Animal Science 374

ANIMAL HEALTH AND WELFARE

Department of Agricultural, Food and Nutritional Science

University of Alberta

Fall 2002

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Office Hours: flexible – by appointment

Scheduling:
Lectures: Tues./Thurs. 11:00-12:20
811 General Service Building

Prerequisites: * 3 in university-level biology
Course Description
- This course helps students to develop an understanding of general principles of health, disease and prevention in farm animals.
- The course gives students the basis to build an intellectual framework for understanding and discussing animal welfare concerns and other ethical issues surrounding the use of animals in agriculture, science and society.

Course Objectives
Through this course, students will:
- Explore your own and others’ attitudes towards animal welfare.
- Develop a basic understanding of the history of animal use, and of various philosophical positions underlying people’s attitudes on animal use.
- Foster your ability to recognize and create rational arguments regarding animal use and care, through discussion and written assignments.
- Be able to discuss practical social, economic and legal issues that relate to animals used in agriculture, research, entertainment, wildlife management and as companion animals.
- Develop a basic knowledge of various scientific approaches to the study of animal welfare.
- Develop a basic understanding of the principles of animal disease, causes of disease, treatment and prevention of disease.
- Become familiar with examples of causative agents of infectious disease, including viruses, bacteria and parasites, including zoonotic diseases.
- Recognize and describe a variety of non-infectious diseases.

As additional educational goals, students will:
- Learn to recognize the many factors (values, knowledge, technology, regulation and economics) that enter into decisions about animal use and animal health.
- Develop skills in communication by discussing issues with others, by presenting material to the class, and through written assignments.
- Be exposed to several guest speakers who are veterinarians and animal scientists in various types of roles related to animal health and welfare.

Expectations
All students are expected to master the basic concepts of the course. You will best meet the course objectives by being prepared for class by reading the assigned material, actively participating in discussions, meeting deadlines for graded coursework, and collaborating with fellow class members. As much of the course involves discussion and interaction with classmates, attendance is imperative.

Appropriate professional behaviour demonstrating respect for fellow students and instructors is expected. All students at the University of Alberta are subject to the Code of Student Behaviour, as outlined on pages 710-732 of the Calendar. Please familiarize yourself with it and ensure that you do not participate in any inappropriate behaviour as defined by the Code. Key components of the code include the following statements:

30.3.2(1) No Student shall submit the words, ideas, images or data of another person as the Student’s own in any academic writing, essay, thesis, project, assignment, presentation or poster in a course or program of study.

30.3.2(2) c No Student shall represent another’s substantial editorial or compositional assistance on an assignment as the Student’s own work.

Please speak with me if you have any questions or concerns about the Code, particularly as it pertains to assignments and internet research.

Written assignments must be handed in by 4:00 p.m. on the date due. Late assignments will be docked 25% of the total mark per day, and will not be accepted after 2 days.
Required Resource Material
- Coursepack – Available in U of A Bookstore

Methods of Student Evaluation
- Mid-term Exam: 25%
- Final Exam: 35%
- Issue Analysis (Hand-in Assignment): 5%
- Term Paper:
  - Oral Summary Presentation (5 minutes): 5%
  - Written Submission: 20%
- Class Participation/Attendance: 10%

<table>
<thead>
<tr>
<th>Week</th>
<th>Day</th>
<th>Date</th>
<th>Subject</th>
<th>Reading Assignment (numbers correspond to reading list)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Thurs.</td>
<td>Sept. 5</td>
<td>Introduction - Critical Thinking</td>
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<tr>
<td>2</td>
<td>Tues.</td>
<td>Sept. 10</td>
<td>Historical Attitudes, Utilitarianism, Animal Rights, Value of Animal Life</td>
<td>1, 2, 3</td>
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<td></td>
<td>Thurs.</td>
<td>Sept. 12</td>
<td>Philosophies on Use and Treatment of Animals</td>
<td>4, 5, 6</td>
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<td>3</td>
<td>Tues.</td>
<td>Sept. 17</td>
<td>Scientific Approaches to Animal Welfare - Stress Physiology (Submit Term Paper Topics)</td>
<td>7,</td>
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<td></td>
<td>Scientific Approaches - Using Animal Behaviour; Preference testing - Detecting pain and injury; Effects of Physical Environment</td>
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<td>4</td>
<td>Tues.</td>
<td>Sept. 24</td>
<td>Animals Used in Agriculture</td>
<td>8, 9, 10</td>
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<td>4</td>
<td>Thurs.</td>
<td>Sept. 26</td>
<td>Regulatory Medicine and Foreign Animal Disease - Dr. Larry Delver, CFIA (Covered on Final Exam)</td>
<td>11, 12, 13</td>
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<td>5</td>
<td>Tues.</td>
<td>Oct. 1</td>
<td>Animals Used in Agriculture - Dr. John Church, AAFRD Welfare Specialist</td>
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<td>5</td>
<td>Thurs.</td>
<td>Oct. 3</td>
<td>Animals Used in Sport and Entertainment - Dr. Toni Bayans, HSLAS Assistant Director</td>
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<td>6</td>
<td>Tues.</td>
<td>Oct. 8</td>
<td>Humane Societies / Animals Used for Companionship</td>
<td>19, 20, 21</td>
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<td>6</td>
<td>Thurs.</td>
<td>Oct. 10</td>
<td>Animals Used in Research - Dr. David Neil, University Veterinarian</td>
<td>22,</td>
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<td>7</td>
<td>Tues.</td>
<td>Oct. 15</td>
<td>Animal welfare ethics in wildlife conservation and management - Dr. Lee Foote, Renewable Resources</td>
<td>23, 24</td>
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<td>7</td>
<td>Thurs.</td>
<td>Oct. 17</td>
<td>Student Presentations</td>
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<td>8</td>
<td>Tues.</td>
<td>Oct. 22</td>
<td>Midterm Exam</td>
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<td>8</td>
<td>Thurs.</td>
<td>Oct. 24</td>
<td>Causes of Disease, Predisposing Factors</td>
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<td>9</td>
<td>Tues.</td>
<td>Oct. 29</td>
<td>Infectious Agents - Bacteria, Viruses, Parasites, etc.</td>
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<td>9</td>
<td>Thurs.</td>
<td>Oct. 31</td>
<td>Immune System / Principles of Immunization - Dr. Ed Doorenbak, Ayeser Technical Service Veterinarian</td>
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<td>10</td>
<td>Tues.</td>
<td>Nov. 5</td>
<td>Infectious Agents, cont'd; Mechanisms of Infection and Immunity</td>
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<td>10</td>
<td>Thurs.</td>
<td>Nov. 7</td>
<td>Housing, Hygiene, Sanitation and Husbandry Effects on Health and Production, Reproductive Health and Disease</td>
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11 Tues. Nov. 12  No Class – Fall Class Break
Pathology – Recognition of Disease - Dr. Richard Uwiera, Vet. Pathologist, HSLAS and Zoonotic
11 Thurs. Nov. 14 Diseases - Dr. Nick Nation, Director, HSLAS
12 Tues. Nov. 19 Treatment and Prevention
12 Thurs. Nov. 21 Herd Health Programmes and Biosecurity
27, 28
13 Tues. Nov. 26 Epidemiology, Epizootiology - Dr. Sandra Honor, AAFRD
13 Thurs. Nov. 28 Disease Case Studies (Term Papers Due)
14 Tues. Dec. 3 Disease Case Studies

Readings:
(All included in Coursepack, except #9 and #11. Additional handouts may be given in class)


**Other Suggested Resources:**


40. Agriculture and Agri-Food Canada Codes of Practice. Editions for Pigs, Poultry, Dairy Cattle, Beef Cattle, Horses, etc.

Websites:

Humane Society of the United States (HSUS)  www.hsus.org
American Humane Association (entertainment)  www.americanhumane.org
American Humane Association Film and TV Unit  www.ahafilm.org
People for the Ethical Treatment of Animals (PETA)  www.peta.org
Zoocheck Canada  www.zoocheck.com
World Society for the Protection of Animals (WSPA)  www.wspa-international.org
Canadian Federation of Humane Societies (CFHS)  www.cfhs.ca
Meatingplace  www.meatingplace.com
Dr. Temple Grandin’s Web Pages  www.grandin.com
Canadian Veterinary Medical Association (CVMA)  www.animalhealthcare.ca
Alberta Farm Animal Care Association (AFAC)  www.afac.ab.ca
Canadian Council on Animal Care (CCAC)  www.ccac.ca
U of Guelph Ctr. for the Study of Animal Welfare  www.aps.uoguelph.ca/~csaw/
NetVet  http://netvet.wustl.edu/vet.htm
Canadian Food Inspection Agency  www.inspection.gc.ca

Sample Term Paper Topics  Not Inclusive – BYOT (Bring your own topic!)

- Traditional foxhunting in Britain
- Animal welfare issues in the salmon aquaculture industry
- Design of zoos as a reflection of animal welfare concerns
- Ethical and animal welfare concerns surrounding traditional Spanish bull-fighting
- Welfare issues of metabolism crates in nutrition research using agricultural species
- Effects of eco-tourism on *Gorilla gorilla beringei*
- The disparity in the treatment and protection of laboratory, pet and pest rodents
- Animal welfare issues and anti-vivisectionism in medical research
- The welfare of cattle in slaughter plants
- Animal welfare aspects of poultry transportation
- Animal welfare dimensions of commercial fishing
- Welfare of transgenic animals
- An evaluation of hot-iron branding and some alternatives
- Cold stress in beef cattle and the need for housing
- Welfare of animals in the circus industry
- Animal hoarding – the problem of animal collectors
- Cosmetic surgery on companion animals: canine tail amputation, dewclaw removal, ear cropping and feline oncheyectomy (declawing)
- Sow housing systems and welfare issues
- Animals in film
- Niche marketing of welfare
- Veal calf production
- Welfare issues in developing countries
- Links between animal cruelty and domestic violence
- Greyhound racing: animal welfare issues and concerns
- The Pregnant Mare Urine industry