

ENY 5572
Beekeeping
Fall 2018
3 credits

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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 Instructors.

Office Hours: Due to Mr. Jack's and Dr. Ellis' travel schedules, office hours and phone meetings are available only by email appointment. Our building is just east of the Entomology and Nematology building (Charles Steinmetz Hall or Building 970).

Course Description: The biology of honey bees and the craft of apiculture will be examined by exploring the natural history, biogeography and ecology of honey bees. Honey bee anatomy, physiology, colony social structure, pests/diseases, pollination ecology, management and current topics in beekeeping will be discussed.

Additional Information Regarding the Course: This course contains significant scientific content. If you are unsure of any vocabulary terms or scientific principles, please take the time to research them. It will be easy to fall behind if you do not understand the content. A basic biology prerequisite is recommended, though not required.

Course Learning Objectives:

1. Compare the natural histories of honey bees with those of other bees, emphasizing the development of sociality in bee hymenoptera.
2. Examine the diversity and biogeography of honey bees.

3. Discover the intricacies of honey bee biology, anatomy, physiology.
4. Determine the contributions of nest structure, eusocial behavior, and superorganism colony traits to the success of honey bees globally.
5. Appraise the history, development, and practice of apiculture.
6. Associate apiculture with production agriculture, ecosystem health, and human success.
7. Synthesize transcending topics (such as parasitology, invasive species biology, IPM, etc.) using apiculture as a model.

**This course is co-taught with EYN 4573: Apiculture.

Recommended Readings (not required):

1. Caron, D.W. 2013 (revised from 1999). Honey Bee Biology and Beekeeping. Wicwas Press. Cheshire, CT, 368 pp.
2. Delaplane, K.S. 2006. Honey Bees and Beekeeping: A Year in the Life of an Apiary, 3rd Edition. The Georgia Center for Continuing Education, Athens, GA, 108 pp.
3. Supplemental Information (documents, videos, etc.) that further explains the concepts taught is provided for each module.

Lectures: This is an online, Canvas-based course. The website for the syllabus, all lectures, reading materials, announcements, tests, etc. will be posted on eLearning: <http://lss.at.ufl.edu>. All lectures for this course are narrated presentations and may include some videos and/or supplemental reading. Not all information covered during the narrated presentations will exist as printed material on lecture slides. Therefore, you should pay close attention to the narrated lectures as knowing and understanding the spoken information is critical for success in this course. All lectures and tests will be delivered online in Canvas. There will be no classroom lecture meetings.

Throughout the course, you will view video and Flash course lectures. Please understand that many of these 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 and are not to be distributed.

Course Notifications and Communication: All course communications (assignments, announcements, test information, etc.) will be made via the Announcements and Email functions of 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.

Course Schedule: This course is offered via Canvas as a distance education course. To stay on track, students must adhere to the course schedule.

Course Schedule, Fall 2018

Section	Module	Week(s)	Content (Lecture # and Title)	Module Assessments Due	Section Critical Thinking Exercises Due	Beekeeping Experience Assignments Due	Extension Report Assignments Due
Getting Started	Getting Started	1	syllabus, course orientation, tips for success	Syllabus quiz 24 Aug 2018			
1	1 – Phylogeny and Biogeography	2,3	1 – An introduction to hymenopterans and bees	7 Sept 2018	7 Sept 2018		7 Sept 2018 Report Topic Due
			2 – Sociality and honey bees				
			3 – Biogeography of honey bees				
2	2 – Anatomy and Physiology	4,5	4 – Honey bee anatomy	21 Sept 2018	28 Sept 2018	21 Sept 2018 - RSVP for Beekeeping Field Day 29 Sept 2018 – Beekeeping Field Day	
			5 – Honey bee physiology				
			6 – Nutrition and Immune Response				
	3 – Biology	6	7 – Honey bee biology	28 Sept 2018			
			8 – Honey bee colonies as a superorganism				
3	4 – Beekeeping	7,8	9 – The history of beekeeping	12 Oct 2018	26 Oct 2018	26 Oct 2018 – Beekeeping Reports Due	19 Oct 2018 – Report 1 st Submission Due 26 Oct 2018 – Peer Evaluations Due
			10 – Beekeeping equipment				
			11 – Getting started in beekeeping				
	5 – Pests Predators & Pathogens	9	12 – Pests and predators of honey bees	19 Oct 2018			
			13 – Pathogens and disease of honey bees				
	6 – Management Strategies	10	14 – Integrated pest management in apiculture	26 Oct 2018			
15 and 16 – Yearly beekeeping management							
4	7 – Hive Products	11	17 – History and theory of honey production	2 Nov 2018	9 Nov 2018	9 Nov 2018 – Peer evaluations due	
			18 – Other products of the hive				
	8 – Ecosystem Services	12	19 – Bee botany	9 Nov 2018			
			20 – Pollination ecology				
5	9 – Breeding and African honey bees	13	21 – Queen and package bee production	16 Nov 2018	30 Nov 2018	30 Nov 2018	30 Nov 2018 – Final Submission
			22 – African honey bees				
	10 – CCD, Research, and Extension	14,15	23 – Colony collapse disorder (CCD)	30 Nov 2018			
			24 – Research and extension efforts in apiculture				

Evaluation: The course grade is based on total points earned out of 600 possible points.

Module assessments	25 points each × 10 assessments	250 points
Section critical thinking exercises	35 points each × 5 exercises	175 points
Beekeeping experience RSVP	5 points	5 points
Submission of your peer evaluations of two of your peers' beekeeping reports	10 points × 2 peer reviews (you get 10 points per peer review you submit)	20 points
Peer evaluation of your beekeeping report (two of your peers' evaluations of your report)	25 points × 2 peer reviews	50 points
Extension report	100 points	100 points
	Total Course Points	600 points

Grades and Grade Points

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

FINAL GRADING		
% grade	Letter grade	Points needed to achieve letter grade
100-93	A	≥ 554.5
90-92	A-	536.5 – 554.4
87-89	B+	518.5 – 536.4
83-86	B	494.5 – 518.4
80-82	B-	476.5 – 494.4
77-79	C+	458.5 – 476.4
73-76	C	434.5 – 458.4
70-72	C-	416.5 – 434.4
67-69	D+	398.5 – 416.4
63-66	D	374.5 – 398.4
60-62	D-	356.5 – 374.4
0-59	E	0 – 356.4

Assignments:

(1) Syllabus Quiz: There is an ungraded syllabus quiz on the “Getting Started” page. You need to read the syllabus and answer quiz questions related to it by **11:59 pm ET on the date listed in the course schedule**. You must complete the syllabus quiz before you are able to advance to the next module. This quiz will show you how your online assessments will be formatted as well as allow you to demonstrate that you understand how this course works and important due dates. Go to “Getting Started” on the course homepage to review the syllabus and take this short quiz.

(2) Module Assessments: There is a 25 point assessment associated with each of the ten modules in this course. These assessments are *open note* (i.e. you are allowed to use class lectures, books, websites, etc. while taking the assessments). The assessments will be composed of true/false and multiple choice questions. **The assessments 1) open the Saturday morning after the previous**

section ends, 2) are timed (60 minutes each), and 3) are due at 11:59 pm on the date listed in the course schedule. These are individual assessments so please do your own work and do not work in groups or share your answers. There is a large bank of test questions for each assessment and the assessment questions are selected randomly for each student. You will receive a 5 deduction for each day a module assessment is late.

(3) Critical Thinking Exercises: The 10 modules are arranged into five sections. There is a critical thinking exercise associated with each section. The exercises are designed to encourage you to think critically about the content presented in the module lectures. The critical thinking exercises are worth 35 points each. These are individual exercises so please do your own work and do not work in groups or share your answers. All of the critical thinking exercises are open note and untimed. You can close and reopen the exercise as many times as you would like until the due date (see course schedule), but you will not be able to make any changes once you have officially submitted your final exercise. **The exercises will be available only during the section open period (see course schedule), are due at 11:59 pm on the date listed in the course schedule.** You will receive a 5 deduction for each day a module assessment is late.

(4) Beekeeping Report: One of the most useful skills in any profession is writing. As such, you are expected to produce a 4-5 page (maximum) written report (12 point, Times New Roman font, double spaced) by participating in one of two activities (shadow a beekeeper or attend the beekeeping field day). Regardless of which activity you choose, you must RSVP and take a sting quiz by the date listed on the course schedule. Students living within 2 hours of Gainesville, FL are expected to make every effort to attend the field day. Students electing to shadow a beekeeper must include the beekeeper's name and phone number when registering for this option.

Your two options:

1) You can attend the Honey Bees and Beekeeping Field Day hosted at the University of Florida Honey Bee Research Building (just east of Charles Steinmetz Hall) in Gainesville, FL. On one Saturday during the semester (see the course schedule for the date), we host a field day during which students construct beekeeping equipment, work live honey bee colonies, extract honey, etc. The field day begins at 9:00 am and concludes at 2:00 pm. Participants must wear socks and close-toed shoes. Long sleeve shirts and pants are encouraged. Please do not wear any dark colored clothes (black, navy, etc.). Following the Field Day, students must write a 4-5 page report on their experience with honey bees and beekeeping during the event. A map and driving direction to the UF Bee Biology Unit are available on the Canvas Course site. No family, friends, spouses, etc. are allowed to attend the field day.

2) You can shadow a beekeeper and write report on his/her beekeeping operation. You can discuss how the operation is managed, what the purpose of the operation is (pollination, honey production, etc.), key obstacles the beekeeper has to overcome in his/her operation, etc. Your visit with the beekeeper should be photo-documented (you can/should include photos as figures in the report, though they must be in addition to the 4-5 pages of text). You will receive a score of 0 on the beekeeping report/peer evaluation if you do not shadow the beekeeper in person. This option is mainly intended for students who are unable to attend the field day because (1) they

live too far from Gainesville or (2) they have a previously-scheduled, legitimate engagement elsewhere that day. Finding a beekeeper to shadow can take time. Please make every effort to contact a beekeeper by the Beekeeping Experience RSVP (see course schedule for date) so that you can shadow the beekeeper well before the Beekeeping Report is due. Almost every country, region, state, etc. has a beekeepers' association. The best way to find a beekeeper in your area is do an internet search for "your country/state/region/etc. beekeepers association". For example: "Florida Beekeepers Association," "New Zealand Beekeepers Association," "Jacksonville Beekeepers Association," etc. From the website(s) you find, look for the given association's list of contacts, officers, members, etc. and contact one of them to explain your assignment and request a visit. At the end of the day, you have the same resources available to find beekeepers in your area that the Instructor and TAs have. Thus, the responsibility of finding a beekeeper lies with the student who elects to shadow a beekeeper. That said, please contact the Instructor or TA if you need help finding a local beekeeper in your area after exhausting other options.

A grading rubric has been provided at the end of this syllabus to facilitate development and peer review of the beekeeping report. **Five points will be deducted from reports every day past the due date (see the course schedule) that the report is submitted, regardless of the excuse.** Please do not wait until the last minute to produce your report.

The report must include a title, student name and email address, page numbers, photographs and/or figures, and introductory, supporting (or body), and conclusion paragraphs. The report must conclude in a 1/2 –page summary. The text of the report must be 4-5 double spaced pages long. It should be formatted in 12-point, Times New Roman Font.

The beekeeping report grade (up to 75 pts) is composed of three components.

1) 5 points for the RSVP and sting quiz – You must RSVP for the beekeeping field day and take a sting quiz by the due date noted in the course schedule.

2) 20 points for submitting your peer evaluations of two other students' reports (10 points per report) – After submission of all students' beekeeping reports, you will be randomly assigned two other students' beekeeping reports to peer evaluate using the rubric at the end of this syllabus. You get 10 points per peer review you submit (up to two peer reviews). You will be awarded 0, 10, and 20 points for submitting zero, one or two peer reviews respectively. Your evaluations of two of your peer's reports are due by the date listed in the course schedule.

3) 50 points for your peers' reviews of your beekeeping report – You can receive up to 50 points for the beekeeping report you write and submit. Two students in the class will review your beekeeping report and individually assign a score of 0 – 25 using the beekeeping report rubric at the end of this syllabus. The two scores will be summed to produce the total score for your beekeeping report.

(5) Extension Review: Students enrolled in ENY 5572 are required to produce an additional report in the form of a Featured Creatures article (<http://entnemdept.ufl.edu/creatures/>) or EDIS document (<http://edis.ifas.ufl.edu/>) with the potential for publication through the University of Florida's extension branch (Cooperative Extension Service). For Featured Creatures and EDIS

documents, you **must** check with the TA before beginning your paper so that they can verify that such a document does not already exist on your topic. The instructor or TA can provide ideas for selecting a topic. **A grading rubric has been provided at the end of this syllabus to facilitate development of the extension document.**

If writing a Featured Creatures document, you must choose a bee pollinator or bee pest of interest and write about it following the standard Featured Creature format. This format is available at the Featured Creatures link above under the “Format for Authors” link. EDIS documents can be written on a special topic regarding honey bees or beekeeping. Students should refer to the “Publishing FAQs” under “Instructions for Authors” on the EDIS website for publication guidelines.

Your document should convey scientific information in a way that a high school student could understand. Figures are extremely helpful in extension documents, and students are encouraged to include as many figures as necessary to explain a topic. You must obtain use permission from the owner of any figures you include in your final report if the figure is not original to you. There will be an additional assignment to submit with the Final Extension Report called “Extension Report Figures and Permissions.” For this assignment, you will upload the full sized jpeg file for each figure and fill in the accompanying word document with the proof of permission for use.

There are four components of the extension report that compose the completed assignment. Due dates for each component are listed in the course schedule.

- 1) Report Topic Due – The student should identify and record the topic chosen for the extension report by completing the Canvas assignment “Extension Report Topic.”
- 2) 1st Submission – This is not a rough draft, but rather is what the student considers the completed document.
- 3) Peer Review – The 1st submission will be shared with other graduate students in the class who will provide a peer review of the report by the due date listed in the course schedule. Each student will peer review two extension reports.
- 4) Final Submission – Students are expected to revise the extension report per the comments provided during the peer review process. The final report must be submitted by the due date shown in the course schedule.

A grading rubric has been provided at the end of this syllabus to facilitate development and peer review of the extension report. **Ten points will be deducted from the final report score every day past the due dates that any of the information requested above is late, regardless of the excuse.** Please do not wait until the last minute to produce your report or meet any of the other report deadlines. All points lost will be deducted from the final report grade.

Class Attendance and Make-Up Work: There will be no make-up for assessments, critical thinking exercises or other assignments missed without prior approval from the instructor. Unexcused, missed assignments will be assigned a grade assignment of 0. You will not be

allowed to make up assignments after the due date unless extenuating circumstances or illness prohibited you from completing the assignment. You will be required to provide appropriate written documentation (e.g., from a doctor in case of severe illness or a funeral notice or obituary in the unfortunate event of the death of a close relative/friend) to make up an assignment you failed to complete by the due date. Requirements for class attendance and make-up assignments are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>. This is a distance education course so attendance is not required.

Online Course Evaluation Process: Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

Academic Honesty: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

We, the members of the University of Florida, pledge to hold ourselves and peers to the highest standards of honesty and integrity.

Campus Helping Resources: Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- *University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu/cwc/*

Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Wellness Coaching

- *Career Resource Center*, First Floor JWRU, 392-1601, www.crc.ufl.edu/

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

For issues with technical difficulties for E-learning in Canvas: Please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Services for Students with Disabilities: The Disability Resource center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

UF Policy on E-mail: “Official University business email will be communicated to students using the University GatorLink email account. That is, official email will be sent exclusively to GatorLinkUserName@ufl.edu. The preferred email address recorded for all students will be the GatorLink address. This is the email address displayed in the online phonebook. Students may continue to use the forwarding mechanism to deliver their email to other mail services, if they wish. However, it is the student’s responsibility to insure that the forwarding address is current so that they receive official communications from the University”.

Software Use: All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Plagiarism: Plagiarism is a serious problem in academia today, especially with the ease of obtaining information from the World Wide Web. Plagiarism is defined as representing the words or ideas of another person as one's own, without attribution to the source. All words and ideas must be attributed to a source unless they are considered common knowledge (i.e., widely known by many people and found in many different sources). There are many kinds of plagiarism; one of the most common ones is "insufficient paraphrasing", even with correct citation. Please look at the Purdue Online Writing Lab's web site on Avoiding Plagiarism (<https://owl.english.purdue.edu/owl/resource/589/01/>).

Plagiarism is unethical, unacceptable in science, and prohibited by the UF Student Honor Code (<http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>). The consequences for plagiarism while at the University of Florida range from receiving a grade of zero for the plagiarized assignment or a failing grade for the course, to, for repeated offenses, expulsion from the university. Plagiarism after graduate training calls into question one's scientific integrity and can lead to banning of publication in journals and the loss of jobs/careers.

In some countries, it is an acceptable practice to write in a manner that faculty members at the University of Florida consider to be plagiarism. Students studying in our university and with plans to publish their research in the English language need to know what plagiarism is and how to avoid it.

Students who plagiarize will be caught and consequences will be applied. I check all written assignments using an anti-plagiarism software called Turnitin® (http://turnitin.com/en_us/products/originalitycheck). Students who plagiarize will receive a grade of zero on the assignment. The second instance of plagiarism in the course will result in an automatic failing grade in the course.

Please understand that our purpose in bringing to your attention the matter of plagiarism is to help train you to be ethical scientists, not to impugn your character.

Student Complaint Process: Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. Should you have any complaints with your experience in this course, please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.

Beekeeping Report Rubric

CATEGORY	Point Value ¹				
	5	4	3	2	0 - 1
Components of the report²	All required elements are present and additional elements that add to the report (e.g., thoughtful comments, graphics) have been added.	All required elements are present.	One required element is missing, but additional elements that add to the report (e.g., thoughtful comments, graphics) have been added.	2-3 required elements are missing.	>4 required elements are missing.
Spelling, Punctuation and Grammar	One or fewer errors in spelling, punctuation and grammar in the report.	Two or three errors in spelling, punctuation and grammar in the report.	Four or five errors in spelling, punctuation and grammar in the report.	Five or six errors in spelling, punctuation and grammar in the report.	>6 errors in spelling, punctuation and grammar in the report.
Appearance and Organization	Lab report uses headings and subheadings to visually organize the material. Additional steps have been taken to make the report visually pleasing.	Lab report uses headings and subheadings to visually organize the material. Some additional steps have been taken to make the report visually pleasing.	Lab report formatting does not help visually organize the material.	Lab report is typed but looks sloppy, with poor formatting and poor organization.	Lab report is handwritten, sloppy, illegible, and poorly formatted and organized.
Beekeeping Concepts³	Report illustrates an accurate and thorough understanding of beekeeping concepts outlined during the field day or visit with a beekeeper.	Report illustrates an accurate understanding of most beekeeping concepts outlined during the field day or visit with a beekeeper.	Report illustrates a limited understanding of beekeeping concepts outlined during the field day or visit with a beekeeper.	Report illustrates inaccurate understanding of beekeeping concepts outlined during the field day or visit with a beekeeper.	Report illustrates no understanding of beekeeping concepts outlined during the field day or visit with a beekeeper.
Beekeeping Jargon⁴	Report illustrates an accurate knowledge and use of jargon associated with beekeeping. The student uses all jargon correctly.	Report illustrates an accurate knowledge and use of most jargon associated with beekeeping. The student uses most jargon correctly.	Report illustrates a limited knowledge and use of jargon associated with beekeeping. The student uses only some jargon correctly.	Report illustrates incomplete knowledge and use of jargon associated with beekeeping. The student regularly misuses beekeeping-related jargon.	Report illustrates no knowledge and/or use of jargon associated with beekeeping. The student always misuses beekeeping-related jargon.

¹**Point Value:** There are 25 points that can be obtained per peer review (totaling 50 points when adding the two peer reviews together).

²**Components of the Report:** The report must include a title, student name and email address, page numbers, photographs and/or figures, and introductory, supporting (or body), and conclusion paragraphs. The report must conclude in a 1/2 –page summary. The text of the report must be 4-5 double spaced pages long. It should be formatted in 12-point, Times New Roman Font.

³**Beekeeping Concepts:** This includes topics such as honey extraction, equipment assembly, disease and pest recognition, lighting smokers, appropriate use of clothing worn by beekeepers for protection, etc.

⁴**Beekeeping Jargon:** The technical terminology associated with beekeeping and apiculture. Does the student demonstrate knowledge of beekeeping jargon by using it correctly?

Some additional questions that will help you develop the report: Does the student use accepted terminology rather than colloquialisms? Does the student demonstrate breadth and depth of knowledge about the topic? Do they demonstrate clearly that they understand apiculture and its practice? Do they include information garnered from multiple, reliable sources? Does the manuscript flow logically? Does it tell a story or, is it scattered in thought, jumping from one topic to the next? Do all paragraphs begin with introductory sentences and have supporting sentences that stick to the theme? Does one paragraph flow directly into the next? Are the sentences readable? Do the students use proper subject and verb agreement? Do sentences end in prepositions? Does the student split verbs? What is the overall writing quality?

Extension Report Rubric

CATEGORY	Point Value ¹				
	16	12	8	4	0
Components of the report²	All required elements are present and additional elements that add to the report (e.g., thoughtful comments, graphics) have been added.	All required elements are present.	One required element is missing, but additional elements that add to the report (e.g., thoughtful comments, graphics) have been added.	Some required elements are missing.	Many (over half) required elements are missing.
Spelling, Punctuation and Grammar	No errors in spelling, punctuation and grammar in the report.	Minor errors (1-3) in spelling, punctuation and grammar in the report.	Moderate errors (4-6) in spelling, punctuation and grammar in the report.	Considerable errors (7-9) in spelling, punctuation and grammar in the report.	A significant number (>9) of spelling, punctuation and grammar errors are present in the report.
Appearance and Organization	Report uses headings and subheadings to visually organize the material. Additional steps have been taken to make the report visually pleasing.	Report uses headings and subheadings to visually organize the material. Some additional steps have been taken to make the report visually pleasing.	Report formatting does not help visually organize the material.	Report is typed but looks sloppy, with poor formatting and poor organization.	Report is handwritten, sloppy, illegible, and poorly formatted and organized.
Topic Concepts³	Report illustrates an accurate and thorough understanding of the concepts associated with the topic.	Report illustrates an accurate understanding of most concepts associated with the topic.	Report illustrates a limited understanding of concepts associated with the topic	Report illustrates inaccurate understanding of concepts associated with the topic	Report illustrates no understanding of concepts associated with the topic
Topic Jargon⁴	Report illustrates an accurate knowledge and use of jargon associated with the topic.	Report illustrates an accurate knowledge and use of most jargon associated with the topic. The student uses most jargon correctly.	Report illustrates a limited knowledge and use of jargon associated with topic. The student uses only some jargon correctly.	Report illustrates incomplete knowledge and use of jargon associated with the topic. The student regularly misuses topic-related jargon.	Report illustrates no knowledge and/or use of jargon associated with the topic. The student always misuses topic-related jargon.

Drawings, Diagrams, Tables and Figures (collectively called “accompanying materials”)	Clear, accurate accompanying materials are included and make the report easier to understand. The accompanying materials are labeled neatly and accurately. All non-original accompanying materials are properly acknowledged.	Accompanying materials are included, labeled neatly and accurately, and the original source properly acknowledged.	Some needed accompanying materials are missing OR missing important labels OR the original sources are not identified.	Most needed accompanying materials are missing OR missing important labels OR the original sources not identified.	No accompanying material is present OR is missing important labeling OR credit information.
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¹Point Value: All reports start with 4 points. So, there are 96 additional points that can be obtained (totaling 100 points). Intermediate points can be assigned for each category. For example, if a student’s use of topic jargon lies between the highest (16 points) and 2nd highest (12 points) point values, 13-15 points can be awarded for that category as appropriate.

²Components of the Report: The report must include a title, student name, email address and in-text citations. If submitting a Featured Creatures report, the components included must follow those outlined at <http://entnemdept.ufl.edu/creatures/> under the link “format for authors”: http://entnemdept.ufl.edu/creatures/FC_format.pdf. It is important to note the EDIS formatting is considerably more flexible than that for Featured Creatures articles. If submitting an EDIS document, the student must follow the general guidelines presented at <http://edis.ifas.ufl.edu/> and more specifically at <http://edis.ifas.ufl.edu/faq/pubfaq.html>. However, the “necessary components” will vary with the topic. Please email Cameron Jack at cjack@ufl.edu for components that must be included for your particular topic. Additionally, review EDIS documents written about similar topics to identify needed information.

³Topic Concepts: The student must demonstrate an understanding of the concepts associated with the topic. For example, if the student writes a Featured Creatures article on small hive beetles, then the student would have to demonstrate an understanding of its biology, behavior, distribution and control (among other things). If the student writes an EDIS article on extracting honey, the student would have to demonstrate knowledge on honey extraction and processing techniques, harvesting, production, etc.

⁴Topic Jargon: The technical terminology associated with the topic. Does the student demonstrate knowledge of the jargon associated with the topic by using it correctly?

Some additional questions that will help you develop the report: Does the student use accepted terminology rather than colloquialisms? Does the student demonstrate breadth and depth of knowledge about the topic? Do they include information garnered from multiple, reliable sources? Does the manuscript flow logically? Does it tell a story or, is it scattered in thought, jumping from one topic to the next? Do all paragraphs begin with introductory sentences and have supporting sentences that stick to the theme? Does one paragraph flow directly into the next? Are the sentences readable? What is the overall writing quality?

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 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.