

**K-State MPH Faculty Advisory Council Meeting  
Coles Rmn 343  
Wednesday, February 11, 2015, 10:30 AM  
Minutes**

<b>Committee Member</b>	<b>Emphasis</b>	<b>Present</b>	<b>Not Present</b>
Cates, Michael	MPH Director	X	
Stevenson, Barta	MPH Staff	Non Voting	
Kueser, Caleb	MPH Student		X
Hanson, Jennifer	Core Instructor	X	
Hsu, Wei Wen	Core Instructor	X	
Larson, Robert	Core Instructor	X	
Sanderson, Michael	Core Instructor		X
Open	FSB		
Kastner, Justin	FSB		Nutsch Proxy
Nutsch, Abbey	FSB	X	
Chapes, Stephen	IDZ		X
Renter, David	IDZ		Larson Proxy
van der Merwe, Deon	IDZ	X	
Haub, Mark	PHN		X
Rosenkranz, Ric	PHN	X	
Wang, George	PHN		X
Irwin, Brandon	PHPA		X
Mailey, Emily	PHPA	X	
McElroy, Mary	PHPA		Mailey Proxy

Dr. Cates called the meeting to order at 10:35 AM. There was a quorum present.

1. **Approval of Minutes.** The minutes from the January meeting were approved and will be posted as distributed.
2. **Program Director's Report.** Dr. Cates provided a status of the program update and his activities (Attachment 1). There was a short discussion about the items he presented.
3. **Items of Business:**
  - a. **MPH Graduate Faculty.** Application of Dr. Sally Davis to MPH Graduate Faculty (Attachment 2) was approved.
  - b. **CEPH Interim Report.** The draft report is ready for review and will be posted to K-State online for review by this committee next week.
  - c. **IDZ Emphasis Area Curriculum Update.** A motion was made and passed to add DMP 710, Introduction to One Health (2 credit hours) and DMP 806 Environmental Toxicology (2 credit hours), to the Infectious Diseases/Zoonoses curriculum in grouping #3 as primary courses, effective Fall 2015. (Attachment 3)
  - d. **FSB Emphasis Area Curriculum Update.** A motion was made and passed to add DMP 710, Introduction to One Health (2 credit hours) and DMP 806 Environmental Toxicology (2 credit hours), to the Food Safety/Biosecurity curriculum in grouping #5 as reinforcing courses, effective Fall 2015. DMP 710 will be aligned with competences 1, 2, 3, and 4 and DMP 806 will be aligned with competencies 2 and 3.

## Minutes

- e. **MPH/DMP 802 as Core Course to replace MPH/DMP 806.** A motion was made and seconded to have MPH 802, Environmental Health (3 credit hours) added as a core course, replacing MPH 806, effective Fall 2015, bringing the minimum core courses to 15 credit hours, without changing the overall degree requirements of 42 hours.
  - f. **Graduate Certificate in Public Health Core Concepts.** To keep the certificate program aligned exactly with the MPH program, a motion was made and seconded to have MPH 802 replace MPH 806 in the requirements, and to increase the total required credit hours to 15, effective Fall 2015
  - g. **Curriculum change paperwork.** The MPH Curriculum Change proposal will be sent to the Graduate School today to begin the 2 week required comment period. If all goes well, a Qualtrics survey will be launched on February 25 to all MPH faculty to vote on the proposed changes. Voting will close on March 3. The schedule should meet all the deadlines for the item to be approved by Faculty Senate in May for Fall 2015 implementation.
4. Ms. Stevenson distributed a student progress chart to the faculty in each emphasis area with a request to let her know of any updates and/or changes they know about.
  5. **Future Meetings:** Below is a list of future meetings (all scheduled to begin at 10:30 AM).

<b>Date</b>	<b>Location/Room</b>
March 11, 2015	Union, Rm 209
April 8, 2015	Coles, Rm 343
May 13, 2015	Union, Rm 209
June 10, 2015	Coles, Rm 343

The meeting adjourned at 11:15 AM.

## Attachment 1 – MPH Program Director’s Report

### MPH Program Director’s Report

#### Course and Curriculum Change Progress:

- (1) 1/9: Course proposal for Environmental Health sent to DMP by Dr. Nguyen to start approval process;
- (2) 1/14: MPH Faculty Advisory Council approved new course, Environmental Health, as a core course to replace MPH 806, Environmental Toxicology;
- (3) 1/15: Documents sent to Graduate School;
- (4) 1/22: DMP Faculty approved the course, with number change (now 802) to move forward in the college approval process;
- (5) 2/9: College of Veterinary Medicine has scheduled vote for course approval—DMP/MPH 802;
- (6) 2/11: Grad School will begin comment period on MPH curriculum changes, to be followed by MPH faculty vote.
- (7) Projected March 2015: Grad Council will consider course/curriculum changes.

At your request, I met with the MPH IDZ faculty on 1/22 to get their feedback on the addition of DMP 710, Introduction to One Health, to our curriculum. I received seven opinions before, during and after the meeting: two to add the course as a required course in the IDZ area of emphasis and five to add it as an optional course in grouping number 3 of the IDZ emphasis area.

Draft Interim report will be ready for Faculty Advisory Council review by next week. The documents will be posted on the K-State Online site for MPH Faculty Advisory Council.

## Attachment 2 – Dr. Sally Davis

### APPLICATION MASTER OF PUBLIC HEALTH (MPH) PROGRAM FACULTY KANSAS STATE UNIVERSITY

Please complete this form and send it along with an accompanying brief (2-3 page) Curriculum Vitae to:  
Dr. Michael Cates, Director, Master of Public Health Program, 311 Trotter Hall.

#### PERSONAL INFORMATION

Name of Applicant: A. Sally Davis  
Title and Department: Assistant Professor, DMP  
Office Address: K-237 Mosier Hall  
Office Phone: 785-532-3789 Email: asally@vet.k-state.edu

#### PROFESSIONAL RESPONSIBILITIES

Graduate Faculty Status:  Yes  No

Graduate Courses Taught (limit 255 characters)

N/A - new faculty at KSU

#### PERSONAL STATEMENT

Briefly describe in the space below, your interest, experience, current projects, and other contributions to the Master of Public Health program at Kansas State University (limit 855 characters)

I recently joined the DMP faculty as Assistant Professor of Experimental Pathology. Previously, I was a Research Fellow at the National Institute of Allergy and Infectious Diseases. My research focuses on visualizing host-pathogen interactions for infectious agents, primarily zoonotic viruses such as influenza A but also Pneumocystis a fungus of concern in immunocompromised human populations. I also provide pathology support to the Center of Excellence for Emerging Zoonotic Animal Diseases where I am already engaged in studies on Rift Valley Fever Virus. I collaborate with multiple investigators at the NIH and am forming collaborations with the USDA ABADRU (Arthropod-Borne Animal Diseases Research Unit). To this program I would also bring a network of public health professionals, outside of the local area including the DC metro area.

1/27/2015

Date

Signature

## Attachment 2 – Dr. Sally Davis

### A. Sally Davis

Department of Diagnostic Medicine/Pathobiology

#### Education:

B.A. Computer Science modified with Education	1992	Dartmouth College
Graduate Certificate, Middle School Sciences	1992	Dartmouth College
D.V.M.	2007	NC State University
Residency in Veterinary Anatomic Pathology	2009	NC State University
Ph.D.	2014	NC State University

#### Professional experiences:

Current:	2014 – Present	Assistant Professor Experimental Pathology, Diagnostic Medicine/Pathobiology, KSU CVM
Previous:	2011-2014	Research Fellow, Viral Pathogenesis and Evolution Section, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD
	2009-2011	Postdoctoral Fellow, Viral Pathogenesis and Evolution Section, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD
	2007-2009	Postdoctoral Fellow, Laboratory of Cancer Biology and Genetics, National Cancer Institute, NIH, Bethesda, MD
	2003-2007	Academic tutoring, NC State University College of Veterinary Medicine, Raleigh, NC
	2001-2003	A diversity of research and veterinary assistant positions, CT and NC
	1993-2000	International business and computer consulting at Cambridge Technology Partners, last title Director, multiple locations in North America, Europe, and Australia

#### Selected Refereed Journal Articles:

- Davis AS, Chertow D, Moyer JE, Suzich JB, Sandouk A, Dorward D, Logun C, Shelhamer JH, Taubenberger JK. Validation of Normal Human Bronchial Epithelial Cells as a Model for Influenza A Infections in Human Distal Trachea. *Accepted at Journal of Histochemistry and Cytochemistry*.
- Li Q, Pujananski LM, Davis AS, et al. 2014. Contemporary Avian influenza A Virus Subtype H1, H6, H7, H10, and H15 Hemagglutinins Encode a Mammalian Virulence Factor Similar to the 1918 Pandemic Virus H1 Hemagglutinin. *mBio*. Nov 18;5(6):e02116-14.
- Kutty G, Davis AS, Ma L, Kovacs J. 2014. *Pneumocystis* Encodes a Functional Endo- $\beta$ -1,3-glucanase that is Expressed Exclusively in Cysts. *J Infect Dis*. Sep 17 [Epub ahead of print]
- Davis AS, Richter A, Becker S., Moyer JE, Sandouk A, Skinner J and Taubenberger JK. 2014. Characterizing and Diminishing Autofluorescence in Formalin-fixed Paraffin-

## Attachment 2 – Dr. Sally Davis

embedded Human Respiratory Tissue. *Journal of Histochemistry and Cytochemistry*. June;62:405-423.

- Qi L, Davis AS, *et al.* 2012. Analysis by single gene reassortment demonstrates that the 1918 influenza virus is functionally compatible with a low pathogenicity avian influenza virus in mice. *J Virol. Sep*;86(17):9211-20.
- Memoli, MJ, Davis, AS *et al.* 2011. “Multi-Drug Resistant 2009 Pandemic H1N1 Influenza Viruses Maintain Fitness and Transmissibility in Ferrets” *J Infect Dis.* 203(3):348-57.

### Public Health Related Activities:

- Guest lecturer at North Virginia Community College, pathology and epidemiology 2013
- Postdoctoral science policy discussion group, NIH; organized the Food Security seminar 2011-2012
- One Health Academy, Washington, DC, monthly events focused on promoting interdisciplinary collaboration 2011-2014
- Wednesday Afternoon Lecture Series fellows committee, NIH; hosted Dr. Jean-Hervé Bradol, past president of Médecins Sans Frontières 2008-2013
- USDA scholarship to attend an Avian Influenza Epidemiology Workshop in Indonesia under mentorship of Dr. Mo Salman, Professor of Veterinary Epidemiology, Colorado State University College of Veterinary Medicine 2007
- Trained by the North Carolina Veterinary Response Corps, NC Dept. of Agriculture & Consumer Services initiative focused on improving preparedness and response to disaster events that affect livestock and companion animals 2007
- Externship at The Marine Mammal Center, Sausalito, CA which included public health education regarding human interaction with marine mammal species 2006
- Wildlife Anesthesia, Capture and Handling of African and North American Species course, Austin, TX – as applicable to emergency preparedness 2006
- Wildlife Rehabilitators of North Carolina, nonprofit committed to sharing information and knowledge about wildlife rehabilitation; newsletter editor, board member and secretary 2003-2007
- Connections, Americorps ACCESS program in Greensboro, NC, bringing life skills to immigrants, including a focus on accessing local public health resources 2002
- Volunteer member of Northeast then Southeast marine mammal stranding networks coordinated by NOAA Fisheries; included training in public interaction during stranding events and mass mortalities 2001-2007

## Attachment 2 – Dr. Sally Davis



Graduate School

January 27, 2015

Sally Davis  
Diagnostic Medicine & Pathobiology  
305 Coles Hall  
CAMPUS

Dear Professor Davis:

Congratulations on being nominated by your colleagues for membership on the Graduate Faculty at K-State. It is my pleasure to endorse their nomination. As you are aware, the quality, depth, and breadth of the graduate education enterprise at K-State are a direct result of the efforts and activities of the Graduate Faculty. We know you will be an active participant and contributor. Not only will you contribute to current students' success, you will play a critical role in recruiting exceptional graduate students for your program.

This is an interesting time for graduate education at K-State, as we see pressures for change coming from the state, region, and nation. These pressures present us with challenges to improve upon our already high standards, and we solicit your help in working with the Graduate School and the Graduate Council in making the requisite changes including improving the quality of our mentoring of graduate students.

The Graduate School website, *Kansas State University Graduate Catalog* and the *Graduate Handbook* serve as useful tools in mentoring graduate students through their program. The Graduate School website at: [www.ksu.edu/grad](http://www.ksu.edu/grad) contains all the essential information in facilitating graduate students' progress including forms, deadlines, and electronic thesis, dissertation and report guidelines. The Graduate Catalog outlines the basic requirements and graduate training opportunities in the over 100 graduate degree and 20 certificate programs. A current version can be found on the Graduate School website at <http://catalog.ksu.edu/index.php?catid=2>. The Graduate Handbook, which contains relevant policies and procedures adopted by the Graduate Council, is also on our web site at: [http://www.k-state.edu/grad/graduate\\_handbook/](http://www.k-state.edu/grad/graduate_handbook/).

The Graduate School welcomes you as a member of the Graduate Faculty, and we look forward to working with you in the future.

Sincerely,

A handwritten signature in cursive script that reads "Carol W. Shanklin".

Carol Shanklin  
Dean of the Graduate School

cc: College of Veterinary Medicine  
T. G. Nagaraja

## Attachment 3 – DMP 710

### Introduction to One Health Syllabus

**Course Number:** DMP 710 - OA

**Class Number:** 17263

**Course Credits:** 2 credit hours

**K-State Online (KSOL) Website**

**for Course Materials:** <http://public.online.ksu.edu/>

**Instructor Information:**

Paige Adams, DVM, Ph.D.

K-State Olathe

22201 W. Innovation Dr.

Room 170A

Olathe, KS 66061

Office phone: (913) 307-7367

apadams@vet.k-state.edu

Class hours are by appointment only.

**Course Description:** "One Health" encompasses the complex interrelationships among humans and animals, humans and the environment, and animals and the environment. This course provides a broad-based introduction to One Health, incorporating in person lectures, original videos of leading subject matter experts and researchers, case studies, and scientific readings. It addresses zoonotic diseases (those that may be transferred between humans and animals) and environmental issues that impact human, animal, and ecosystem health. Topics include disease surveillance, the human-animal bond, the built environment, disaster response, sanitation, rural/suburban/urban interface, and food safety and security.

**Prerequisites:** Two courses in the biological sciences

**Course Format:** This is a hybrid course led by the instructor, involving a combination of in-person class meetings (that can also be accessed remotely via Zoom) and online coursework assignments. Lecture videos, selected reference materials, reading assignments, and classroom assignments (including Discussion Questions) will be available to the students on K-State Online. The class will meet in person every Thursday from 4:00 pm to 5:30 pm in Room 222B at K-State Olathe.

**Textbook:** *Human-Animal Medicine: Clinical Approaches to Zoonoses, Toxicants and Other Shared Health Risks*. Peter M. Rabinowitz and Lisa A. Conti. Maryland Heights: Saunders, Elsevier. 2010. ISBN: 978-1-4160-6837-2.

**Course Learning Objectives**

1. Become familiar with the One Health concept and the respective interrelationships among human health, animal health, and environmental health
2. Identify diseases with zoonotic potential and their routes of transmission
3. Define the role of One Health in food safety and defense



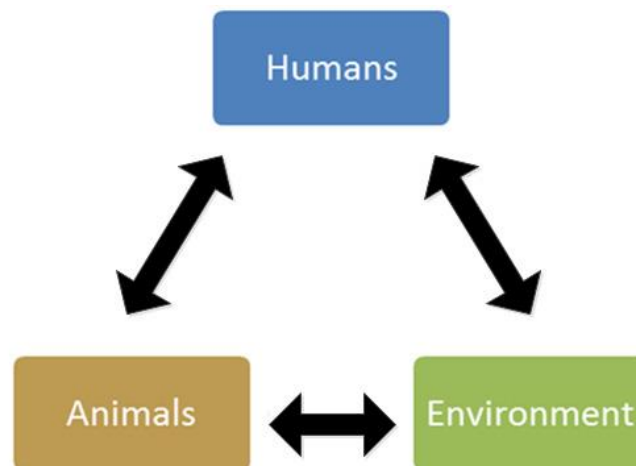
## Attachment 3 – DMP 710

4. Demonstrate how a variety of natural and human-made environmental issues influence human health, and how communities impact the environment
5. Demonstrate how a variety of natural and human-made environmental issues affect animal health, and how animal populations affect the environment
6. Identify issues of society and nature that exemplify One Health and describe methods by which these may be addressed

### Overall Structure

- I. Introduction: The concepts and practices of One Health
- II. Relationships among humans and animals
- III. Relationships among humans and the environment
- IV. Relationships among animals and the environment
- V. Applied research case analysis for a term project

The Basic Concept of One Health:



### Grades

Discussion questions (3 x 5%)	=	15%
Quizzes (3 x 15%)	=	45%
Case analysis papers (2 x 10%)	=	20%
Final case analysis paper (Term Paper)	=	<u>20%</u>
		100%

A = 90– 100%  
B = 80– 89.9%  
C = 70– 79.9%  
D = 60– 69.9%  
F = 0– 59.9%

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### **Late Assignments**

1. Discussion questions may not be completed late due to their interactive nature.
2. All other late assignments will have a 10% deduction off the total score for each day that the assignment is late.
3. If you need extra time to complete assignments, contact me as early as possible. I understand that you have busy lives outside of this course, and in most cases, I am happy to schedule new due dates. I will generally not grant last minute requests or requests after the due date has passed.

### **Extra Credit**

There is no extra credit offered in this course. There are no exceptions.

# Attachment 3 – DMP 710

## Course Schedule

### I. Introduction (1 week)

#### Week 1: Introduction to One Health (Jan. 20-23, 2015)

1. In class: Review the K-State online resources
2. In class: Review the syllabus
3. Post your profile (optional) (See Week 1 outline for more info)
4. Post your self-introduction in the Message Board (See Week 1 outline for more info)
5. In class lecture: Introduction to Microbiology
6. In class lecture: Introduction to Disease Models
7. Reading: Chapter 1, The Convergence of Human and Animal Medicine, pp. 1-6
8. Video: One Health – Dr. Laura Kahn (Time: 20:22)
9. Video: The Role of a Public Health Officer – Dr. Ingrid Garrison (Time: 3:41)
10. Video: History of One Health – Dr. Justin Kastner (Time: 6:34)
11. Reading: Chapter 2, Legal and Ethical Issues in Human-Animal Medicine, pp. 7-11
12. Reading: Chapter 3, Establishing a New Approach to Clinical Health History, pp. 12-17

### II. Relationships among Humans and Animals (5 weeks)

#### Week 2: Globalization and the Human-Animal Bond (Jan. 26-30, 2015)

1. Reading: Chapter 5, Psychosocial and Therapeutic Aspects of Human-Animal Interaction, pp. 24-36
2. Video: Human-Animal Bond – Dr. Deb Sellers (Time: 10:34)
3. In class lecture: Role of Globalization in Emerging Diseases
4. Video: Introduction to Global Public Health – Dr. Deborah Briggs (Time: 8:57)
5. Video: Long Term Challenges in Global Public Health – Dr. Deborah Briggs (Time: 10:59)
6. Video: Sustaining Global Surveillance and Response to Emerging Diseases (Committee on Achieving Sustainable Global Capacity for Surveillance and Response to Emerging Diseases of Zoonotic Origin) – The Institute of Medicine and the National Research Council (Time: 7:05)
7. In class lecture: Comparative Medicine

#### Week 3: Zoonotic Diseases – Routes of Transmission (Feb. 2-6, 2015)

1. Reading: Chapter 9, Zoonoses (reference only), pp. 105-298
2. Reading: Chapter 10, Infectious Diseases Scenarios, pp. 299-330
3. In class lecture: Zoonotic Diseases 1: Routes of Transmission
4. Video: Be Aware of Diseases you and your Pet can Share – Dr. Susan Nelson (Time: 5:01)
5. Video: Leptospirosis – Dr. Kate Kukanich (Time: 6:37)

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6. Video: Influenza – Dr. Dick Hesse (Time: 13:51)
7. Video: Johnny the Puppy, Part 1 – Drs. Cathleen Hanlon, Jean McNeil, and Robert Weedon (Time: 5:18)
8. Video: Johnny the Puppy, Part 2 – Drs. Cathleen Hanlon, Jean McNeil, and Robert Weedon (Time: 4:15)
9. Video: Toxoplasmosis – Dr. Susan Nelson (Time: 1:09)

### **Week 4: Zoonotic Diseases – Vector-borne Diseases and Sentinel Animals (Feb. 9-13, 2015)**

1. In class lecture: Zoonotic Diseases 2: Vector-borne Diseases
2. Video: Ehrlichiosis and Anaplasmosis – Dr. Roman Ganta (Time: 21:57)
3. Video: West Nile Virus – Dr. Bonnie Rush (Time: 15:54)
4. Reading: Chapter 4, Sentinel Disease Signs and Symptoms, pp. 18-23
5. In class lecture: Animals as Sentinels
6. **Assignment:** Discussion Questions 1

### **Week 5: Zoonotic Diseases – Foodborne Illness (Feb. 16-20, 2015)**

1. Reading: Chapter 11, Foodborne Illness, pp. 331-342
2. In class lecture: Zoonotic Diseases 3: Foodborne Diseases
3. Video: Shiga-Toxin Producing *E. coli* – Dr. T.G. Nagaraja (Time: 20:15)
4. **Assignment:** Case Study Analysis 1 (Due Feb. 20, 2015)

### **Week 6: Food Safety, Defense, and Security (Feb. 23-27, 2015)**

1. In class lecture: Food Safety, Defense, and Security
2. Video: Food Safety – Dr. Doug Powell (Time: 09:09)
3. Video: Antibiotic Residues – Dr. Mike Apley (Time: 15:34)
4. Video: Milk Safety – Dr. Karen Schmidt (Time: 15:40)
5. Video: Safe Meat Processing – Dr. Elizabeth Boyle (Time: 21:08)
6. **Assignment:** Quiz 1

## **III. Relationships among Humans and the Environment (4 weeks)**

### **Week 7: The Built Environment Disease Concerns (March 2-6, 2015)**

1. Reading: Chapter 6, The Built Environment and Indoor Air Quality, pp. 37-42
2. Reading: Chapter 8, Toxic Exposures, pp. 50-78 (First half of chapter)
3. In class lecture: Built Environment Disease Concerns
4. Video: Indoor Air Quality – Mr. Bruce Snead (Time: 24:11)
5. Video: Lead Poisoning – Dr. Ingrid Garrison (Time: 1:56)

### **Week 8: The Natural Environment Disease Concerns (March 9-13, 2015)**

1. Reading: Chapter 7, Allergic Conditions, pp. 43-49
2. Reading: Chapter 8, Toxic Exposures, pp. 79-104 (second half of chapter)
3. In class lecture: Natural Environment Disease Concerns
4. Video: Blue-Green Algae – Dr. Deon van der Merwe (Time: 15:48)

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5. Video: Heavy Metal and Trace Mineral Toxicity – Dr. Saugata Datta (Time approximately 23:00)
6. Video: Heavy Metals and Trace Minerals in the Environment – Dr. Saugata Datta (Time approximately 24:00)
7. Video: Mycotoxins – Dr. John Leslie (Time: 19:53)

**Student Holiday: [March 16-20, 2015](#)**

### **Week 9: The Built Environment: Physical Activity, Health, and Safety ([March 23-27, 2015](#))**

1. In class lecture: Built Environment Effects on Physical Activity, Health, and Safety
2. Video: Design of the Built Environment – Prof. Susanne Siepl-Coates (Time: 13:47)
3. Video: Design of Homes for the Human Life Span – Associate Prof. Migette Kaup (Time: 15:33)
4. Video: Walkability – Dr. Katie Heinrich (Time: 14:28)
5. **Assignment:** Discussion Questions 2

### **Week 10: Multiple and Reciprocal Levels of Human-Environment Interaction ([March 30-April 3, 2015](#))**

1. Reading: Chapter 12, Occupational Health of Animal Workers, 343-371
2. In class lecture: Multiple and Reciprocal Levels of Human-Environment Interaction
3. Video: Maintaining Human Health in Short-Term Concentrations of People – Dr. Paul Benne (Time: 23:03)
4. Video: Rocky Mountain Spotted Fever – Dr. Kate Kukanich (Time: 9:34)
5. **Assignment:** Quiz 2

## **IV. Relationships among Animals and the Environment (4 weeks)**

### **Week 11: Animals in the Built Environment ([April 6-10, 2015](#))**

1. In class lecture: Animals and the Built Environment
2. Video: Wetland Ecology/Lead in Mottled Ducks – Dr. David Haukos (Time: 13:23)
3. Video: Exercising with Pets – Dr. Susan Nelson (Time: 2:18)
4. Video: Lead Toxicity in Livestock – Dr. Deon van der Merwe (Time: 15:11)
5. **Assignment:** Case Study Analysis 2 (Due April 10, 2015)

### **Week 12: Wildlife Habitat Encroachment / Introduction of Non-Native Species ([April 13-17, 2015](#))**

1. In class lecture: Wildlife Habitat Encroachment
2. Video: Wildlife Encroachment – Dr. Sam Wisely (Time: 15:45)
3. In class lecture: Introduction of Non-Native Species
4. Video: Invasive Species – Dr. Kim With (Time: 27:15)
5. **Assignment:** Discussion Questions 3

### **Week 13: Climate Change and Effects on Animals / Animal Disaster Management ([April 20-24, 2015](#))**

## Attachment 3 – DMP 710

1. In class lecture: Climate Change and Effects on Animals
2. Reading: Chapter 13, Public health and Human-Animal Medicine, pp. 372-383
3. In class lecture: Animal Disaster Management
4. Video: Pets in Disasters – Dr. Christen Skaer (Time: 14:58)
5. Video: Livestock in Disasters – Dr. Tarric Crnic (Time: 14:13)
6. Video: “Sampling Crab Larvae in the Gulf of Mexico” - Gulf Oil Spill - Dr. Marco Kaltofen, Civil and Environmental Engineer, Boston Chem Data Corp. (Time: 02:36)

### **Week 14: Bio- and Agro-Terrorism (April 27-May 1, 2015)**

1. In class lecture: Bio- and Agro-Terrorism
2. Video: Bio- and Agro-Terrorism and Emerging Diseases – Dr. Jerry Jaax (Time: 13:22)
3. Video: Food Protection and Defense – Dr. Justin Kastner (Time: 13:22)
4. In class lecture: Risk Communication
5. **Assignment:** Quiz 3

<b>V. One Health Case Analysis / Research Paper Term Project (2 weeks)</b>
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### **Week 15: Term Paper (May 4-8, 2015)**

1. Submit references by 11:59 p.m. on May 7, 2015
2. Work independently

### **Finals Week: Term Paper Submission (May 11-15, 2015)**

- Due by 11:59 p.m. on Friday, May 15, 2015

## Attachment 3 – DMP 710

### Kansas State University Policies

#### 1. Statement Regarding Academic Honesty

Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reached via the following URL: [www.k-state.edu/honor](http://www.k-state.edu/honor). A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

For more information, visit the Honor & Integrity System home web page at: <http://www.ksu.edu/honor>

#### 2. Statement Regarding Students with Disabilities

Students with disabilities who need classroom accommodations, access to technology, or information about emergency building/campus evacuation processes should contact the Student Access Center and/or their instructor. Services are available to students with a wide range of disabilities including, but not limited to, physical disabilities, medical conditions, learning disabilities, attention deficit disorder, depression, and anxiety. If you are a student enrolled in campus/online courses through the Manhattan or Olathe campuses, contact the [Student Access Center](mailto:accesscenter@k-state.edu) at [accesscenter@k-state.edu](mailto:accesscenter@k-state.edu), 785-532-6441; for Salina campus, contact the [Academic and Career Advising Center](mailto:acac@k-state.edu) at [acac@k-state.edu](mailto:acac@k-state.edu), 785-826-2649.

#### 3. Statement Defining Expectations for Classroom Conduct

All student activities in the University, including this course, are governed by the [Student Judicial Conduct Code](#) as outlined in the Student Governing Association [By Laws](#), Article V, Section 3, number 2. Students who engage in behavior that disrupts the learning environment may be asked to leave the class.

#### 4. Statement for Copyright Notification

Copyright 2012 (Jodi Freifeld, DVM, MBA; Robert L. Larson, DVM, PhD; Beth A. Montelone, PhD; Kansas State University) as to this syllabus and all lectures. During this course students are prohibited from selling notes to or being paid for taking notes by any person or commercial firm without the express written permission of the professor teaching this course.

## Attachment 4 – MPH/DMP 802 Environmental Health



### Course Syllabus

DMP/MPH 802

### Environmental Health

- Instruction:** Dr. Thu Annelise Nguyen  
Associate Professor  
Diagnostic Medicine / Pathobiology  
College of Veterinary Medicine  
Kansas State University  
Manhattan, KS 66506  
Phone: 785-532-4429  
Email: [tnuyen@vet.k-state.edu](mailto:tnuyen@vet.k-state.edu)
- Office Hours:** By appointment
- Meeting Time:** This is a three-credit graduate-level course consisting of a 3-hour meeting per week.
- Lectures: Wednesday from 9:00 a.m. to 11:45 a.m. in Coles Hall, Room 343
- The first class meets on Wednesday, August 26, 2015; last class meets on Wednesday, December 9, 2015
- Course Description:** This course provides a broad overview of some of the most important and current challenges to human health from the environment as well as teaching the basic concepts and skills to assess, control, and prevent these challenges in environmental health. Topics of lectures include agent-host-environment triad and its impact as a determinant of population health. Students are introduced to factors that impact on air, water, land and climate in the macro environment, in specific contexts such as homes, workplaces, and consumer products, and in natural and man-made disasters. Students will be exposed to professional practice of environmental sciences, epidemiology, toxicology, occupational health and industrial hygiene, and consumer health and safety. Topics include the methods for defining environmental contamination; identifying contaminants, pathogens and toxins; assessing risks and causality; determining health impact; ameliorating hazards; and protecting the population through waste management, regulatory programs, environmental inspections, food and product safety, and environmental policy. Includes interaction with professionals in public health practice.
- Course Objectives:** By completing the class assignments, through participation and by completing the readings, the student will be able to:



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Learning Outcomes	Course Objectives
Recognize major public health issues for populations on a social, community, and global scale.	<p>Describe environmental risk factors that affect both personal and population health.</p> <p>Recognize the importance of key events and milestones in the history and development environmental health.</p> <p>Identify pesticides and other organic compounds, and how they influence population health.</p>
Describe multidisciplinary and ecological public health issues and concerns.	Gain knowledge and understanding of the multiple determinants of health with emphasis on impacts of environmental contaminants.
Discuss lifestyle behaviors that promote individual and population health and well-being.	<p>Describe risk factors and modes of transmission for diseases that result from pollutants in the environment.</p> <p>Gain awareness of lifestyle behaviors that can reduce exposure to environmental contaminants.</p>
Apply multidisciplinary strategies and interventions in addressing public health issues.	<p>Outline approaches for assessing and controlling environmental hazards that affect population health.</p> <p>Discuss the interconnectedness among the physical, social, and environmental aspects of community health.</p> <p>Describe how the methods of epidemiology and surveillance are used to safeguard the population's health against hazards in air, water, food, and solid/liquid waste.</p> <p>Gain knowledge of how environmental health sciences, epidemiology and toxicology can help address and protect safety of populations, including consumers and workers.</p>
Apply concepts of planning and management in public health programs.	<p>Identify key laws and regulations for addressing issues related to environmental health.</p> <p>Explain how the organizational structure, financing, and delivery of personal health care and environmental health services impact population health.</p>
Integrate and apply knowledge, skills, and principles for health improvement.	Assess the source and quality of environmental health information and data, as related to individual and population health.

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Course content:

<b>Week</b>	<b>Date</b>	<b>Time</b>	<b>Topic</b>	<b>Instructor</b>	<b>Assignment</b>
1.	8/26	9:00-10:15	Introduction	Dr. Nguyen	---
		10:30-11:45	Env. Health Examples	Dr. Nguyen	
2.	9/2	9:00-10:15	Env. Epidemiology	Guest Speaker	Ch.1
		10:30-11:45	Class discussion	from CDC	
3.	9/9	9:00-10:15	Toxins in the Env.	Dr. Nguyen	Quiz 1
		10:30-11:45	Class Discussion	Dr. Nguyen	
4.	9/16	9:00-10:15	Env. Policy and Regulation	Guest Speaker	Ch.2
		10:30-11:45	Class Discussion	from EPA	
5.	9/23	9:00-10:15	Agents of Env. Disease: Zoonotic and water-borne disease	Dr. Cohnstaedt from USDA	Ch.3
		10:30-11:45	Class Discussion		
6.	9/30	9:00-10:15	Agents of environmental disease: Toxic metals and elements	Dr. Nguyen	Quiz 2 Ch.5
		10:30-11:45	Class Discussion	Dr. Nguyen	
7.	10/7	9:00-10:15	Agents of Env. Disease: Pesticides and other organic compounds	Dr. Nguyen	Ch.5
		10:30-11:45	Class Discussion		
8.	10/14	9:00-10:15	Mid-semester examination	---	
		10:30-11:45	Case Study Env. Diseases	Dr. Nguyen	
9.	10/21	9:00-10:15	Agents of Env. Disease: Ionizing & Non-ionizing Radiation	Mr. Ron Bridges	Quiz 3 Ch.4
		10:30-11:45	Class Discussion		
10.	10/28	9:00-10:15	Air/Water Quality; Solid/Liquid Waste	Guest Speaker	Ch.7
		10:30-11:45	Class Discussion		
11.	11/4	9:00-10:15	Food Safety	Dr. Nutsch	Ch.6
		10:30-11:45	Class Discussion		
12.	11/11	9:00-10:15	Occupational Health	Mr. Ron Bridges	Ch.5
		10:30-11:45	Class Discussion		
13.	11/18	9:00-10:15	Managing Env. Risks to Promote Population Health	Guest Speaker from Alliance	Quiz 4 Ch.4
		10:30-11:45	Class Discussion		
14.	12/2	9:00-10:15	Case Study of Health and Occupation Safety	Guest Speaker from JCDHE	
		10:30-11:45	Class Discussion		
15.	12/9	9:00-10:15	Student Presentation	---	
		10:30-11:45	Student Presentation	---	
16.	12/17	Thursday	Final Exam		

Prerequisites: None

Course Grades: The graded assignments and the percentages of the student's grade they will constitute are the following:

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Quizzes (four)	20 %
Mid-semester examination	30 %
Class participation	10 %
Presentation	10%
Final examination	30%

Symbol assignment: 90-100%: A; 75-89%: B; 65-74%: C; 55-64%: D; <55%: F

Required Text: Author: Maxwell  
Title: Understanding Environmental Health, Second Edition  
ISBN: 9781449665371

A listing with readings from published papers will be provided in class or online.

### Course Notices:

Attendance is required at all classes and only university-approved excuses will be accepted.

No make-up examination will be provided for students who miss the examination due to non-university excused absence. Student missing an examination for a non-university excused absence will received 0 points.

It is both professional and courteous to come to class on time. Entering the classroom after the beginning of class is disruptive to your classmates. All cellular telephones and mobile pagers must be turned off during class time. Text messaging or playing computer games during class is unacceptable behavior.

Scholastic dishonesty, in any form, will not be tolerated. This means no cheating of any kind. Scholastic dishonesty includes, but is not limited to, looking at the exam sheet of a classmate (with or without their permission).

All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Governing Association By Laws, Article VI, Section 3, number 2.

Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance that, in academic matters, one's work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reached via the following URL: [www.ksu.edu/honor](http://www.ksu.edu/honor). A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: "On my honor, as a student, I have neither given nor received unauthorized aid on this academic work." A grade of XF can

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result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

Any student with a disability who needs assistance in this course should contact Disability Support Services (<http://www.k-state.edu/dss/>), and inform the instructors of arrangements that must be made to accommodate special needs.