<th>Assignments Due Before Class at 9:30 am</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thursday 6 July</td>
<td>Introduction and Preparing the Apiary</td>
<td>Syllabus/Sting Quiz Module 1 Quiz</td>
</tr>
<tr>
<td>2</td>
<td>Tuesday 11 July</td>
<td>Hive Demo and Installing Packages</td>
<td>Module 2 Quiz Discussion Post 1</td>
</tr>
<tr>
<td>3</td>
<td>Thursday 13 July</td>
<td>Clipping and Marking Queens and Hive Inspections</td>
<td>Module 3 Quiz Discussion Post 2</td>
</tr>
<tr>
<td>4</td>
<td>Tuesday 18 July</td>
<td>Making Splits and Swarm Control</td>
<td>Module 4 Quiz Discussion Post 3</td>
</tr>
<tr>
<td>5</td>
<td>Thursday 20 July</td>
<td>Field Trip</td>
<td>Discussion Post 4</td>
</tr>
<tr>
<td>6</td>
<td>Tuesday 25 July</td>
<td>Pests, Diseases and Hive Inspections</td>
<td>Module 6 Quiz Discussion Post 5</td>
</tr>
<tr>
<td>7</td>
<td>Thursday 27 July</td>
<td>Pests and Diseases Continued</td>
<td>Module 7 Quiz Discussion Post 6</td>
</tr>
<tr>
<td>8</td>
<td>Tuesday 1 August</td>
<td>Honey Collection and Hive Inspections</td>
<td>Module 8 Quiz Discussion Post 7</td>
</tr>
<tr>
<td>9</td>
<td>Thursday 3 August</td>
<td>Honey Extraction</td>
<td>Module 9 Quiz Discussion Post 8</td>
</tr>
<tr>
<td>10</td>
<td>Tuesday 8 August</td>
<td>Value Added Hive Products and Hive Inspections</td>
<td>Module 10 Quiz Discussion Post 9</td>
</tr>
<tr>
<td>11</td>
<td>Thursday 10 August</td>
<td>Practical Exam</td>
<td>Discussion Post 10</td>
</tr>
</tbody>
</table>
Assignments:

(1) Attendance/Participation: Attendance and participation are mandatory for this course. Cumulatively, attendance and participation in classes 1-10 will be worth 10 points each day (for a total of 100 points). Students are expected to arrive to class on time and tardiness will result in a reduction of five attendance points for that day. This course is designed to provide students with hands-on experiences in beekeeping. Therefore, students are expected to participate and be engaged in all hands-on activities for the duration of the class period; failure to do so will result in a reduction of participation points for that day up to 5 points. No make-up opportunities are available for attendance/participation without a university excused absence. No family, friends, spouses, etc. are allowed to attend any of the classes.

(2) Module Quizzes: There is an online assessment associated with each of the classes (classes 1-10). Each assessment is worth 10 points and will include five questions. Quizzes are open note. Students are required to watch the lecture(s) and complete the quiz prior to the beginning of each class. Students will be allowed two attempts for each quiz. **Quizzes are due by 9:30 am the morning of the corresponding class.** You will receive a 5-point deduction for each day a module assessment is late.

(3) Field Experience Discussion Posts: Students are required to participate on the discussion board after each class. This means that students must, in their own words:
1) provide a concise description of what was learned and experienced from the lectures and class and
2) make a substantiated comment on at least one other student’s post.

Each post must be between 150 and 300 words. Proper terminology, spelling, and grammar are expected in all posts. Students are encouraged to include any questions they may have about the topic. They will be able to see all entries that other students have made once they have submitted their entry. We encourage students to work together to explore any questions that may have been presented by other students. Participation in the discussion (via an original post and comment) is worth 10 points total. A rubric for grading the discussion posts is provided at the end of this syllabus. **Field Discussion Posts are due by 9:30 am the morning of the corresponding class.** You will receive a 5-point deduction for each day a module assessment is late.

(4) Practical Exam: The practical exam will occur during the last class period (see Course Schedule). The practical exam is a three-part exam. One section of the practical will be an assessment of a student’s ability to work a bee hive and identify key components of a living honey bee colony. A second section of the practical exam will test students’ ability to identify honey bee pests, beekeeping equipment, and beekeeping tools. Finally, a third section will assess the student’s ability to integrate a series of symptoms/conditions to identify common colony states (e.g. queenless, swarming, healthy, etc.). Make-up opportunities are not available for the practical exam without a university-excused absence.

Optional content: In addition to the assignments above, optional resources are provided throughout the course modules, labeled as “supplemental content.” These resources are not required for course completion and are solely included for enrichment opportunities.
**Minimum technology and skills:** The only software used for this course is Canvas. All learning materials will be available to download in the course modules. Minimum technological skills required for this course include the navigation of Canvas. Additionally, students may desire to send emails and use word processing programs for assignments.

**Absences and Make-Up Work:** Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: [catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/](catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/)

**Online Course Evaluation Process:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at [gatorevals.aa.ufl.edu/students/](gatorevals.aa.ufl.edu/students/). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via [ufl.bluer.com/ufl/](ufl.bluer.com/ufl/). Summaries of course evaluation results are available to students at [gatorevals.aa.ufl.edu/public-results/](gatorevals.aa.ufl.edu/public-results/).

**Academic Honesty:** UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code ([sccr.dso.ufl.edu/process/student-conduct-code/](sccr.dso.ufl.edu/process/student-conduct-code/)) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

**Services for Students with Disabilities:** Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [dso.ufl.edu/drc](dso.ufl.edu/drc)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

**Campus Resources:**

**Health and Wellness**

*U Matter, We Care:* If you or someone you know is in distress, please contact [mailto:umatter@ufl.edu](mailto:umatter@ufl.edu), 352-392-1575, or visit [umatter.ufl.edu](umatter.ufl.edu) to refer or report a concern and a team member will reach out to the student in distress.
Counseling and Wellness Center: Visit counseling.ufl.edu or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit shcc.ufl.edu.

University Police Department: Visit police.ufl.edu or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; ufhealth.org/emergency-room-trauma-center.

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu.

Library Support: cms.uflib.ufl.edu/ask various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring. teachingcenter.ufl.edu/

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/

Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor-code/student-conduct-code/

On-Line Students Complaints: distance.ufl.edu/student-complaint-process/

Netiquette:
It is important to recognize that the online classroom is in fact a classroom, and certain behaviors are expected when you communicate with both your peers and your instructors. These guidelines for online behavior and interaction are known as netiquette.

Security:
Remember that your password is the only thing protecting you from pranks or more serious harm.

- Do not share your password with anyone.
- Change your password if you think someone else might know it.
Always logout when you are finished using the system.

**General Guidelines:**
When communicating online, you should always:
- Treat your instructor and fellow students with respect, even in email or in any other online communication.
- Always use your professors’ proper title: Dr. or Prof., or if you in doubt use Mr. or Ms.
- Unless specifically invited, don’t refer to them by first name.
- Use clear and concise language.
- Remember that all college level communication should have correct spelling and grammar.
- Avoid slang terms such as “wassup?” and texting abbreviations such as “u” instead of “you”.
- Use standard fonts such as Times New Roman and use a size 12 or 14 pt. font.
- Avoid using the caps lock feature AS IT CAN BE INTERPRETTED AS YELLING.
- Limit and possibly avoid the use of emoticons like :).
- Be cautious when using humor or sarcasm as tone is sometimes lost in an email or discussion post and your message might be taken seriously or offensive.
- Be careful with personal information (both yours and other’s).
- Do not send confidential patient information via e-mail.

**Email Netiquette:**
When you send an email to your instructor, teaching assistant, or classmates, you should:
- Use a descriptive subject line.
- Be brief.
- Avoid attachments unless you are sure your recipients can open them.
- Avoid HTML in favor of plain text.
- Sign your message with your name and return e-mail address.
- Think before you send the e-mail to more than one person. Does everyone really need to see your message?
- Be sure you REALLY want everyone to receive your response when you click, “reply all.”
- Be sure that the message author intended for the information to be passed along before you click the “forward” button.
<table>
<thead>
<tr>
<th>Points Available</th>
<th>2 points</th>
<th>1 point</th>
<th>0 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accurately summarizes the day's activities</td>
<td></td>
<td></td>
<td>Does not accurately summarizes the day's activities</td>
</tr>
<tr>
<td>Uses correct terminology/jargon throughout</td>
<td>Occasionally misuses or does not use appropriate terminology/jargon</td>
<td>Consistently misuses or never uses appropriate terminology/jargon</td>
<td></td>
</tr>
<tr>
<td>Explains the relevance of the day’s activities to being able to manage honey bee colonies successfully</td>
<td>Mentions but does not elaborate on the relevance of the day’s activities to successful honey bee management</td>
<td>Does not mention or explain the relevance of the day’s activities to successful honey bee management</td>
<td></td>
</tr>
<tr>
<td>Is written in complete sentences and uses proper grammar</td>
<td>Occasionally uses improper grammar</td>
<td>Is not written in complete sentences and does not use proper grammar</td>
<td></td>
</tr>
<tr>
<td>Responded to 1 or more post(s) made by another classmate</td>
<td></td>
<td></td>
<td>Did not reply to another student's post</td>
</tr>
</tbody>
</table>