# VTS 140
Basic Animal Husbandry for Veterinary Sciences

## Course Syllabus

**Instructor name**  
xxxxx@uaf.edu  
Spring 2008

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<tr>
<th><strong>Office Location:</strong></th>
<th>Harper Bldg, Room 124</th>
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<tr>
<td><strong>Office Hours:</strong></td>
<td>TBD</td>
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| **Mailing Address:** | Interior-Aleutians Campus  
PO Box 756720  
Fairbanks, AK 99775 |
| **Fax:**             | 907-474-5561         |
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**Class Meeting Information**  
This course is offered by Elluminate Live software. This is a type of software used on the internet for interactive teaching. This requires students to have access to a computer, an internet connection and a headset that has earpieces and a microphone. An intensive three day practicum will be held at participating farm(s) where students can work with each other and the instructor to learn further and develop husbandry skills.

**Class Meeting Times:**  
T, Th 6:00pm – 8:00pm  
Practicum dates: TBD  
Practicum times: 8:00am – 5:00pm (days 1 & 2), 8:00am – 12:00pm (day 3)

**Prerequisites:**  
VTS 101 prior to or concurrent with, or instructor approval

**Credits:**  
3 (2.5 + 0 + 1.5)
A. COURSE DESCRIPTION
This course teaches basic domestic animal husbandry techniques. This includes behavior, restraint, basic feeding principles, animal handling, principles of humane care, housing and management (exclusive of reproduction). Also discussed are species and breed identification. The course materials are inclusive of canine, feline, goat/sheep, pig, horse, cattle, bison, reindeer, musk ox, exotics and lab animals.

B. COURSE GOALS
The goal of this course is to provide an understanding of husbandry and how to apply it to different species. This understanding includes animal behavior and its impact on restraint, handling, and management. Proper restraint, handling, and management then lead to humane care. The course will offer insights on how to adapt husbandry to unique situations, such as Alaska’s cold winters and remote areas.

C. STUDENT LEARNING OUTCOMES
At the end of this course students will be familiar with husbandry techniques for canine, feline, goat/sheep, pig, horse and cattle. A student will have the ability to adapt these techniques to unique situations, such as Alaskan climate and geography. The practicum portion of this class will give the students the introductory knowledge necessary to safely handle, examine, and care for domestic animals. The site visits provided during the practicum will give students experience with real working situations of domestic animal care. This will serve to give insight on adapting husbandry techniques to different situations.

D. TEXTBOOKS AND MATERIALS

1) UAF Cooperative Extension Service Publications
   MWPS-00007 Dairy Housing and Equipment Handbook
   MWPS-00006 Beef Housing and Equipment Handbook
   MWPS-00015 Horse Housing and Equipment Handbook
   MWPS-00033 Natural Ventilating Systems for Livestock Housing

2) ISU Cooperative Extension Service Publications
   FM1855 Estimated Costs for Livestock Fencing
   PM1610 Freestall Housing for Livestock
   PM 1760 Improving Winter Environments in Open-Ceiling Buildings for Pigs

3) Raising Reindeer for Pleasure and Profit
   By Gordon Poest.
   Morris Publication. © 1996

4) Musk ox Husbandry; a guide for the care, feeding and breeding of captive muskoxen
   By P. Groves
   Biological Papers of the University of Alaska. Special Report No. 5, 1992
5) Animals in Translation  
By Temple Grandin  
Harcourt Books, Inc. Orlando, FL © 2005  
ISBN: 9780156031448

E. COURSE SUPPLIES
- Headset with earpieces and microphone, compatible with Elluminate Live  
- Restraint tools: snout snare, nose pliers, lariat, twitch, squeeze cage (to be used in practical experience)  
- Breed charts: canine, feline, equine, bovine, ovine, caprine

F. COURSE POLICIES
Assignments are to be completed on a timely basis. Practicum attendance is mandatory.  
Students are expected to participate in classroom discussions and practical exercises.  
Completion of the Institutional Animal Care and Use Committee (IACUC) Module 1 is mandatory. This module is accessible using Blackboard (www.classes.uaf.edu) and should be completed by Lecture 6.

G. METHODS OF EVALUATION
Grading will be based on 3 quizzes (30%), participation (5%), written assignments (25%) and a final examination (40%). A=90% or higher, B=80-89%, C=70-79%, D= 60-69%, F<60%.

H. SUPPORT SERVICES
UAF Disabilities Services for distance Students: UAF has a Disability Services office that operates in conjunction with the College of rural Alaska’s campuses and the UAF Center for Distance Education. Disability Services is a part of the UAF Center for Health and Counseling and provides academic accommodations to enrolled students who are identified as being eligible for these services.

If you are eligible, please visit http://www.uaf.edu/cht/disability.html on the web or contact a student affairs person at your nearest local campus. You can also contact Disability Services on the Fairbanks Campus at (907) 474-7043.

I. COURSE CALENDAR
Lectures are two hours in duration. This course calendar is fluid and subject to change. The instructor will notify students of any changes. Reading is to be done prior to lectures and will be discussed during that particular lecture via audio or Elluminate Live conference.

Lecture 1: Tuesday 6:00-8:00 pm. Lecture content:
- Student introductions. Name, place of residence, veterinary/animal husbandry experiences (sled dogs, domestic farm animals, pets)  
- Introduction to animal husbandry – class format, expectations, lecture and practicum outline
- Ethics of animal use – history of animal use in Western civilization, animal use in Alaska, ethics and animal safety issues, Institutional Animal Care and Use Committee guidelines, IACUC Module 1 introduction

**Lecture 2:** Thursday 6:00-8:00 pm. Lecture content:
- Breed and species identification- large animals
  - bovine, ovine, caprine and equine breeds
- Geographic differences in breed identification with examples
- Breed and species identification- small animals.
  - Canine and feline breeds
  - Common domestic avian species
  - Exotic breeds (ferret, chinchilla, hamster, etc)
- Restraint techniques, general
  - Animal safety
  - Human personnel safety
  - Zoonotic disease transmission
  - General methods of animal handling and restraint
    - Chute and corral designs
  - Chemical restraint, general principles

**Lecture 3:** Tuesday 6:00-8:00 pm. Lecture content:
- Restraint and handling of dogs and cats
  - Physical and mechanical techniques:
    - Physical holds
    - Neck snare
    - Nets
    - Squeeze cage
    - Live trap
    - Chemical restraint, chambers
- Restraint and handling of cattle, sheep, goats and swine
  - Physical and mechanical techniques:
    - Cattle chutes
    - Cattle tail hold
    - Cattle nose pliers
    - Squeeze chutes
    - Rope restraint and casting (cattle, goat)
    - Physical hold (sheep, goat)
    - Fencing requirements
    - Chemical restraint

**Lecture 4:** Thursday 6:00-8:00 pm. Lecture content:
- Restraint and handling of bison
  - Squeeze chutes
  - Fencing
  - Worker safety specifics
- Restraint and handling of musk ox
-Rope restraint
-Manual handling
-Squeeze chute
-Chemical restraint
-Restraint and handling of reindeer
  - Alaskan native mentor interview, reindeer herder
  -Manual capture and handling
  -Rope restraint
  -Squeeze chute
  -Herding
  -Chemical restraint

**Lecture 5:** Tuesday 6:00-8:00 pm. Lecture content:
-Restraint and handling of equine
  -Mechanical restraint
  -Twitching
  -Halters and bits, chains
  -Rope casting
  -Chemical restraint
  -Animal housing, general principles
    -facilities, physical plant properties
    -ventilation principles

**Lecture 6:** Thursday 6:00-8:00 pm. Lecture content:
-Housing of dogs
  -Kennel design and housing
  -Domestic dog housing based on animal purpose
  -Ventilation and sanitation
-Housing of cats
  -Cattery design, sanitation
  -Disease transmission
  -Housing issues of felines
  -Quiz 1: Lectures 1 – 5 (through equine restraint and handling)

**Lecture 7:** Tuesday 6:00-8:00 pm. Lecture content:
-Housing of cattle, sheep and goats.
  -Ventilation
  -Building sanitation.
  -Climate control.
  -Fencing
  -Space requirements.
-Housing of swine
  -Ventilation
  -Building sanitation- “all in/ all out”.
  -Climate control
  -Enclosures, pasture vs. confinement.
-Space requirements

**Lecture 8:** Thursday 6:00-8:00 pm. Lecture content:
- Housing of bison
  - Space requirements
  - Fencing
- Housing of reindeer
  - Open range vs. fencing
  - Space requirements
  - Fencing
- Housing of musk oxen
  - Space requirements
  - Fencing
  - Qiviut harvest
- Housing of equine
  - Ventilation
  - Shelter
  - Fencing

**Lecture 9:** Tuesday 6:00-7:30 pm. Lecture content:
- Discussion of “Animals in Translation”, chapters 1 – 3
  - Animal perceptions
  - Human feelings vs. animal feelings, anthropomorphism
  - Animal groups, societies and families
- **Quiz 2:** Lectures 5 – 8 (Restraint, handling and housing of specific large & small animal species)

**Lecture 10:** Tuesday 6:00-8:00 pm. Lecture content:
- Concepts of management:
  - Feeding schedules
  - Handling and stress
  - Waste management
  - Disease transmission and management
  - Ventilation and climate considerations for various Alaskan climates
- Species specific management- swine
  - Seasonal nutrition concerns
  - Feeding schedules and methods
  - Optimal environment
  - Reproductive management
  - Culling/ “poor doers”
  - Waste management
  - Disease and parasite prevention

**Lecture 11:** Thursday 6:00-8:00 pm. Lecture content:
- Species specific management- beef and dairy cattle
  - Seasonal nutrition concerns
-Feeding schedules and methods
-Optimal environment
-Reproductive management
-Culling/ “poor doers”
-Waste management
-Disease and parasite prevention

Lecture 12: Tuesday 6:00-8:00 pm. Lecture content:
-Species specific management- sheep and goats
  -Seasonal nutrition concerns
  -Feeding schedules and methods
  -Optimal environment
  -Reproductive management
  -Culling/ “poor doers”
  -Waste management.
  -Disease and parasite prevention.
-Species specific management- reindeer
  -Range vs. confinement feeding
  -Seasonal nutrition concerns (eg. antler growth, lactation)
  -Reproduction
  -Calf handling
  -Hoof care
  -Culling
  -Disease and parasite prevention.
  -Antler harvest

Lecture 13: Thursday 6:00-8:00 pm. Lecture content:
-Species specific management- bison
  -Seasonal nutrition concerns
  -Concepts of minimal handling
  -Reproductive management
  -Calf handling
  -Herd management
  -Feeding routines
  -Fencing and wander control
  -Disease and parasite control
-Species specific management- musk ox
  -Basic feeding and seasonal nutrition concerns (lactation)
  -Reproduction
  -Calf handling
  -Hoof and hair coat care (Quiviut harvest)
  -Disease and parasite control

Lecture 14: Tuesday 6:00-8:00 pm. Lecture content:
-Species specific management- equine
  -Seasonal nutrition concerns
- Methods of feeding
- Reproductive management
- Air quality
- Hoof and hair coat care
- Disease and parasite prevention
- Canine kennel management
  - Feeding
  - Commercial feed
  - Subsistence feed
  - Seasonal nutrition concerns
  - Reproduction
  - Disease and parasite control

**Lecture 15:** Thursday 6:00-8:00 pm. Lecture content:
- Canine kennel management, continued
  - Specific management of sled dogs
  - Environmental factors
  - Training
  - Specific subarctic parasitic overview
- Cattery management
  - General principles
  - Reproduction

**Lecture 16:** Tuesday 6:00-7:30 pm. Lecture content:
- Discussion of “Animals in Translation”, chapters 4 – 7
  - Socialization of domestic animals
  - Animal aggression, fear, survival
  - Animal pain and suffering
- **Quiz 3:** Lectures 10 – 15 (Species specific management of large and small animal species)

**Lecture 17:** Thursday 6:00-8:00 pm. Lecture content:
- Marketing and slaughter:
  - Swine
  - Cattle
  - Sheep, goats
  - Reindeer, bison
- Slaughtering techniques used
  - Western, Native Alaskan, specific religious techniques and rituals
- Current market for domestic animal products
  - USDA-certified slaughterhouse requirements
  - United States, international

**Final Exam** – Date to be determined, material from all class lectures and practicum days to be included in final examination. This will be a take-home exam.
PRACTICUM INTENSIVE

The practicum will be given over a three day intensive period, for a total of 20 hours. Practicum dates are listed above and times will be 8:00am to 5:00pm on days 1 & 2, 8:00am to 12:00pm on day 3. Times include lunch breaks and travel time to different sites during the practicum days. Attendance is mandatory and participation in activities to benefit from learning activities is ideal!

Practicum day 1:
Morning: Site visit to UAF Reindeer Research Station, Fairbanks, AK
- Facility demonstration and student participation in the following:
  - herding, corralling of reindeer
  - capture techniques
  - restraint techniques – chutes, halter, head gates
  - weighing reindeer
  - physical examination of reindeer
  - annual maintenance activities including immunization, hoof trimming, antler harvest (in correct season)
  - Corral and fence design for comparison to other species

Afternoon: Site visit to UAF Large Animal Research Station, Fairbanks, AK
- Facility demonstration and student participation in the following:
  - herding, corralling of musk ox
  - capture techniques
  - restraint techniques – chutes, head gates
  - weighing musk ox
  - annual maintenance activities including immunization, hoof trimming, quiviut harvest (in appropriate season)
  - physical examination of musk ox

Practicum day 2:
Morning: Site visit to Northwest Land & Livestock Co., Delta Junction, AK
- Facility demonstration and student participation in the following:
  - herding, corralling of bison
  - capture techniques
  - restraint techniques – squeeze chutes, head gates
  - comparison of corral facilities in different domesticated production animals
  - physical examination of bison
  - annual maintenance activities including hoof trimming and immunization

Afternoon: Site visit to Misty Mountain farm, Delta Junction, AK
- Facility demonstration and student participation in the following:
  - herding, corralling of beef cattle
  - capture techniques
  - physical handling and restraint of sheep, pigs
  - restraint techniques – squeeze chutes, head gates
  - comparison of corrals and housing facilities in different domesticated production animals
Practicum day 3:
Morning: Site visit to sled dog kennel, Two Rivers, AK
- Facility demonstration and student participation in the following:
  - canine restraint
  - general physical exam techniques
  - physical maintenance activities including immunizations, nail trimming
  - management & sanitation of dog kennel
  - evaluation of different types of housing, movement of animals
  - movement of fomites (vehicles, clothing, equipment) as mechanism of disease transfer