### Department of Veterinary Preventive Medicine Veterinary Public Health Specialization

Epidemiology of Zoonoses and diseases common to animals and humans.
(Formerly: VPM 796.04 Zoonotic Diseases)
VPM 721
4 Credit Hours

# Course Syllabus Fall Quarter 2007

### **Course Leaders:**

Dr. Armando E Hoet, Sisson Hall, A100Q, 292-0684, <a href="hoet.1@osu.edu">hoet.1@osu.edu</a> (Team Leader) Dr. Thomas Wittum, Sisson Hall, A100S, 292-8157, wittum.1@osu.edu

### **Description:**

This course is focused on describing the basic epidemiology of common and important Zoonotic diseases. Instruction will emphasize the use of such knowledge in the establishment of preventive and control strategies specific for these zoonoses. The importance of safeguarding animal and public health from such diseases will be highlighted throughout the course. This course is divided into two major sections; the aim of the first section is to develop an understanding of important concepts on animal infectious diseases, such as definitions and categories of zoonoses, causation and disease association, regulatory agencies and zoonotic diseases, diagnostic techniques, and other related topics. The second section will be a comprehensive review of the most common zoonotic diseases that can be transmitted to humans. For each disease, students will learn the etiologic agent, epidemiology, the most common manifestations of the disease in humans and animals, diagnostic procedures for detection, as well as preventive and control measures related to each zoonoses. Special topics about VPH and small animal populations, wildlife, and laboratory animals will be also covered.

### **Course Objectives**

After completion of this course, the students should:

- understand basic concepts and definitions of zoonoses and diseases common to animals and humans.
- know the most common zoonotic diseases with respect to their etiology, epidemiology, as well as specific preventive and control measures.

### **Course Format:**

The teaching strategy of this course will be based primarily on lectures. Throughout the course several Faculty from the Veterinary Preventive Medicine Department and invited guest lecturers will teach the different classes. Their names and contact information can be found below in the Course Syllabus. Assigned readings could be used to expand the information in a specific pertinent topic.

## **Course Syllabus:**

September 20    Introduction to VPH 1   (0.5 hr) Dr. Hoet     Basics about pathogens   (0.5 hr) Dr. Hoet     September 20   General Concepts in Infectious   (1 hr) Dr. Hoet     Animal Diseases   Definition and Classification of   (2 hr) Dr. Hoet     September 25   Recognition of an Infectious Disease   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Taxastics   (1 hr) Dr. Wittum     Page Internal Approximation and Classification and Cl	hoet.1@osu.edu wittum.1@osu.edu
September 20  September 25  September 27  Recognition of an Infectious Disease (0.5 hr) Dr. Hoet (0.5 hr) Dr. Hoet (1 hr) Dr. Hoet (1 hr) Dr. Hoet (2 hr) Dr. Hoet (2 hr) Dr. Hoet (2 hr) Dr. Wittum	wittum.1@osu.edu
September 20 General Concepts in Infectious Animal Diseases (1 hr) Dr. Hoet  September 25 Definition and Classification of Zoonoses (2 hr) Dr. Hoet  September 27 Recognition of an Infectious Disease (1 hr) Dr. Wittum	wittum.1@osu.edu
September 25 Definition and Classification of Zoonoses (2 hr) Dr. Hoet  II September 27 Recognition of an Infectious Disease (1 hr) Dr. Wittum	wittum.1@osu.edu
II September 25 Zoonoses (2 hr) Dr. Hoet  September 27 Recognition of an Infectious Disease (1 hr) Dr. Wittum	wittum.1@osu.edu
II September 27 Recognition of an Infectious Disease (1 hr) Dr. Wittum	wittum.1@osu.edu
	wittum.1@osu.edu
Decidations According to 17-11-11	
September 27 Regulatory Agencies and Zoonotic (1 hr) Dr. Hoet	
Diseases	
October 02 Diagnostic Techniques and (1 hr) Dr. Hoet	Homework Assignment
Infectious Diseases	
III October 02 Properties of Diagnostic and (1 hr) Dr. Wittum	
October 02 Screening Tests (7 hr) Dr. Wittum  October 04 Avian Influenza (2 hrs) Dr. Lee	lee.2854@osu.edu
Rabies: Etiologic agent and the	166.2634@Osu.edu
October 09 Rables. Ethologic agent and the (1 hr) Dr. Hoet	
IV October 09 Rabies: Prevention and Control (1 hr) Dr. Smith	Kathy.Smith@odh.ohio.gov
October 11 Anthrax (1 hr) Dr. Meiring	meiring.5@osu.edu
October 11 1 <sup>st</sup> Exam (1 hr)	Basic to Screen. 7.5 hrs
October 16 Prion Diseases (2 hr) Dr. Shulaw	shulaw.1@osu.edu
V October 18 Hantavirus (1 hr) Dr. Hoet	
October 18 Leptospirosis (1 hr) Dr. Hoet	
October 23 Arthropod-borne Viral Encephalitis (1 hr) Dr. Saville	saville.4@osu.edu
Surveillance of arthropod-horne	D. O. O. B. II.
VI October 23 Surveinance of artifopod-borne (1 hr) Dr. Ortiz	Diana.Ortiz@odh.ohio.gov
Rocky Mountain Spotted Fever and	rajala-schultz.1@
October 25  Q Fever  (1 hr) Dr. Rajala-Shul	osu.edu
October 25 Lyme Disease and Tularemia (1 hr) Dr. Rajala-Shul	ltz
October 30 Brucellosis and eradication programs (1 hr) Dr. Hoet	
VII October 30 Zoonotic Tuberculosis (1 hr) Dr Shulaw	
November I   Malaria   (1 hr) Dr. Wittum	
November 1 2 <sup>nd</sup> Exam (1 hr)	AI to Leptospira 9 hrs
November 6 Plague (1 hr) Dr. Wittum	
VIII November 6 Toxoplasmosis (1 hr) Dr. Monahan	monahan.19@osu.edu
November 8   Companion Animals and Zoonotic   (2 hrs) Dr. Lord	lord.19@osu.edu
Issues	. 1 1:1 1:20 1
November 13 Public Health Issues in Laboratory Animal Populations (2 hrs) Dr. Hickman at Dr. Kraly	nd hickman-davis.2@osu.edu kraly.4@osu.edu
IX November 15 3 <sup>rd</sup> Exam (1 hr)	Encephal to Toxo 9 hrs
November 15 SARS (1 hr) Dr. Saif	saif.2@osu.edu
Emerging Diseases in Wild Animal	
X November 20 Populations (2 hrs) Dr. Denison	dennis.129@osu.edu
November 22 Thanksgiving Day No Classes	
November 27 Mycoses (1 hr) Dr Hillier	hillier.4@osu.edu
XI November 27 MRSA (1 hr) Dr. Hoet	
December 4-6 4 <sup>th</sup> Exam (1 hr)	Companion to MRSA

### **Grading and Exams:**

The grade points will be distributed in four exams, which will be based on the lectures course (34.5 hrs). Final course grades will be composed as follows:

1 <sup>st</sup> Exam	(7.5 hrs)	20%
2 <sup>nd</sup> Exam	(9 hrs)	25 %
3 <sup>rd</sup> Exam	(9 hrs)	25 %
4 <sup>th</sup> Exam	(9 hrs)	25 %
Class participation		5 %

The following grading scheme will be used: 90-100% =A; 80-89% =B; 70-79% =C; 65-69 =D; 0-64 =E

### **Meeting Place and Time:**

A180 Sisson Hall

Department of Veterinary Medicine

Tuesdays and Thursdays from 8:30 to 10:18 am

### **Recommended Reading:**

- Acha, P.N., Szyfres B. Zoonoses and Communicable Diseases common to Man and Animals. 3<sup>rd</sup> Edition. Volume I. Bacteriosis and Mycoses. Scientific and Technical Publication No. 580. Pan American Health Organization. Washington, DC. 2003.
- Acha, P.N., Szyfres B. Zoonoses and Communicable Diseases common to Man and Animals. 3<sup>rd</sup> Edition. Volume II. Chlamydioses, Rickettsioses, and Viroses. Scientific and Technical Publication No. 580. Pan American Health Organization. Washington, DC. 2003.
- Acha, P.N., Szyfres B. Zoonoses and Communicable Diseases common to Man and Animals. 3<sup>rd</sup> Edition. Volume III. Parasitoses. Scientific and Technical Publication No. 580. Pan American Health Organization. Washington, DC. 2003.
- Heymann, D.L. Control of Communicable Diseases Manual. 18<sup>th</sup> edition. American Public Health Association. Washington, DC. 2004.

### **Accommodation for Special Needs**

If you need an accommodation based on the impact of a disability, you should contact me to arrange an appointment as soon as possible. At the appointment we can discuss the course format, anticipate your needs and explore potential accommodations. I rely on the Office for Disability Services for assistance in verifying the need for accommodations and developing accommodation strategies. If you believe you need accommodation and have not previously contacted the Office for Disability Services, I encourage you to do so (more information available at http://www.ods.ohio-state.edu/).

### **Academic Integrity**

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other education and scholarly activities. Thus, The Ohio State University, the College of Veterinary Medicine, the College of Public Health, and the Committee on Academic Misconduct (COAM) expect that all students have read and understood the University's *Code of Student Conduct* and the School's *Student Handbook*, and that all students will complete all academic and scholarly assignments with fairness and honesty. The *Code of Student Conduct* and other information on academic integrity and academic misconduct can be found at the COAM web pages (http://oaa.osu.edu/coam/home.html). Students must recognize that failure to follow the rules and guidelines established in the University's *Code of Student Conduct*, the *Student Handbook*, and in the syllabi for their courses may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Please note that the use of material form the Internet without appropriate acknowledgement and complete citation is plagiarism just as it would be if the source were printed material. Further examples are found in the *Student Handbook*. Ignorance of the *Code of Student Conduct* and the *Student Handbook* is never considered an "excuse" for academic misconduct.

If I suspect a student of academic misconduct in a course, I am obligated by University Rules to report these suspicions to the University's Committee on Academic Misconduct. If COAM determines that the student has violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct tin this course, pleases see me.