

UW-Dept of Animal Sciences
Course syllabus
Spring Semester

Course title: Animal Health and Diseases Management.

Course number: 604-320 Cross-listed with Dairy Science (292-320)

Class time & location: (Tuesdays & Thursdays), time: 8:00 – 9:15 am.

Credit hours: 3

Format: lecture

Instructor: Amin Fadl

Instructor Office: 546 Animal Science Building, 1675 Observatory Dr.

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Prerequisites: Zoo101/102, Biol 152, or instructor's consent.

Course Description:

This course introduces a wide range of topics related to animal health and disease management including: signs of good and poor animal health, principal causes of diseases; methods of disease transmission and diagnosis; mechanisms of disease prevention and management including biosecurity, host immune responses and vaccination; zoonotic diseases and public health; common diseases of farm animals and management. Open to animal, dairy and nutritional sciences majors, pre-veterinary and related fields.

Objectives and outcome:

Upon completion of the course, students will learn:

- Signs of good and poor animal health.
- Causes, transmission, diagnosis and therapy for common diseases of farm animals
- Basic immunology as they relate to disease prevention.
- Disease prevention mechanisms (vaccination) in animals.
- Develop and apply biosecurity procedures.
- Common disease conditions and management in agricultural animals.
- Zoonotic diseases and public health significance.
- The role of veterinarians, animal scientists and farm managers in control of diseases.

Course Texts & Materials:

Mainly: Class lecture notes, handouts and study/presentation.

Optional texts:

- Introduction to Veterinary Science, Lawhead & Baker, 2004.
- Animal Health, 3rd ed, Jackson, Greer, Baker, 2000.
- Principles of Veterinary Medicine, by Hoopes and Thwaites
- The Merck Veterinary Manual 9th edition, 2005. (available online, see link below)

Course Grading:

Grading of the course will be based on quizzes, 4 examinations and class assignments. Grades will be computed as an average of the following

Quizzes	10%
Paper & presentation	15%
Exam I	15%
Exam II	20%
Exam III	20%
Exam IV (Final)	20%

Letter grades will be assigned based on the following percentage:

A	90% and up	Excellent
AB	86-89%	(intermediate grade)
B	80-85%	Good
BC	76-79%	(intermediate grade)
C	70-75%	Fair
D	60-69	poor (passing)
F	< 60%	Failure
I		Incomplete

Important URL Links:

<http://www.merckvetmanual.com/mvm/index.jsp>

Online Merck Manual

<http://www.pfizerah.com>

- Pfizer Animal Health

<http://www.aphis.usda.gov/vs/naahps/>

- National Center for Animal Health Programs

<http://www.thepigsite.com/>

- Pig Diseases and Management

Course topics
Tuesdays & Thursdays 8:00-9:15 am

	Lecture topic
1	Introduction
2	Signs of health & diseases
3	General causes of diseases
4	Disease transmission, diagnosis & treatment
5	Biosecurity: disease prevention
6	Biosecurity/HAACP (disease prevention)
7	Immune response (Immune system: Immune organs & cells)
8	Immune response (mechanisms of innate & acquired Immunity)
9	Immune response (Vaccines & Immunity)
10	Diseases of digestive system (mouth, choke, lactic acidosis, colic)
11	Diseases of digestive sys. (Bloat, ruminal drinkers, hardware dis.)
12	Diseases of digestive sys. (scours, colibacillosis, obstruction)
13	Diseases of respiratory system
14	Nutritional & metabolic diseases
15	Neonatal diseases & fluid therapy
16	Urinary tract disorders (general signs, infections, calculi)
17	Reproductive disorders (abortion, dystocia, mastitis)
18	Infectious diseases (FMD, erysipelas, PRRS)
19	Infectious diseases (TB, Johne's disease, strangles)
20	Infectious diseases (tetanus, botulism, lyme disease)
21	Zoonotic diseases (anthrax, rabies)
22	Zoonotic diseases (Salmonella, E. coli, Listeria, Campylobacter)
23	Parasitic diseases (internal & external parasites management)
24	Lameness (Bovines & Equines)
25	Physical influences (Management of: wounds, heatstroke, frostbite, electric)
26	Diseases of nervous system (BSE, encephalitis)
27	Ophthalmic disorders (conjunctivitis, cataract, corneal ulcers).