

ADVS3000—Animal Health, Hygiene, and Parasitology
Lecture Notes
Spring Semester 2007

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ADVS 3000—Animal Health, Hygiene, and Parasitology Course Syllabus
Spring Semester 2005

Class: MW 11:30am–12:20pm, AGSB 234

Laboratory: T 9:00am–11:45am **OR THURS.** 9:00am–11:45am; 1:30pm–4:15pm, VSB 224

Instructor: Dr. Rusty Stott

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Office hours: MW 12:30-1:30 or by appointment

Lecture Schedule

Date	lecture	Topic	exam
January	8	1 Animal Health: Disease causation/ Natural history of disease	1
	10	2 Organisms causing infections	1
	15	No Class; MLK Jr. day	
	17	3 Immune system	1
	22	4 Immune system / Vaccines	1
	24	5 Anti-infective medications	1
	29	6 Anti-infective medications / Quality assurance programs	1
	31	7 Environmental hygiene / Housing	1
February	5	Examination—11:30am–12:20pm @ AGSB 234	
	7	8 Disease Diagnosis	2
	12	9 Reproductive health / Disease	2
	14	10 Reproductive health / Disease	2
	19	No class: Washington and Lincoln day	
	20(T)	11 Reproductive health / Neonatal calf health	2
	21	12 Neonatal calf health / Disease;	2
	26	13 Calfhood / Yearling health / Disease	2
	28	14 Calfhood / Yearling health / Disease	2
March	5	15 Adult cattle health / disease: Lameness	3
	7	Examination—11:30am–12:20pm @ AGSB 234	
	12-14	No Classes; Spring Break	
	19	16 Adult cattle health / disease: Mastitis	3
	21	17 Adult cattle health / disease: Metabolic diseases	3
	26	18 Adult cattle health / disease: Infectious diseases;	3
	28	19 Zoonotic / Regulatory / Emerging disease	3

April	2	20	Zoonotic / Regulatory / Emerging disease	3
	4		Examination —11:30am–12:20pm @ AGSB 234	
	9	21	Toxic causes of disease	4
	11	22	Toxic causes of disease / Animal Welfare	4
	16	23	Beef Feedlot health management	4
	18	24	Equine health	4
	23	25	Companion animal health	4
	25	26	makeup lecture	4
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May	2 (W)		Final Examination; 9:30-11:20am @ AGSB 234	

Notes: General notes for scheduled lectures will be available through out the course. However, please come prepared to take your own notes for every lecture period. The available notes should not be considered to be comprehensive for the discussion scheduled for that day.

Text: The recommended text for this course is *Animal Health* and may be purchased in the USU Bookstore. *Principles of Veterinary Science* and *Infectious Disease in Food Animal Practice* may also be useful references. Several copies of these books are on reserve in the USU Science and Technology (Scitech) Library. Reading assignments will also originate from *The Merck Veterinary Manual* which may be found free on the Internet at <http://www.merckvetmanual.com/mvm/index.jsp>

Testing: The tests will consist of a mixture of any of the following: multiple choice, fill-in, true/false, short answer, and essay. Make-up examinations will not be given except in cases where the absence is deemed completely unavoidable by the course instructor (i.e hospitalization or death in the family) and advanced notice &/or written excuse provided. **The final examination will be comprehensive** over the lecture part of the course. However, questions in the final examination which relate to the laboratory will only cover the last 5 weeks of laboratory.

Grading: One overall grade will be given for the course (lecture + laboratory). Examination results from the lecture and laboratory sections of the course will be weighted in the following manner:

Lecture examination #1	100 pts
Lecture examination #2	100 pts
Lecture examination #3	100 pts
Laboratory examination #1	100 pts

Laboratory exam questions on lecture exam # 3 and final exam	
Laboratory attendance	55 pts
Final Examination (Comprehensive)	150 pts
Total	605pts

Grading:

100-93 A	92-90 A-
89-87 B+	86-82 B
81-79 B-	78-75 C+
74-70 C	69-67 C-
67-64 D+	63-60 D
59-56 D-	<56 E

Course fees: A fee of \$30.00 (U.S.) is required for the course. Course fees will be used to purchase a dairy and dairy beef quality assurance booklet for the lecture, provide lecture/laboratory notes and defray the cost of laboratory supplies (specimens and lab supplies for parasitology, syringes, needles, solutions, etc for food animal procedures).

Americans with Disabilities Act:

“If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center, preferably during the first week of the course. Any requests for special consideration relating to attendance, pedagogy, taking the examinations, etc., must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials can be provided in alternative formats - large print, audio, diskette, or Braille.”

ADVS 3000 Suggested Reading Assignments

-Reading assignments will be designated as **H**, **M**, or **R**.

H: Jackson, Greer and Baker, Animal Health, 3rd Edition.

M: The Merck Veterinary Manual, 8th Edition. On line at <http://www.merckvetmanual.com>

R: On Reserve in USU Science & Technology Library; **Electronic reserve password:**

Date

Topic

January	8	H: Chapter 1
Lec 1		
Lec 2	10	H: Chapter 1& 19
	15	No class
Lec 3	17	Reading Assignment in Lecture Notes
Lec 4	22	M: Pharmacology: Vaccines and Immunotherapy:(all) H: Chapter 5
Lec 5	24	M: Pharmacology: Pharmacology Introduction (introduction, routes of drug administration) Antibacterial agents, Anthelmintics
Lec 6	29	DQA Booklet pages 1-17
Lec 7	31	H: Chapter 6 and 7
February	5	Exam
Lec 8	7	H: Chpt. 9 (pp124-128) (116-117) M: Management and Nutrition: Ventilation (All)
Lec 9	12	H: Chapter 11
Lec 10	14	H: Chapter 11 M: Reproductive system: Abortion in large animals
	19	No class
Lec 11	20	M: Management and Nutrition: Disease management interaction: Cattle, Horses, Goats: Perinatal management
Lec 12	21	
Lec 13	26	H: Chapter 12 – respiratory system and Chpt 17 (specific diseases covered in notes) also look up specific diseases in Merck
lec 14	28	M: Respiratory System: Respiratory diseases of cattle: BRDC (all), Enzootic pneumonia of calves and shipping fever (all)
March	5	H: Chapter 17 M: Musculoskeletal System: Lameness in Cattle: Sheep: Horses (Read about diseases discussed in class)
Lec 15	7	exam (12-14 Spring Break)
		M: Reproductive system: Large animals: Cows: Ewes: Mares H: Chapter 11 (p 199)
Lec 16	19	
Lec 17	21	H: Chapter 16 M: Metabolic disorders: (read ones discussed in class)
Lec 18	26	H: Chapter 15 M: Digestive system: Bovine viral diarrhea and mucosal disease complex: (all); M: Generalized conditions: Paratuberculosis: (all)
Lec 19	28	R: Bovine Spongiform Encephalopathy and variant Creutzfeldt-Jakob Disease: Background, Evolution, and Current Concerns
April	2	M: Zoonoses: Zoonoses: read Introduction and look through table
Lec 20		
	4	exam
Lec 21	9	H: Chapter 18 M: Toxicology: read Introduction and look at toxins covered in class.
Lec 22	11	(Toxicology continued)
Lec 23	16	

Lec 24	18
Lec 25	23
Lec 26	25 <u>make up lecture</u>

USU Farm Biosecurity Protocol

Biosecurity measures are necessary at the ADVS/UAES farms to avoid bringing manure and infectious agents from other farms and animals to farm facilities and animals and vice versa.

Specific guidelines:

1. If you have been out of the U.S. within the past 14 days, please inform the instructor prior to class, so he/she can discuss the specifics with a veterinary clinician. Do not enter facilities until you have permission from the instructor.
2. Park in designated areas at the farm and do NOT enter beyond the “Biosecure Area” signs until properly clothed and permission has been given.
3. Footwear - One of the following is to be provided by each student and/or faculty member entering a Biosecure animal area. The Professor/Instructor is responsible to instruct students and see that biosecurity guidelines are followed. For Equine classes a footbath will be provided and used for cleaning of cowboy boots, etc.
 - Rubber boots can be cleaned and disinfected before and after each visit. A boot bath and brush will be provided before and after each class sessions and changed when contaminated.
 - Disposable boot/shoe covers may be provided as an option to A.
4. Clothes / Coveralls - The instructor is responsible to ensure that this policy is followed. If animals are to be “handled”, clean coveralls should be worn. Disposable coveralls would be adequate for many courses and could remain at the farm between uses. If “animal handling” is not involved the wearing of washed, clean clothes to each class/laboratory session is adequate.
5. Human health and certain precautions:
 - Injury - always stay alert and be cautious when around animals.
 - Animals often carry infectious agents which may be transmitted to and cause disease in humans. This is a special concern for anyone who has reduced immunity (immunocompromised). Persons working with animals should keep their hands/fingers out of their own mouth and wash their hands (and/or shower) as needed and especially prior to eating. Food should not be brought to farm sites during animal related activities.