Certificate in Shelter Medicine
An off-book, online program of the College of Veterinary Medicine

Rationale

Shelter Medicine is an emerging specialty in veterinary medicine. However, few Colleges of Veterinary Medicine offer coursework beyond an overview of the subject or a clerkship in spay/neuter. Veterinarians and veterinary students need access to advanced coursework to prepare them with the unique knowledge and skills required to effectively manage large populations of dogs and cats housed in animal shelters and to improve live outcomes for the millions of pets placed annually in animal shelters.

Mission

Prepare practice-ready shelter veterinarians who can enhance the health and welfare of homeless pets.

Student Learning Outcomes (SLOs)

A. **Know the critical role played by veterinarians in protecting the health and welfare of sheltered dogs and cats.**
   1. Use the *Association of Shelter Veterinarians (ASV) Guidelines for Standards of Care in Animal Shelters* as a guide for the practice of veterinary medicine in a shelter environment.
   2. Locate reliable medical information to support best practices within an animal shelter.
   3. Recognize common infectious diseases, behavioral problems, and examples of animal cruelty or neglect presented to animal shelters and describe the shelter veterinarian's role in responding to such issues.
   4. Know the scope of issues related to animal homelessness and identify recent trends surrounding those issues.
   5. Compare and contrast sheltering methods and assess each method for how well it addresses the "Five Freedoms" of animal welfare.
   6. Identify employment opportunities that exist for veterinarians in shelters and discuss the training and experience needed for success in such positions.
   7. Know key concepts involved with the practice of shelter medicine such as: sanitation, preventive health care, disease outbreak management, behavioral assessments, stress control, population management, cruelty investigations, and high-quality/high-volume sterilization.

B. Recognize and respond to compromised physical health of sheltered animals.
1. Perform basic population data analyses useful in determinations of animal care capacity and design population management strategies to protect animal health based on the analyses.
2. Analyze the impact of various shelter housing and sanitation strategies on animal physical health and design best practice strategies to mitigate the situation.
3. Assess various shelter preventive healthcare policies and create best practice protocols for vaccination, parasite treatment/prevention, physical examination, housing selection, and daily health monitoring.
4. Evaluate existing medical and surgical protocols and modify to contain best practices for animal shelters.
5. Analyze case examples of euthanasia-related issues and troubleshoot concerns related to euthanasia policies, protocols, and procedures.
6. Diagnose and manage infectious disease outbreaks common to the shelter setting.

C. Recognize and respond to compromised behavioral health of sheltered animals.
1. Compare differences in intake/outcome policies among various sheltering models.
2. Classify the advantages and disadvantages of using various behavioral resources available to shelters.
3. Lead daily behavioral rounds and make population decisions to maximize both behavioral health and life-saving efforts.
4. Assess welfare of individual animals as well as the general population within the shelter.
5. Evaluate housing conditions of sheltered animals.
6. Design protocols that maximize behavioral health and minimize risk to physical health.
7. Compare the reliability, validity, and standardization of available behavioral assessments and know the advantages and limitations of such assessments.
8. Know how to use available behavioral information to make appropriate placement decisions within various sheltering models.
9. Use principles of training, behavioral modification, and animal behavior to determine whether the techniques are humane and whether the techniques are likely to be effective.
10. Use basic principles of psychopharmacology to design a medication protocol for a sheltered animal and monitor its effectiveness.
11. Diagnose common behavioral problems, create an appropriate treatment plan, and prescribe/monitor appropriate medications for problems such as: jumpy/mouthy dogs, separation anxiety, fearfulness, interspecies aggression, aggression toward people or other species, inappropriate elimination, urine marking, kennel stress, and furniture scratching.

Assessment Timeline

SLOs A: 1-7 are assessed during VME 6810 Integrating Veterinary Medicine with Shelter Systems (a 3 credit course offered every semester)

1. Write a 500 words or less letter that outlines a plan of action for preventing infectious disease outbreaks based on the ASV Guidelines for Standards of Care. **SLO A1**
2. Prepare an original 10 minute or less presentation and a one or two-page handout about an infectious disease common to shelters. The report will cover transmission, diagnosis, treatment, prevention, and management of the disease in the shelter setting. **SLO A2, A3, A7**
3. Prepare an original 10 minute or less presentation and a fictionalized case report summary about an example of animal cruelty or neglect that might be presented to an animal shelter. Describe how the veterinarian might best examine and document such a case. **SLO A2, A3, A7**
4. Classify common behavioral problems of sheltered dogs and cats using Asilomar categories and discuss differences of opinions about classifications. **SLO A1, A4, A7**
5. Prepare an original 10 minute or less presentation and a one or two-page handout about a common behavior problem presented to animal shelters. Describe how the veterinarian might best diagnose, prevent, treat, and manage the problem within the resources of the shelter. **SLO A2, A3, A7**
6. Classify a set of images by whether they seem to meet the Five Freedoms for animal welfare. Explain choices and propose modifications to improve situations where needed. Compare choices in the class discussion. **SLO A1, A2, A4, A5, A7**
7. Analyze a monthly population data report from a fictional animal shelter and assess the shelter's capacity for care. **SLO A1, A4, A5, A7**
8. Propose two strategies a shelter might use to manage a population and increase its capacity for care and discuss the various strategies with classmates. **SLO A2, A7**
9. Prepare a brief overview of a shelter that includes facts about the shelter's mission, data reporting, funding, successes, challenges, and community partnerships. **SLO A4, A5**
10. Post your 250 word or less opinion about whether a "no-kill" nation is an achievable goal and discuss the various opinions with your classmates. **SLO A4, A5**
11. Write a one-typed page or less "perfect" job description for a shelter veterinarian and compare that job description to currently available job listing on the web. **SLO A4, A6**
12. Participate in a class discussion about controversies related to techniques used in high-quality, high-volume sterilization surgeries. **SLO A1, A2, A4, A6, A7**

SLOs B: 1-6 are assessed during VME 6811 Shelter Animal Physical Health (a 3 credit course offered once each fall semester)

THIS COURSE IS CURRENTLY UNDER DEVELOPMENT AND WILL NOT BE TAUGHT UNTIL FALL 2013. Thus, assessments are not yet available.

SLOs C: 1-11 are assessed during VME 6812 Shelter Animal Behavior and Welfare (a 3 credit course offered once each spring semester)

1. Conduct an internet search to locate behavior professionals near your location and report about the availability of such resources to local shelters. Research a local shelter and report on its policies for admission, adoption, behavioral assessment, and management of animal welfare. Compare the available resources and shelters in a discussion with classmates. **SLO C1, C2**

2. Conduct virtual daily rounds when given an animal history and videos of behavior and housing conditions; assess the individual animal's welfare and recommend appropriate environmental enrichment for the animal. **SLO C3, C4, C5, C6**

3. Conduct population rounds to assess the conditions of the facility and housing in a virtual shelter; propose policy and facility modifications to improve behavioral health and welfare of the population. **SLO C3, C4, C5, C6**

4. Review of three popular behavior assessment tools commonly used in animal shelters and write a 500 word or less comparison of the tools for standardization, reliability, and validity. **SLO C7**

5. Write a 700 words or less case review of an animal in a virtual shelter. Classify the animal's behavior problem by Asilomar Accord category and recommend an appropriate outcome pathway for that animal based on the shelter's resources. **SLO C8**

6. Analyze behavioral modification techniques presented in popular media and compare the effectiveness of the popularized techniques to best practices for animal behavior training and behavior modification. **SLO C9**

7. Write a 500 word or less treatment and modification plan for a virtual case presentation that includes a prescription for appropriate medication and follow-up care. **SLO 10**

8. Prepare an original 10 minute or less presentation and a one-or tow page handout for a dog or cat with a behavior problem presented to an animal shelter. The plan must include a diagnosis, treatment plan, and outcome recommendation based on Asilomar Accord categories and resources/capacity for care of the given animal shelter. **SLO 11**

Assessment Cycle

Student Learning Outcomes will be assessed within each course when it is offered. Outcomes are criterion-referenced and include grading rubrics by which faculty will assess student submissions.

SLOs A 1- 7 will be assessed every semester when VME 6810 is offered (summer, fall, spring semesters)

SLOs B 1- 6 will be assessed each fall semester when VME 6811 is offered.

SLOs C 1-11 will be assessed each spring semester when VME 6812 is offered.

Certificate program assessment will be conducted annually to determine whether program remains viable and is attracting students to enroll and retaining students to earn the Certificate. Viability of the

Certificate will be measured against the approved business plan for this self-funded program that was approved by the UF Provost's Office.

Methods and Procedures

Direct Assessments

Direct assessments of SLOs are made by instructors as assignments are completed and compared to the given grading rubrics for each assignment. All assessments are criterion-referenced projects.

Indirect Assessments

Other methods to assess the Certificate include:

1. Annual evaluation of course enrollment and completion data.
2. Annual evaluation of student retention/certificate completion data.
3. Formative and summative pre and post- course surveys of student opinions approved by IRB2 for evaluation of educational effectiveness.
4. Annual review of financials to ensure the program is sustainable.
5. Annual review of courses against UF Standards and Markers of Excellence in Online and Blended Courses and/or Quality Matters® Rubric Standards 2011-2013 Edition

Assessment Oversight

Academic and program oversight will be overseen by a steering committee appointed as per the conditions of the approved business plan. This committee includes an administrative representative from the College of Veterinary Medicine's Dean's Office, a faculty representative from the Maddie's® Shelter Medicine Program at UF-CVM, and a marketing representative from Apollidon Learning, who is contracted with UF to promote this certificate program. Adjustments and modifications to courses will be based on the recommendations of this steering committee.

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