



Infectious Disease Management for Animal Shelters

VME 6934 3 credits

University of Florida Distance Education Graduate Program in Shelter Medicine

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Course Description

This course explores all aspects of practical infectious disease management in animal shelters, including prevention, diagnosis, management, and outbreak investigations.

Course Content

Animals in shelters face a higher risk of infectious disease than companion animals in most other settings. While it is inevitable that sick animals will occasionally enter shelters (as well as rescue/ foster/ HQHVSN settings), disease transmission and endemic disease in animal shelters and shelter-associated programs can usually be prevented. Actions taken by shelter staff and veterinarians can mean the difference between a couple of sick animals and a large-scale outbreak.

In this course, students will use shelter cases to learn about how various diseases occur in companion animal populations; how to prevent, diagnose, and manage these diseases in diverse shelter resource settings including those involving foster homes; and what to do if an outbreak does occur. Emphasis will be on practical knowledge and strategies that go beyond individual diagnostic testing, disinfection, and vaccination to uncover *why* animals in shelters get sick and *what* shelter professionals can do to minimize disease.

Course Prerequisites/Co-Requisites

VME 6810 Integrating Veterinary Medicine with Shelter Systems

VME 6811 Shelter Animal Physical Health

VME 6816 The Role of the Animal Shelter in Protecting Community and Public Health

Course Website

https://onlinesheltermedicine.vetmed.ufl.edu/

Course Objectives

By the end of this course, students will be able to:

- 1. Analyze how the epidemiologic triad applies to various pathogens and population-level presentations of disease
- 2. Apply foundational principles of infectious disease prevention in a confined population of companion animals

- 3. Apply the Association of Shelter Veterinarians (ASV) Guidelines and other published references to mitigate infectious diseases of concern in animal shelters
- 4. Conduct outbreak management (investigation, implementation of control measures, population management) from start to finish
- 5. Create diagnostic testing strategies tailored to diverse shelter resource scenarios (vets and vet students only; other students will determine budget costs and feasibility based on vet recommendations)
- 6. Interpret diagnostic results at an individual and population level (vets and vet students only; other students will pose questions to a veterinarian and make operational decisions based on responses)
- 7. Design sanitation and biosecurity procedures and protocols (general and tailored to specific diseases)
- 8. Relate shelter data and statistics to infectious disease surveillance, management, and outcomes
- Recommend specific infectious disease management strategies for animal populations likely to enter shelter and HQHVSN settings
- 10. Implement mitigation plans for cases with zoonotic potential

Materials and Supplies Fees

None.

Required Textbooks and Software

- 1. REQUIRED TEXTBOOKS: (e-versions of these books will be available in Course Reserves if you have your UF VPN open)
 - a. Infection Disease Management in Animal Shelters, 2nd Edition, Miller, Janeczko, and Hurley (editors), Wiley-Blackwell, 2021.
 - b. Shelter Medicine for Veterinarians and Staff, 2nd Edition, Kate Hurley and Lila Miller (editors), Wiley-Blackwell Publishing, 2013.
 - ASV Guidelines for Standards of Care in Animal Shelters
 Download a copy from the Association of Shelter Veterinarians website at http://www.sheltervet.org/
- 2. Other required and recommended readings will be posted in e-learning and Course Reserves to download and review without charge.
- 3. Required Technology: Computer with reliable, high speed internet access; your preferred web browser; video player with ability to play MP4 videos; speakers and/or headphones and working sound; PDF reader. For more information on hardware and software necessary to run Canvas, visit https://community.canvaslms.com/docs/DOC-2059 (Links to an external site.). Canvas offers mobile applications for both Apple

(Links to an external site.) and Android (Links to an external site.) products. These apps may be downloaded in the respective app stores. Depending on the device and your equipment, not all Canvas features may be available on the app at this time. For more information on Canvas apps, visit https://community.canvaslms.com/docs/DOC-1542 (Links to an external site.).

Recommended Materials

Recommended readings will be posted in e-learning and available in online Course Reserves.

Course Schedule

Module/Weeks	Topic/Concepts	Activities/Assignments
1. Getting started (1 week)	Introduction Review pre-req content	Readings Interactive assignments Discussion
2. Herding cats or a herd of cats? (1 week)	Individual vs population medicine Epidemiologic triad and common diseases Infectious disease management "toolbox"	Readings Interactive assignments Discussion
3. Not just a cold- what can we learn from feline URI? (3 weeks)	Individual and population-level disease presentations URI prevention and management ASV Guidelines Capacity for care model Diagnostic selection and interpretation for URI	Readings Recorded lectures Interactive assignments Project 1: interactive choose-your-own-adventure Discussion Reflection essay
4. A canine cough conundrum 2 weeks)	Outbreak management: clean break "Red flag" CIRDC presentations Diagnostic selection, interpretation, limitations	Readings Interactive assignments Project 2: interactive choose-your-own-adventure Discussion
5. Practical management strategies for canine and feline parvovirus (2 weeks)	Community aspect of parvovirus Outbreak focus: vaccination, biosecurity, sanitation Inpatient vs outpatient treatment	Readings Recorded lecture Project 3: interactive choose-your-own-adventure Interactive assignments

		Quiz Discussion
6. A mystery disease outbreak (1 week)	Normal baseline for GI disease in shelter cats and kittens Enteric disease outbreak investigation and management Clinical and epidemiological information to inform a "clean break" without a diagnosis	Readings Recorded lectures Interactive assignments Discussion Reflection essay
7. Contagious dermatoses (2 weeks)	Common presentations Assess risk and zoonotic potential Mitigation strategies for special settings including shelter, foster, HQHVSN	Readings Interactive assignments Discussion Quiz
8. Special situations, infectious diseases that don't cause "outbreaks," and shelter data wrap up (1 week)	Infectious diseases that don't cause "outbreaks" Published guidelines for specific populations in shelter, rescue, and HQHVSN Relate shelter data and stats to risk of in-shelter disease	Readings Interactive assignments Discussion Quiz Reflection essay
9. Final projects (2 weeks)	Create a comprehensive outbreak prevention and response plan for one of the following clinical presentations feline URI, feline parvovirus, canine parvovirus, CIRDC, dermatophytosis. The plan should be tailored to either your shelter or a shelter example provided (shelter A or B). Use all of the tools in the Infectious Disease Management Toolbox. Create either a 1-2 page infographic or a 5 minute presentation to train shelter staff on your plan.	

Evaluation of Grades

EVALUATION FRAMEWORK

Submit each of the following assignments as directed within each module. Student grades will be seen only by the individual student who submits his/her own assignment.

Assignment	Weight	Grading Criteria
Module Projects (3)	30% total	Grade based on participation in branching outbreak management exercise followed by completion of table (see individual grading rubric for detailed grading criteria)
Quizzes (4)	10% total	See individual grading rubric for detailed grading criteria
Module Assignments (Interactive) (10)	20% total	See individual grading rubric for detailed grading criteria
Final Course Project	20% total	See individual grading rubric for detailed grading criteria
Discussion Posts (8 Discussion Posts)	20% total	See individual grading rubric for detailed grading criteria

GRADING SCALE

Percent	Grade
93 -100	А
90 - 92	A-
87 - 89	B+
83 – 86	В
80 - 82	B-
77 - 79	C+

73 – 76	С
70 - 72	C-
67 - 69	D+
63 - 66	D
60 - 62	D-
0 - 59	E

Additional information on the University of Florida Grades and Grading Policies may be found at: http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html

EXPECTATIONS AND POLICIES

Students are responsible for meeting all academic objectives as defined by the instructor. Plagiarism will not be tolerated. Be sure to cite your sources and references and attribute any verbatim quotations included in your submissions and posts.

<u>UF Maples Center for Forensic Medicine Code of Conduct and Professionalism (our Department)</u>

Instructional Policy:

This course is part of the distance education program at the University of Florida. Instead of traditional lecture format, the medium for communication between course instructors, teaching assistants and students will be via Canvas e-learning. (http://elearning.ufl.edu)

Attendance: Students must participate in the online discussions, and are required to visit the course elearning daily for important updates and announcements.

Additional information regarding attendance/absences can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Class Participation: Students are expected to constructively join in online discussions with appropriate preparation, to post interesting and relevant information on the class bulletin board, and to interact professionally with their classmates.

Performance Expectations: Students are expected to produce quality work of a standard comparable to any graduate level didactic course. Bulletin postings and discussions must be legible, constructive and appropriate. Students are required to think for themselves and will be expected to complete assignments that require the application of logic and reasoning skills when the answer may not be found in a book or the course notes.

Due Dates and Late Submissions: Pay close attention to the due dates posted in e-learning on your personal Dashboard and the Canvas Calendar for each assignment. Late submissions are eligible for up to 50% of the available points for each assignment.

This course is designed for working professionals like yourself. So we understand that sometimes life gets in the way of our best plans for juggling work, home, and school. If you anticipate you will likely miss a due date, request an extension in advance of the due date by sending an email through the Canvas Inbox to your instructors that explains the reason you need more time and when you expect to submit the work. Please title these posts clearly with "REQUEST EXTENSION FOR ASSIGNMENT 6A" (or whatever you need). Please avoid overuse of this option as it interferes with your classmate's ability to complete their own assignments.

NOTE: We honor most, but not all, requests for extensions.

Grade Changes: Grades will be changed only when a grading error has been made. If you think an error has been made, you should email the instructor as soon as possible. Your entire assignment will then be re-graded.

Incomplete grades: Under special circumstances, if a student is unable to finish a course before the end of the semester we may be able to assign an incomplete grade. An incomplete grade is a non-punitive grade assigned at the discretion of the course instructor. In this course an incomplete grade may be assigned if 1/3rd or more of the course assignments have been completed and if the student has remained in communication with TA's and instructors throughout the course, or has made an effort to request an incomplete grade. If an incomplete grade is assigned, outstanding assignments must be completed by the end of the next semester. If the assignments are not completed in this time you will be assigned a grade based on the completed assignments.

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, https://www.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.

Course Evaluation

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/. 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.bluera.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/.

University Honesty Policy

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 (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-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.

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

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see:

http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Campus Resources:

Health and Wellness

U Matter, We Care:

If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 392-1161.

University Police Department at 392-1111 (or 9-1-1 for emergencies), or

Academic Resources

E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.

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

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. https://teachingcenter.ufl.edu/.

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. https://writing.ufl.edu/writing-studio/.

Student Complaints Campus:

https://www.dso.ufl.edu/documents/UF Complaints policy.pdf.

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