

DISEASES OF WILDLIFE—SYLLABUS

SurgSci/FWE 548

Fall 2016

OVERVIEW

This course is designed to provide students with an overview of the issues involved across a wide range of wildlife diseases. The primary focus of the lectures will be on the biological, epidemiological, clinical, public health and, in some cases, sociopolitical ramifications of wildlife diseases. The course will cover a wide variety of wildlife diseases caused by bacteria, viruses, parasites, prions, and environmental changes that affect a range of wildlife species. This range of diseases will be presented in order to familiarize students with the many facets involved in disease management, from animal and human health issues, to ecological and environmental considerations, to the role of society in contributing to, and managing, these diseases.

REFERENCES

There is no required textbook for this course, but guest lecturers may provide specific references for particular topics. It is **very important** that you attend **ALL** lectures, as this will be your primary, and in some cases, only exposure to each topic. The following is a list of useful texts, which will provide further detailed information on wildlife epidemiology and disease:

“Field Manual of Wildlife Diseases: General Field Procedures and Diseases of Birds” by M. Friend and J. C. Franson. The entire text of this manual can be viewed and or downloaded online at: http://www.nwhc.usgs.gov/publications/field_manual/index.jsp

“Disease Emergence and Resurgence: The wildlife-human connection” edited by M. Friend. The entire text of this manual can be viewed and or downloaded online at: http://www.nwhc.usgs.gov/publications/disease_emergence/index.jsp

“Sustaining Life: How human health depends on biodiversity” edited by E. Chivian & A. Bernstein. Particularly interesting chapters include; Chapter 7 (Ecosystem disturbance, biodiversity loss, and human infectious disease), and Chapter 8 (Biodiversity and food production).

“The Ecology of Wildlife Diseases” edited by P. Hudson, A. Rizzoli, B. Grenfell, H. Heesterbeek, and A. Dobson. Oxford University Press, 2001.

“Infectious Diseases of Wild Mammals, third edition” edited by E. Williams & I. Barker, Iowa State University Press, 2001.

“Parasitic Diseases of Wild Mammals, second edition” edited by W. Samuel, M. Pybus & A. Kocan, Iowa State University Press, 2001.

“Noninfectious Diseases of Wildlife, second edition” edited by A. Fairbrother, L. Locke & G. Hoff, Iowa State University Press, 1996.

“Field Manual of Wildlife Diseases in the Southeastern United States”. 2nd Edition. W. R. Davidson and V. F. Nettles, Southeastern Cooperative Wildlife Disease Study, College of Veterinary Medicine, University of Georgia, Athens, 1997.

“Conservation Medicine: Ecological Health in Practice.” Edited by A. A. Aguirre, R. S. Ostfeld, G. M. Tabor, C. House, and M. C. Pearl. Oxford University Press, 2002.

LECTURES

All materials will be placed on the Learn@UW course website

LECTURERS

We are taking advantage of the wealth of experience in wildlife diseases available at the University of Wisconsin, the USGS-National Wildlife Health Center, and other local institutions by having guest lecturers present information on specific topics. These lecturers are recognized scientists in the subjects being covered; therefore, you will receive “state of the art” instruction, as well as “real world” examples of wildlife disease issues.

GRADES

Grading for the course is based on three exams; Exam 1 = 33.3% of total grade, Exam 2 = 33.3% of total grade, and Final = 33.3% of total grade. The Final exam will include cumulative conceptual issues from the entire semester, but will focus on the specifics of material NOT covered in the previous exams. These exams will consist of multiple choice and short answer questions. Final grades will be determined on a percentage basis, but the course coordinators will also take into account the overall class performance and natural “breaks” in score distribution.

Generally, the grade distribution will be as follows:

A=92-100%; AB=88-91%; B=81-87%; BC=77-80%; C=65-76%; D=55-64%; F<55%.

However, this system is not guaranteed!

There will be NO make-up exams without prior approval from K. Sladky, and these will only be pre-arranged in cases of emergency. Therefore, arrange your schedule NOW so that you will be present for all exams.

Please contact Kurt Sladky (kurt.sladkyk@wisc.edu) anytime during the semester with any questions, concerns, problems, or suggestions. Although this course is composed of many students, discussion and questions are welcome during the lectures. On the following pages, I have included a list of all lecturers along with their affiliations and contact information:

**DISEASES OF WILDLIFE—LECTURERS
DSS/WI ECOL 548**

Dr. Anne Ballmann

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Dr. Tom Yuill

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DISEASES OF WILDLIFE—LECTURE SCHEDULE
SurgSci/ FWE 548
Fall 2016

Room 212 Animal Sciences, 9:55-10:45 MWF

Date	Day	Topic	Lecturer
Sept. 07	Wed	NO CLASS	
09	Fri	NO CLASS	
Sept. 12	Mon	Introduction/ Ecosystem Health	<i>Sladky</i>
14	Wed	Basic Dis. Concepts	<i>Sladky</i>
16	Fri	Epidemiology I	<i>Sladky</i>
Sept. 19	Mon	Epidemiology II	<i>Sladky</i>
21	Wed	Wildlife Disease Investigations	<i>Ballmann</i>
23	Fri	Important Wildlife Parasites	<i>Yoshino</i>
Sept. 26	Mon	Environmental Toxicology	<i>Porter</i>
28	Wed	Avian Lead Toxicosis	<i>Friend</i>
30	Fri	Ecoimmunotoxicology	<i>Karasov</i>
Oct. 03	Mon	Rabies Virus	<i>Yuill</i>
05	Wed	Myxomatosis/Calicivirus	<i>Yuill</i>
07	Fri	Arboviruses	<i>Yuill</i>
Oct. 10	Mon	Avian Botulism	<i>Friend</i>
Oct. 12 Wednesday EXAM 1			
Oct. 14	Fri	Dengue Fever & Zika Virus	<i>Osorio/Aliota</i>
Oct. 17	Mon	West Nile Virus	<i>Hofmeister</i>
19	Wed	Tick-Borne Diseases	<i>Hofmeister</i>
21	Fri	Sylvatic Plague/Tularemia	<i>Bron</i>
Oct. 24	Mon	Hantaviruses	<i>Bernard</i>
26	Wed	Influenza Viruses & Avian Influenza	<i>Ip</i>
28	Fri	Canine Distemper/Morbilliviruses	<i>Long</i>
Oct. 31	Mon	Mycobacteriosis	<i>Talaat</i>
Nov. 02	Wed	TB in African Wildlife	<i>Long</i>
04	Fri	Avian Cholera	<i>Samuel</i>
07	Mon	Avian Malaria	<i>Samuel</i>
09	Wed	Prion Diseases	<i>Samuel</i>
11	Fri	Chronic Wasting Disease	<i>Samuel</i>
Nov. 14 Monday Exam 2			

Nov.	16	Wed	Emerging Diseases in Reptiles & Amphibians	<i>Lorch</i>
	18	Fri	Aquatic Animal Diseases	<i>Sladky</i>
Nov.	21	Mon	Bat White Nose Syndrome	<i>Behr</i>
	23	Wed	NO CLASS-THANKSGIVING	
	25	Fri	NO CLASS-THANKSGIVING	
Nov.	28	Mon	Bat-Associated Zoonotic Diseases	<i>Sladky</i>
	30	Wed	Disease Mngt. Endangered Spec.	<i>Sladky</i>
Dec.	02	Fri	Endangered Species Case Study: Whooping Cranes	<i>Hartup</i>
Dec.	05	Mon	Human-primate interaction & the Origins of HIV/AIDS	<i>Goldberg</i>
	07	Wed	Ecosystem health in Uganda	<i>Goldberg</i>
	09	Fri	Climate Change and Zoonoses	<i>Patz</i>
Dec.	12	Mon	Landscape Change and Zoonoses	<i>Patz</i>
	14	Wed	LAST CLASS DAY FINAL EXAM	

Course Coordinator:

**Kurt Sladky, MS, DVM, Dipl. ACZM, Dipl. ECZM
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*****The best way to communicate with me is by email*****