

COURSE SYLLABUS

Veterinary Public Health

CVM 7055

2 Credit Hours

Course Director: Helen Engelke BVSc. MPVM MRCVS

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Course Instructors: Helen Engelke, BVSc, MPVM, MRCVS;

Adjunct Faculty: Karen Ehnert, DVM, MPVM, Ryan C. Patrick, DVM, MPH, Emily Beeler, DVM, Veterinary Public Health and Rabies Control Program, County of Los Angeles, Department of Health Services

Pamela Ellison, DVM, MPVM, Preventive Veterinary Services, San Bernardino County, Department of Public Health

Course Time and Location:

We will meet regularly on campus over a two week period with normal course hours being from 8am – 5pm. The time and location of all meetings will be announced on Blackboard in the Veterinary Public Health folder. As meeting locations may vary the course director will notify you by email (with at least 48 hrs notice) as to the time and location of our first meeting on the Monday of Week 1.

At our first meeting the course syllabus will be discussed and the course schedule finalized. One field trip will occur, either to the San Bernardino County Preventive Veterinary Services or to the Los Angeles County Veterinary Public Health and Rabies Control Program. Further details of these field trips will be provided by your Veterinary Public Health course director at the appropriate time.

Course Description: (Course Purpose, aims/goals)

As veterinarians working in the new millennium it is imperative that we understand our role as public health professionals. It is no longer reasonable to accept the traditional concept of the veterinarian working as an independent clinician, treating individual animals or groups of animals. Through taking this course the student will come to have an appreciation of how veterinarians function as public health professionals. The course builds on concepts introduced in Veterinary Basic Sciences but it will challenge students to delve more deeply into the arena of Veterinary Public Health. Students will develop an understanding of the public health system in the US. They will be introduced to major zoonoses that impact human health and common methods used to diagnose, prevent and control these diseases. Other topics to be discussed include occupational health risks to people working with animals, the role of veterinarians in disaster and bioterrorism preparedness and the concepts of emerging and re-emerging diseases. Students will come to understand that Veterinary Public Health is multidisciplinary and involves veterinarians in both private and public sectors and that it includes the activities of other types of health care professionals. In visiting two Veterinary Public Health facilities it is hoped that students will grasp how complex such issues can be in a real world context. Our on campus activities will consist of a mix of student centered learning activities, group discussions, presentations, written assignments and where pertinent, presentations by content experts. It is hoped that this course will allow students to recognize their veterinary responsibilities as health professionals, while at the same time, broadening their horizons as to the opportunities available upon graduation.

Learning Objectives: (Supporting The Course Purpose)

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

1. Clearly define "Veterinary Public Health".
2. Relate the Veterinarian's Oath to its implications for veterinary public health.
3. Describe the key roles veterinarians play in the physical, mental and social well being of humans.
4. Define and understand the term "zoonosis".
5. Define the key concepts in zoonotic disease diagnosis, control and prevention.
6. List the more common zoonoses of relevance to the US and describe the epidemiology of those diseases.
7. Design a plan of action to diagnose, control and prevent a zoonosis.
8. Describe the structure of the Public Health System in the US, as it pertains to Veterinary Public Health.
9. Clearly identify the veterinarian's legal responsibilities in reporting zoonotic diseases and identify key public health professionals they should contact during a zoonotic disease outbreak.
10. Describe the factors influencing the emergence of new diseases.
11. Distinguish between emerging and re-emerging diseases.
12. Describe the qualities of a good journal article on new and emerging diseases.
13. De-construct and critique a journal article on new and emerging diseases and evaluate an article independently.
14. List the different types of surveillance and describe the strengths and weaknesses of those differing types.
15. Evaluate a surveillance system for an important zoonosis.
16. Describe the four phases of the emergency management cycle: mitigation, disaster preparedness, response and

recovery.

17. Describe the County, State and Federal emergency management systems.
18. Describe the Incident Command System.
19. Identify the types of disasters more likely to occur in their State.
20. Understand the role of the veterinarian and apply the current legislation that pertains to animals in disasters in a mock disaster scenario.
21. Define Bioterrorism.
22. Identify those zoonotic agents that might be used in a bioterrorism event.
23. Describe a veterinarian's role in mitigation, disaster preparedness, response and recovery as it relates to a bioterrorism event.
24. Define Occupational Health.
25. Identify key persons who work with animals and animal products and relate types of animal exposures to specific disease risks.
26. Deliver educational information relating to occupational health in a written format for a non veterinary target audience.
27. Establish relationships with health professionals at area public health agencies.

Course Policies and Procedures: (Attendance/Dress Code etc. – specific to course)

Attendance

Attendance and participation in discussion is required in order to optimize the educational benefit for all students. An excused absence may be granted in the case of illness or family emergency. Notification of absence must be directed to the course director through either personal communication, voice mail or email as early as possible. Cellular phone communication is the preferred method for notification with less than 24 hours, but with greater than 24 hours notice an email will be adequate.

Professional behavior

Professional behavior is conducive to an effective learning environment and is expected of all course participants. Professional behavior includes, but is not limited to, tolerance of others' beliefs and opinions, arriving on time and being prepared for class discussions.

Honor code

In compliance with the University and College requirements and recommendations.

Students with special needs

Please address any special needs with the course director at the beginning of the semester or as soon as you are aware so that we can work together to make suitable adjustments. Those seeking accommodations based on disability should contact the Center for Disability Issues and Health Professions (CDIHP) Office (909 469 5380) to coordinate reasonable accommodations for students with documented disabilities. Retroactive disability related accommodations will not be granted.

Equipment and Clothing

During field trips appropriate clothing should be worn. For both Public Health Department visits business casual clothing will be expected. Any further specific clothing requirements will be outlined by the course director as necessary.

Assessment: (Grades/Rubric/Exam)

Grading of this course will be a weighted combination of technical competencies and non technical competencies.

Technical Competencies

- A summative exam will occur at the end of this course and must be completed before the start of the next course. It will consist of multiple choice questions directly related to the learning objectives outlined in the syllabus, learning issues that arise out of class discussion and assignments. It will be consistent with expected veterinary public health knowledge assessment on the North American Veterinary Licensing Examination (NAVLE). Grades will be a straight scale score of percentage correct answers.
- An individual course performance product will be in the form of an occupational health manual which is due by 5pm of the last Friday (Friday Week 2) in both paper and electronic form.
- A group performance product will be in the form of an oral presentation on a case study of a zoonoses or veterinary public health topic as assigned by the director on the first day of the course. These presentations will occur on the first Friday of the course. All participants within the group will receive identical grades regardless of individual quality or quantity of work.

Details of all assignments will be discussed by the course director and will be available on blackboard along with relevant grading rubrics.

Non Technical Competencies

These will be evaluated by the course director and will include an evaluation of professional attitude, collaboration, communication, self directed learning, critical appraisal, work ethic and general interaction during the course.

Course graded events will be weighted as follows to determine the course letter grade:

1. Summative Exam: 40.0%
2. Individual Occupational Health Manual performance product: 20.0%
3. Group Case study presentation: 20.0%
4. Course Director Evaluation: 20.0%

GRADING SCALE

- A (≥90%): A student with work at a professional advanced level with evidence of understanding of all course material.
- B (80-89%): A student who has achieved a high standard of understanding in some topics, although in some areas and issues has moderate understanding.
- C (70-79%): A student who has achieved a moderate level of understanding in the majority of topics.
- D (65-69%): A student who has achieved a moderate level of understanding in a few topics, in some areas the student has achieved only rudimentary understanding.
- F (<65%): A student who has failed to demonstrate an understanding of the topics or is so poor in some areas as to be "dangerous" to others in providing advice on veterinary public health issues.

Course Evaluation

Surveys are conducted regularly for all CVM courses to gather student opinion and observation on course content and conduct, and faculty and/or course director performance. This data helps improve instruction in the College curriculum, and survey outcomes are part of the College assessment program for accreditation purposes. Accordingly, it is expected that each student will complete, as scheduled, all surveys requested for this and other courses. This is a 'threshold' requirement for every College course, that is, a student has not formally completed any course until its survey obligations are met. It may be necessary to withhold a final course grade if there is a failure to comply with survey obligations.

Course Schedule

Mon	Tue	Wed	Thu	Fri
WEEK 1 AM: Course Orientation; Introduction to Veterinary Public Health Topics PM: Discussion of Case Scenarios	AM : Zoonosis Theory Public Health Structures Occupational Health PM: Protected time/ Self Study	AM : Surveillance Theory. Part 1 Salmonella Surveillance Group Exercise , PM: Protected Time/Self Study	AM: Part 2: Salmonella Surveillance Group exercise PM: Protected Time/Self Study	AM: Case Study Presentations. . PM: Protected time/ Self Study
WEEK 2 AM: Factors Affecting New and Emerging Diseases. & Emerging diseases Journal Articles discussion PM: Protected Time/ Self Study	AM: Field Trip	AM: Flip Chart Presentations on Bioterrorism Agents Incident Command System. PM: Protected Time/ Self Study	AM: Bioterrorism/Emergency Management Exercise. PM: Protected time Self Study Self-study	AM: Summative Exam

Resources:

All required course material will be available on Black board. Other recommended resources include:

Texts

1. Zoonoses and Communicable Diseases common to Man and Animals. 2nd Edition. 1987 Sci Publ No 503 Washington, DC. Pan American Health Organization. Acha PN & Szyfes B.
2. Veterinary Medicine and Human Health. 3rd Edition 1984. Calvin Schwabe.
3. Zoonoses Recognition, Control and Prevention. 1st Paperback Edition 2000. Hugh-Jones ME., Hubbert WT., Hagstad HV.

4. Handbook of Zoonoses Identification and Prevention 1st Edition 2007. Colville JL., Berryhill DL.
5. Emerging Infections Microbial Threats to Health in the United States. 1992 National Academy Press. Lederberg J., Shope RE., Oaks SC.

Reports

1. WHO Expert Consultation on Rabies: First Report (2004 Geneva Switzerland) WHO Technical Report Series:931
2. The World Health Report 2007: A Safer Future: Global Public Health Security in the 21st Century
3. Report of the WHO/FAO/OIE Joint Consultation on Emerging Zoonotic Diseases (May 2004 Geneva Switzerland).
4. WHO Study Group on Future Trends in Veterinary Public Health (1999 Teramo Italy). WHO Technical Series:907
5. Compendium of Measures to Prevent Disease Associated with Animals in Public Settings 2007 (National Association of State Public Health Veterinarians, Inc. NASPHV) <http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/rr5605a1.htm>

Web sites

County of Los Angeles Veterinary Public Health and Rabies Control: <http://lapublichealth.org/vet/index.htm>

San Bernardino County Public Health: <http://www.co.san-bernardino.ca.us/pubhlth/>

Centers for Disease Control and Prevention: <http://www.cdc.gov>

CDC: Healthy Pets Healthy People: <http://www.cdc.gov/healthypets/>

The Center for Food Security and Public Health: <http://www.cfsph.iastate.edu>

Emerging Infectious Disease Journal : <http://www.cdc.gov/ncidod/eid/subscribe.htm>

California Department of Health Services: <http://www.dhs.ca.gov/ps/dcdc/dcdcindex.htm>

National Association of State Public Health Veterinarians (NASPHV) <http://www.nasphv.org>

Online periodical from the North Carolina Center for Public Health Preparedness:

<http://www.sph.unc.edu/nccphp/focus/index.htm>

PROMED (Program for Monitoring Emerging Diseases: <http://www.promedmail.org/pls/askus/f?p=2400:1000>:

DEFRA (Department for Environment, Food & Rural Affairs. UK) <http://www.defra.gov.uk/>

Europa: Public Health: http://ec.europa.eu/health/index_en.htm

FEMA: <http://www.fema.gov/>

Additional information will be posted in Blackboard as needed.