Syllabus, Spring 2019

**Domestic Animal Behavior, ANSC 3318 (Tue-Thur 3:30-5 pm; AFS room 102)**

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Assisted by:

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Guest lectures by:

Nathan Hall, Assistant Professor, AFS
Katy Schroeder, Assistant Professor, AFS

**Introduction**

Animal behavior is a fascinating area of science to study. Most people marvel at animals and especially at their species-specific behaviors. Many nature shows document animal behavior. While animal behavior is known to all, the science of animal behavior is less well recognized by the public. This class will focus on the science of domestic animal behavior. Understanding mechanisms underlying behavior is one level of science. Application of animal management while understanding animal behavior is another important level of science. This class introduces students to both mechanisms that cause animal behavior and applications of understanding animal behavior to improve animal and human well-being.

**In-Class Behavior**

The instructor has dedicated this time to meet with you and teach. Your responsibility is to listen and take notes, ask questions and be engaged in the learning experience. **Do not use your cell phone or devices to send or receive calls or texts during class.** If you have an emergency and need to text or talk on the phone, please leave class and attend to the matter. Do not read newspapers or distract the students or instructors. Do not eat food in class.

I expect you will attend class, be attentive, participate in discussions, and turn in exams and assignments on time.

**Course Objectives**

Domestic animals including pigs, cattle, sheep & goats, horses, dogs and cats are intertwined with humans as a source of food, entertainment, companionship and animals can be therapeutic for people. The objectives of this course are first to create an environment for student learning about mechanisms controlling behavior and applications of animal behavior principles for food and companion animals. Secondly, this course will develop student observation and analysis skills in the study of animal behavior.
Learning Outcomes
Students are expected to immerse themselves in the topics of domestic animal behavior. Students are expected to understand:

- Physiological mechanisms that cause or modulate animal behaviors
- Animal sensory systems that animals utilize to modulate animal behavior
- Evolutionary behavioral biology
- Feeding, drinking, maternal-neonatal, reproductive and maintenance behaviors
- How to collect objective animal behavior data, interpret the data and critically analyze and present the findings
- Animal welfare issues and animal behavior's role in addressing these issues

Assessment of Learning Outcomes
Students will have their understanding of domestic animal behavior assessed by the following means:

- Interactive questions and in-class discussion
- Quizzes (10) and exams (3)
- One report on the objective collection of behavior data, including introduction of the project, methods, results, and interpretation of results in terms of both mechanisms of behavior and application of findings.

Exams and quizzes will be taken from the lectures (both electronic and verbal and on-board), the book and from discussions.

Required Text
Per Jensen, Editor. The Ethology of Domestic Animals. 3rd edition. 2017. CABI.

Course Format
Students will attend lectures and take quizzes and exams over that material. Finally, students will collect animal behavior data and write reports to summarize their findings and critically analyze their results.

Grading
Grades will follow the standard break points:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90.0%</td>
<td>A</td>
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<tr>
<td>80.0-89.9%</td>
<td>B</td>
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<td>70.0-79.9%</td>
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<td>60.0-69.9%</td>
<td>D</td>
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<tr>
<td>Below 60.0%</td>
<td>F</td>
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Points
Hour exams (100 pts) & Final (200 pts) 400
Quizzes* 100
Student report; written, oral & video 100
Attendance and Participation 100
Total 700

*A quiz (10 points each) will be given either in class or by electronic means. In addition, there will be 2 hours exams (100 points) and a final exam (200 points).

Lecture Course Topics
This is a list of topics. The weeks in which the material is presented is tentative. Topics may change order and content throughout the semester.

<table>
<thead>
<tr>
<th>Week</th>
<th>Days</th>
<th>Dates</th>
<th>Topic</th>
<th>Chapters</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Tue</td>
<td>1-17-19</td>
<td>Introduction, terminology, the ethogram &amp; behavioral biology</td>
<td>1</td>
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<tr>
<td>2</td>
<td>Tue-Thu</td>
<td>1-22 &amp;</td>
<td>Genetics, evolution &amp; domestication; 1-24 Tour New Deal Farm</td>
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<td>1-24</td>
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<tr>
<td></td>
<td>NOTE</td>
<td>1-30</td>
<td>Expected parturition date for 70 mother cows</td>
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<tr>
<td>3</td>
<td>Tue-Thu</td>
<td>1-29 &amp;</td>
<td>Behavioral physiology; Tour LAS</td>
<td>3</td>
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<td></td>
<td>1-31</td>
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<tr>
<td>4</td>
<td>Tue-Thu</td>
<td>2-5 &amp;</td>
<td>Social and reproductive behaviors; Play, Personality</td>
<td>6, 7, 8</td>
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<td>2-7</td>
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<tr>
<td>5</td>
<td>Tue-Thu</td>
<td>2-12 &amp;</td>
<td>Animal Welfare</td>
<td>9</td>
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<td></td>
<td></td>
<td>2-14</td>
<td>1st hour exam 2-14</td>
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<tr>
<td>6</td>
<td>Tue-Thu</td>
<td>2-19 &amp;</td>
<td>Motivation and learning; Dr. Nathan Hall; lecture 2-19 and</td>
<td>4 &amp; 5</td>
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<td>2-21</td>
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<tr>
<td>Day</td>
<td>Dates</td>
<td>Activities</td>
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<td></td>
<td>2-21</td>
<td>Field trip to ND farm dog facility</td>
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<tr>
<td>Thur</td>
<td>2-28</td>
<td>Dr. Katy Schroeder at TTUEC; horse-human interactions</td>
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<tr>
<td>NOTE</td>
<td>2-28</td>
<td>Start farrowing at ND farm</td>
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<td></td>
<td>2-26</td>
<td>Human-Animal Interactions &amp; Horse behavior</td>
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<td></td>
<td>3-5 &amp; 3-7</td>
<td>Birds</td>
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<td>3-11 to 3-15</td>
<td>Spring break</td>
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<tr>
<td>NOTE</td>
<td>3-1 through 3-15</td>
<td>Lambing at ND farm</td>
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<td>3-19 &amp; 3-21</td>
<td>Cattle</td>
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<td>3-26 &amp; 3-28</td>
<td>Sheep &amp; Goats</td>
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<td>2nd hour exam 3-28</td>
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<td>4-2 &amp; 4-4</td>
<td>Pigs</td>
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<td>4-9 &amp; 4-11</td>
<td>Dogs and cats</td>
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<td>4-16 &amp; 4-18</td>
<td>Discussion of student projects &amp; presentations</td>
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<td>4-23 &amp; 4-25</td>
<td>Discussion of student projects &amp; presentations</td>
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<td></td>
<td>4-30 &amp; 5-2</td>
<td>Discussion of student projects &amp; presentations</td>
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<td>5-7</td>
<td>Last class</td>
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Student Project, Report and Presentation

Students are required to complete a single animal behavior project. The topic this year is maternal-neonatal behavior. We have an opportunity to observe birth in three species this semester: pigs, beef cattle and sheep. All animals are at the New Deal farm (6 miles east of I-27 on FM 1729). Specific dates will be made available to you. However, knowing the breeding date gives us a window of a few days over which the animals may give birth.

This is an individual student project. However, students may pool resources observing animals at the farm. For example, during calving, farrowing or lambing week, students can take turns being at the farm and they may call other students when animals are approaching birth. Each student must have an identifying animal ID for the animal that they are observing. While multiple students can observe a given mother giving birth, the written, oral and video reports of a given student will be for a unique mother.

Pigs farrow about each 6 weeks. They have 10 to 20 litters in each batch. The first group starts farrowing around January 17th. The next group starts farrowing Feb 28th.

Beef cattle were synchronized and bred in a short window. The greatest number of cows will calve January 30th at the New Deal farm Beef Center.

Sheep are bred as a group. Individual breeding dates are not known. However, rams were introduced with an intended lambing time of early March.

A tentative schedule of due dates will be given in lecture, but they are fluid depending on the availability of animals giving birth. While you will focus on at least 1 species, you must observe all three having maternal-neonatal interactions.

What is raw data is required?

- Students must attend and observe at least one live birth of one species (pig, cattle or sheep). The mother’s ID must be obtained. Only 1 student can prepare the report for a given mother.
- Students will observe and video from before the animal is born until it first suckles. This will take some patience. The video does not have to be continuous, but it must capture each major event (ex., birth, breathing, standing, walking, teat-seeking, suckling.
Students will also take notes of events on paper, or a device or an audio recorder. The events should have the date, time and event. The starting and ending of each event to state (such as walking) should be recorded.

What will be the products of this project?

- An edited video of the birth through suckling behaviors
- A written report with:
  - A written paper with an introduction, methods, results (in text and tables and/or graphs) and discussion along with references using the style and format of the Journal of Animal Science.
  - A list of each behavioral event and/or the start of a behavioral state and the time it started and ended
  - Still pictures of each major behavior
- A short, oral presentation of the findings. This presentation will be no more than 5 minutes long and should include graphics and video and data.
- Students will share the major events and times with the graduate assistant so that we can pool the data and look at the averages. We need the time of birth (first sign of a neonate until it is out of the mother), the time to stand and the time to suckle.

Project grading:

- Written report – up to 50 points
- Video – up to 25 points
- Oral presentation – up to 25 points

Extra Opportunities

Observe several species giving birth

If a student wants extra credit, they have the option of preparing the above for 2 or 3 additional species. Each additional species will follow all the above, except the oral presentation and the edited video. Students may earn up to 50 points extra per species for which a report is prepared and delivered.

Animal Language Conference

The Humanities Center in association with other departments will host an Interdisciplinary Conference on animals and language. While many talks will be interesting to you, you should be most interested in a talk by Charlotte Duranton who is a researcher in canine behavior.

https://www.depts.ttu.edu/classic_modern/AnimalLanguageConference.php
University Policies

ADA Statement:
Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor’s office hours. Please note: Instructors are not allowed to provide classroom accommodations to a student unless appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services in West Hall or call 806-742-2405.

Withdrawal from a Course
The last day to drop a course without academic penalty is February 2, 2018. Students will receive an automatic “W” regardless of the current grade in the class. There is no longer a grade of “WF.” Last day to drop a course with academic penalty (counts against drop limit) is March 28, 2018. Last day to withdraw from the University is May 3, 2018.

Academic Integrity Statement:
Academic integrity is taking responsibility for one’s own class and/or course work, being individually accountable, and demonstrating intellectual honesty and ethical behavior. Academic integrity is a personal choice to abide by the standards of intellectual honesty and responsibility. Because education is a shared effort to achieve learning through the exchange of ideas, students, faculty, and staff have the collective responsibility to build mutual trust and respect. Ethical behavior and independent thought are essential for the highest level of academic achievement, which then must be measured. Academic achievement includes scholarship, teaching, and learning, all of which are shared endeavors. Grades are a device used to quantify the successful accumulation of knowledge through learning. Adhering to the standards of academic integrity ensures grades are earned honestly. Academic integrity is the foundation upon which students, faculty, and staff build their educational and professional careers. [Texas Tech University (“University”) Quality Enhancement Plan, Academic Integrity Task Force, 2010]

Religious Holy Day Statement:
"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who is excused under section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

Discrimination, Harassment, and Sexual Violence Statement:
Texas Tech University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from gender and/or sex discrimination of any kind. Sexual assault, discrimination, harassment, and other Title IX violations are not tolerated by the
University. Report any incidents to the Office for Student Rights & Resolution, (806)-742-SAFE (7233) or file a report online at titleix.ttu.edu/students. Faculty and staff members at TTU are committed to connecting you to resources on campus. Some of these available resources are: TTU Student Counseling Center, 806-742-3674, hppts://www.depts.gu.edu/scc (provides confidential support on campus), TTU 24-hour Crisis Helpline, 806-742-5555 (assists students who are experiencing a mental health or interpersonal violence crisis. If you call the helpline, you will speak with a mental health counselor), Voice of Hope Lubbock Rape Crisis Center, 806-763-7273, voiceonopelubbock.org (24-hour hotline that provides support for survivors of sexual violence), Risk, Intervention, Safety and Education (RISE) Office, 806-742-2110, https://www.depts.gu.edu/RISE/ (provides a range of resources and support options focused on prevention education and student wellness), and Texas Tech Police Department, 806-742-3931, http://www.depts.gu.edu/gpd/ (to report criminal activity that occurs on or near Texas Tech campus).

Civility in the Classroom Statement:

Texas Tech University is a community of faculty, students, and staff that enjoys an expectation of cooperation, professionalism, and civility during the conduct of all forms of university business, including the conduct of student–student and student–faculty interactions in and out of the classroom. Further, the classroom is a setting in which an exchange of ideas and creative thinking should be encouraged and where intellectual growth and development are fostered. Students who disrupt this classroom mission by rude, sarcastic, threatening, abusive or obscene language and/or behavior will be subject to appropriate sanctions according to university policy. Likewise, faculty members are expected to maintain the highest Standards of professionalism in all interactions with all constituents of the university (www.depts.gu.edu/ethics/matarodochallenge/ethicalprinciples.php).

LGBTQIA Support Statement*:

I identify as an ally to the lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community and I am available to listen and support you in an affirming manner. I can assist in connecting you with resources on campus to address problems you may face pertaining to sexual orientation and/or gender identity that could interfere with your success at Texas Tech. Please note that additional resources are available through the Office of LGBTQIA within the Center for Campus Life, Student Union Building, Room 201, www.lgbtqia.gu.edu, 806.742.5433.

*If you prefer to list campus resources rather than a statement about ally status, you might include the following among other campus resources you wish to share:
Office of LGBTQIA, Student Union Building Room 201, www.lgbtqia.gu.edu, 806.742.5433
Within the Center for Campus Life, the Office serves the Texas Tech community through facilitation and Leadership of programming and advocacy efforts. This work is aimed at strengthening the lesbian, gay, Bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community and sustaining an inclusive Campus that welcomes people of all sexual orientations, gender identities, and gender expressions.