ENY-4660, Advanced Medical & Veterinary Entomology, 2 credits Distance Education

Syllabus

Instructor: Dr. Philip G. Koehler

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Office: Urban Entomology Building, Bldg 1278

Office Hours: Weekdays 8:00-5:00 Co-Course Requirements: ENY 4660L

Sakai Website: http://lss.at.ufl.edu (login with UF Gatorlink username and password)

Email: each student must have an active email account. The University of Florida requires that you obtain a student ID# and a Gatorlink email account as part of your registration process. The instructor may post class notices to your Gatorlink email account. While many of you already have independent email accounts, you must also obtain a University of Florida Gatorlink email account for use as a registered student. Please send the instructor an email message as soon as you have successfully registered for this course.

Course Description: This course presents the major insect, mite, and tick vectors of disease to man and animals. Students will learn to identify and understand the life cycles, morphology, and behavior of mosquitoes, ticks, mites, lice, fleas, and other disease vectors. Students also will learn about major arthropod-transmitted disease cycles, including malaria, Lyme disease, West Nile virus, leishmaniasis, and plague. The interaction between the disease-causing pathogen and the arthropod vector will be covered, including *biological* and *mechanical* transmission of pathogens as well as the mechanical damage that a parasite inflicts on its host.

Critical Thinking: With international travel and movement of people from place to place, it is difficult to determine the origins of a disease outbreak. Students will be expected to identify the vector, pathogen, and location of a person associated with a vector-borne disease. Critical thinking & communication will be evaluated by downloading a research paper from the course website, analyzing each of the specific portions of the paper (literature review, objectives, materials and methods, results, and discussion), and submitting an evaluation of the downloaded research paper as a Word document.

Course Lectures: Course lectures are on the Sakai course website. The lectures are downloadable in Zip format. You will have to unzip (extract) the lecture files in order to watch and hear them. Lecture notes and class schedule are also on the Sakai website and available for download.

Text: Gary Mullen and Lance Durden. 2009. *Medical and Veterinary Entomology, 2nd Edition*. Academic Press. ISBN #: 978-0-12-372500-4.

Lecture Notebook: Print this on your own. You can have it printed /bound at a copy store if you desire.

Grading: The exams will be timed exams taken on Sakai. The final exam will be comprehensive of all lectures. The course is based on a total of 1000 points:

Exam 1	200 points
Exam 2	200 points
Final exam	400 points
Critical Thinking & Communication	200 points

Grading scale (%):

94-100 A 90-<94 A-87-<90 B+ 83-<87 B 80-<83 B-77-<80 C+ 74-<77 C 70-<74 C-67-<70 D+

64-<67 D 60-<64 D-<60 E

Specific Evaluations: Your grade in the lecture course will be based on the points you earn and determined by the percentage breakdown of points earned. The percentage is then applied to the grading scale. Exams 1 & 2 and identification exams are not comprehensive and will be timed exams located on Sakai. Final exams (lecture and laboratory) will be comprehensive and also located on Sakai. Your "critical thinking & communication paper" will be graded by evaluating the critique of the 5 sections of the downloaded research paper on a scale of 40 points per

Lecture Subjects:

section.

- 1. Introduction to Med & Vet Entomology
- 2. Classification of Arthropod-borne diseases
- 3. Hematophagy, disease transmission and epidemiology
- 4. Flies (Diptera) of Medical and Veterinary Importance
- 5. Moth flies: Leishmaniasis and Bartonellosis
- 6. Biting Midges (Ceratapogonidae)
- 7. Mosquito Taxonomy, Biology, and Behavior
- 8. Mosquito viruses: EEE, VEE, SLE, Yellow fever, West Nile virus
- 9. Mosquito surveillance
- 10. Malaria
- 11. Horse flies, Deer Flies: EIA, Anaplasmosis
- 12. Muscid flies
- 13. Myiasis (Muscoidea)
- 14. Myiasis (Skin Bots and Grubs) and Louse flies

- 15. Black flies of Medical and Veterinary Importance
- 16. Filariasis: Mansonellosis, Onchocerciasis
- 17. No lecture
- 18. Lice of Medical and Veterinary Importance
- 19. Rickettsial Diseases: Epidemic Typhus, etc.
- 20. Mites: Rickettsialpox and Tsutsugamushi
- 21. Mites and Acariasis: Mange, Scabies, Chiggers
- 22. Spiders and Scorpions
- 23. Fleas (Siphonaptera) of Medical and Veterinary Importance
- 24. Plague and Murine Typhus
- 25. Ticks of Medical and Veterinary Importance
- 26. Lyme disease, Rocky Mountain Spotted Fever, Tularemia
- 27. True Bugs (Hemiptera): Kissing bugs and Bedbugs
- 28. Chagas Disease
- 29. Tsetse flies
- 30. Lepidoptera and Hymenoptera

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

Absences and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

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/honorcodes/honorcode.php.

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.

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 Training Programs Community Provider Database

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

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/

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. See http://distance.ufl.edu/student-complaints for more details.