

ASCI 150: Animal Production Skills
Spring, 2023

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Reiling Office Hours: I do not maintain regular office hours. Instead, I place the majority of my "free office time" on Success Hub. You are welcome and encouraged to "self-schedule" appointments through Success Hub. If you don't see a time that works with your schedule, send an e-mail providing 2-3 times that work for you. When received, I'll try to identify a time that also works for me and send you an email confirmation. I will also attempt to be present for a few minutes immediately prior to class, and I'll "hang around" for as long as needed immediately after class. Bottom-line, if you have questions/concerns regarding this class or other factors that may contribute to your future and academic success, we can find a time to visit. I want to help you succeed!

Class Times/Location: TR, 2-4 pm (D105 Animal Science, to start)

Textbook: No textbook required. However, if you want a very good reference book for future usage, I recommend the "Handbook of Livestock Management" by Richard A. Battaglia. If you wish to check one out for a short-term basis, see me. I've got four copies in the office.

Reference: Canvas: my.unl.edu - Reference materials, announcements, communication.

Educational Objectives - During this course, students will gain hands-on experience working with a variety of major food animal species of Animal Science. In the process, you should learn basic principles of animal management and production, become comfortable working and handling all species of domestic livestock, and develop basic animal husbandry skills.

General (all species)

1. Discuss basic behavioral principles as it relates to the handling of production livestock.
2. Demonstrate proper animal handling and restraint techniques.
3. Identify early signals that indicate the potential presence of health problems in livestock.

Beef Cattle Management and Handling:

1. Discuss and demonstrate proper beef quality assurance practices and basic processing procedures.
2. Demonstrate proper administration of growth implants and discuss their effects on growth.
3. Discuss and demonstrate low-stress cattle handling procedures and techniques.
4. Demonstrate usage of basic cattle restraint equipment.

Dairy Cattle Management and Handling

1. List and discuss basic dairy animal husbandry procedures.
2. List and discuss basic milking procedures.

Sheep Management and Handling

1. Demonstrate basic handling procedures needed to shear sheep and trim hooves.
2. Demonstrate & discuss proper administration of various pharmaceuticals to sheep.

Swine Management and Handling

1. Discuss preparation of sows for entering the farrowing facility.
2. Outline behavioral signs of impending parturition and discuss providing farrowing assistance as needed.
3. Discuss and demonstrate proper baby pig processing procedures.
4. Assign proper body condition scores to gilts/sows.
5. Calculate and evaluate performance measures of the sow and her litter through weaning.
6. Discuss and demonstrate proper pork quality assurance practices.
7. Discuss and demonstrate methods to detect estrus (heat) in swine.
8. Discuss and demonstrate basic usage of artificial insemination in swine.
9. Discuss proper weaning procedures and various stressors associated with weaning.
10. Calculate and evaluate performance measures of growing nursery pigs.

Grading:

Grade Points and Percentages

	<u>Points</u>	<u>~% of Total</u>
Daily In-class <u>Participation</u> (30 days * 5 pts/day)	150 pts.....	30%
Completion of out-of-class <u>responsibilities/participation</u> (chores).....	150 pts.....	30%
Including your involvement with evening sow watches, weekend chores, etc.		
Quizzes - may be in class or online, may be written &/or hands-on		
PQA Certification Exam	25 pts.....	5%
BQA Certification Exam	25 pts.....	5%
Quiz 1	25 pts.....	5%
Quiz 2	25 pts.....	5%
Quiz 3	25 pts.....	5%
Projects & Reports		
Swine Project Report	75 pts.....	15%
Total Points	500 pts.....	100.00%

Explanations of Basic Grading Components

Daily Participation Points

- Upon conclusion of each day, instructors and TAs will subjectively evaluate each student's participation using a 5-point scale. The average of all instructor/TA participation evaluations will be submitted as the daily participation score for a particular student using the scale listed below. We fully expect most students to earn 4s and 5s each day. Given 30 class days during the semester; 150 points. You will be allowed 2 excused absences. For excused absences, you will receive the average daily participation points earned across the entire semester.
 - 0 points = absent
 - 1 point = left early for no apparent reason
 - 2 points = Attitude Issues!
 - 3 points = marginal or reluctant participation; hung back, willing to let others do the work
 - 4 points = good participation
 - 5 points = actively engaged and functioned as a "team player"

Out of Class Responsibilities and Participation

- In the past, this class has affectionately been nicknamed the "chores" class. If we have animals here, specific for this class, we must take care of them, and that is part of the hands-on learning.
- Working within a TEAM, you are expected to care for animals, as assigned, each day including weekends. Again, as an individual, you do not have to check/feed every day, but a member of your team

must check/feed every day. Your team is expected to generate and turn in a schedule that indicates when everyone takes responsibility for your team's animals.

- Animals are to be checked/fed MORNING and NIGHT within a designated timeframe (6-9 am, 4-7 pm)
 - o 1st failure to feed/check animals, as assigned, will result in a 30-pt deduction.
 - o 2nd failure to feed/check animals, as assigned → full-grade deduction for course (A→B, B→C)
 - o 3rd failure to feed/check animals, as assigned, will result in FAILURE of the course.
- If you discover that you cannot check & feed animals as scheduled, what should you do to avoid consequences for "failure to check/feed". Identify someone associated with the class who would be willing to check/feed your team's animals, using the following prioritized order of contact ...
 - o 1st - Contact a member of your team to see if they can cover for you.
 - o 2nd - Contact another student enrolled in the class to see if they can cover for you.
 - o 3rd - Contact the TA to see if they can cover for you.
 - o 4th - Contact instructors (Drs. Bryan Reiling or Benny Mote) to let them know. They will make sure the animals get checked/fed.

Individual Quizzes

- There will be 5 quizzes administered throughout the semester.
- Each quiz or QA Certification examination is worth 25 points.
- Quizzes will be conducted in-class, and they may or may not be announced in advance.
- Makeups are ONLY allowed, per an EXCUSED absence. Such absences must be approved in advance, or they must be associated with proof of the issue precluding your attendance (doctor's note, note from police officer, etc.)

Project Reports

- You are expected to write-up and submit an overall summary report regarding the swine project.
- Details and expectations of the report will be provided later.

Guaranteed Grading Scale: The following overall course percentages represent guaranteed grade values.

98% = A+	93% = A	90% = A-
87% = B+	83% = B	80% = B-
77% = C+	73% = C	70% = C-
67% = D+	63% = D	60% = D-

Percentage adjustments based upon class attendance. Class attendance is mandatory, and unexcused absences will count against your final grade as follows (in addition to the low recorded daily participation scores):

0-2 unexcused absences	0%	>8 unexcused absences	-16%
3-4 unexcused absences	-4%		
5-6 unexcused absences	-8%	Example, If your final course percentage = 93% (A), but you	
7-8 unexcused absences	-12%	had 5 unexcused absences, your final adjusted score = 85% (B)	

This is a "hands-on" course, and the only way to learn and become comfortable with skills and procedures presented during class is to be present to actively participate!

ASCI 150 - Course Schedule

Please recognize that animals often work "on their own schedule". Thus, this is a tentative schedule of what we plan to do, but it is subject to change as dictated by the needs and availability of animals for class.

Day	Date	Topic/Activity
Tues	1/24	All) Course Introduction <ul style="list-style-type: none"> ■ Assignment: Check calendars; be prepared to sign-up for Set 1 Sow Watches. All) Pork Quality Assurance Training
Thurs	1/26	All) Pork Quality Assurance Training cont. All) Swine Farrowing Discussion <ul style="list-style-type: none"> ■ Farrowing process, assistance, newborn care ■ Sow watch responsibilities ■ Sign-up for Set 1 Sow Watches (Th, 1/26 - Th, 2/2)
Tues	1/31	All) Baby Pig Processing - Discussion & Demonstration <ul style="list-style-type: none"> ■ weigh, iron injections, dock tails, ear notches, & scour medication All) Sheep Processing - Discussion & Demonstration <ul style="list-style-type: none"> ■ weigh, vaccinate, de-worm, tag, etc.
Thurs	2/2	G1 / G2) Baby Pig Processing Activity <ul style="list-style-type: none"> ■ weigh, iron injections, dock tails, ear notches, & scour medication G2 / G1) Sheep Processing <ul style="list-style-type: none"> ■ weigh, vaccinate, de-worm, tag, etc.
Tues	2/7	All) Beef Quality Assurance Training <ul style="list-style-type: none"> ■ Feeder Cattle Processing - Discussion/Demonstration
Thurs	2/9	G1 / G2) Low Stress Cattle Handling Principles - Discussion/Demonstration <ul style="list-style-type: none"> ■ Open Pen Sorting G2 / G1) Hydraulic Chute Operation - Discussion/Demonstration
Tues	2/14	G1 / G2) Cattle - Open Pen Sorting activity G2 / G1) Cattle - Hydraulic chute operation activity <ul style="list-style-type: none"> ■ "Catch & Release" feeder cattle
Thurs	2/16	G1 / G2) Feeder Cattle Processing <ul style="list-style-type: none"> ■ Weigh, tag, tattoo, injections (IM, SQ, IN), implant G2 / G1) Working with Rope
Tues	2/21	All) Swine - Wean Set 1 Pigs (pigs are ~ 3 weeks old) <ul style="list-style-type: none"> ■ Collect sow weights & body condition. ■ Weigh individual pigs, vaccinate, move & sort into nursery. ■ Start nursery pig trial.
Thurs	2/23	All) Beef - Tail Bleeding Cows (j. Bergman)
Tues	2/28	All) Sheep: Shearing & Hoof Trimming <ul style="list-style-type: none"> ■ Equipment care, sheep handling, demonstration
Thurs	3/2	All) Sheep: Shearing & Hoof Trimming - your turn; for real. <ul style="list-style-type: none"> ■ Note: half will come from 1:30-3:00, and half from 3:00-4:30 pm (if possible)
Tues	3/7	All) Collect Week 2 Nursery Pig Weights (pigs ~ 5 weeks old)
Thurs	3/9	All) Cattle - Principles of Bovine Artificial Insemination <ul style="list-style-type: none"> ■ Note - will enter cows to locate and feel cervix
Tues	3/14	Spring Break - No Class & No Animal Responsibilities

Day	Date	Topic/Activity
Thurs	3/16	Spring Break - No Class & No Animal Responsibilities
Tues	3/21	G1 / G2) Collect Week 4 Nursery Pig Weights (pigs ~ 7 weeks old) G2 / G1) Heat check & artificially inseminate sows for July litters; semen processing.
Thurs	3/23	All) Veterinary Diagnostics (Drs. Kelly Heath, Melissa Bausch, & Anna Fitzwater)
Tues	3/28	G1 / G2) Set-up Farrowing Stalls (for Set #2 Sows) ■ Due to farrow 4/3 - 4/6 G2 / G1) Picture Sale Pigs ■ Current nursery pigs will be sold via an online auction as "show pigs" for 4H/FFA.
Thurs	3/30	Assist with FFA Livestock Management CDE
Tues	4/4	All) Sows scheduled to farrow April 3-6 ■ Will use class time to conduct any needed farrowing related tasks.
Thurs	4/6	All) Sows scheduled to farrow April 3-6 ■ Will use class time to conduct any needed farrowing related tasks.
Tues	4/11	All) Swine: Neuter Boar Pigs (~ 5-8 days old)
Thurs	4/13	All) Fencing - Building an electrical fence.
Tues	4/18	All) Fencing - Building 5-strand barb wire fence.
Thurs	4/20	All) Ultrasound Set 1 sows for pregnancy
Tues	4/25	All) Horse: Farrier Work - Trimming Hooves
Thurs	4/27	All) Swine - Wean Set 2 Pigs (~21-24 days old) ■ Weigh individual pigs, vaccinate, move & sort into nursery.
Tues	5/2	All) Working Field Trip ■ ENREC cow/calf unit - sort cows from calves, vaccinations. ■ ENREC feedlot unit - handle cattle through working facility ■ Trailering - Forward driving & cornering ■ Commercial Dairy Tour
Thurs	5/4	G1 / G2) Trailering (Day 1) - Connecting & Backing (bumper pull) G2 / G1) Safe Skid Steer Operation
Tues	5/9	G1 / G2) Trailering (Day 2) - Connecting & Backing (gooseneck) G2 / G1) Safe Tractor Operation
Thurs	5/11	Wrap-up & "Ag Olympics"

University of Nebraska, Animal Science – General Class Policies

Instructional Continuity Plans: If in-person classes are cancelled by the University, you will be notified of the instructional continuity plan for this class with an announcement posted to Canvas. It is recommended that Canvas be set-up to automatically forward announcements to you, via email or text.

Grading Appeals: A student who feels that he/she has been unfairly graded must ordinarily take the following sequential steps in a timely manner, usually by initiating the appeal within the first 3 weeks of the semester following the awarding of the grade:

- 1) Student should schedule a meeting with the course instructor to discuss the issue. Most concerns are resolved at this point.
- 2) If student is not satisfied with results of the instructor meeting, a written appeal may be submitted to the ASCI Undergraduate Coordinator who will then forward that appeal to the Animal Science Undergraduate Curriculum Committee. The committee decision will be forwarded, in writing or via email, to the student by the ASCI Undergraduate Coordinator with instructor copied.
- 3) If student is not satisfied with the committee decision, he/she may meet with the instructor's unit administrator (ASCI Department Head) to discuss the situation.
- 4) If the concern is not resolved at the departmental level, the final step is to submit a grade appeal to the CASNR Dean by contacting the Dean's Office, 103 Agriculture Hall. Notification to the Dean must be in writing and will include in the notice a statement of the grounds of appeal. Both the student and the instructor will be given an opportunity to present materials to the Dean in the presence of each other.

Photography and Videography in Areas with Animals: Contact between visitors (including students) to the University and animals used in research and teaching can constitute both a positive learning experience for the visitors, and a health risk to the animals and visitors. The following policy is intended to ensure a minimally disruptive environment to resident animals, to protect the health of research and teaching animals, to protect confidentiality and integrity of research, and to help in the accurate representation of the University's policies and procedures.

- 1) **Use of recording devices** such as cameras, video recorders, tape recorders, camera phones, etc. in a secured animal facility **must receive prior approval** from the Department Head, IACP Attending and/or Clinical Veterinarian, or the IACUC Compliance Coordinator, with the following exceptions.
 - a. When performed by authorized PI or designee when required for scientific or publicity reasons, when due consideration is given to ensuring that the University of Nebraska is accurately represented.
 - b. When performed by authorized personnel when required to assist in clinical diagnosis of disease.
 - c. When performed by authorized personnel when required to document compliance or animal handling issues at the direction of University officials, IACUCs, veterinarians, and representatives of federal agencies
- 2) This requirement is waived for government inspectors, and other visitors present at the request or as a requirement of the University (e.g., AAALAC site visitors, IACUC members, Laboratory Animal Veterinarians).
- 3) All approved recording procedures have been documented in the Animal Use Protocol on file for this course.
- 4) All visitors must abide by individual facility Standard Operating Procedures pertaining to protective clothing, TB testing, etc. If protective clothing is required for any particular activity conducted within this course, students will be notified of such needs (i.e., hard-soled shoes, etc.), or such protective gear will be provided (i.e., frocks and hard hats in the meat lab, etc.).
- 5) **Every effort** should be made **to show appropriate and accurate context** when audio or visual recordings are made (i.e., if an animal is anesthetized or sedated, include the vaporizer or tray holding the bottle of injectable drug).
- 6) The IACUC **reserves the right to review** any and all pictures and video recordings, tape recordings, or camera (film or digital) images **before release**, and **may require** that these **images/recordings** be **destroyed**.

University-wide Course Policies and Resources (<http://go.unl.edu/coursepolicies>).

Academic Honesty: Students are expected to adhere to guidelines concerning academic dishonesty outlined in Section II (<https://studentconduct.unl.edu/student-code-conduct#sectionii>) of the UNL Student Code of Conduct. Students are encouraged to contact the instructor for clarification of these guidelines if they have questions or concerns. Academic dishonesty may involve cheating; fabrication or falsification of information; plagiarism, including copying of written materials or

"cutting and pasting" from websites without proper referencing; destroying, defacing, stealing, or making inaccessible library or other academic resource material; complicity in the academic dishonesty of others; falsifying grade reports; or misrepresenting illness, injury, accident, etc., to avoid or delay an examination or the timely submission of academic work. Consequences of academic dishonesty in Animal Science courses, depending upon degree of severity as interpreted by the instructor, may range from a warning to receipt of an "F" for the course. The instructor may also choose to assign a zero or partial credit for a specific assignment, quiz, examination, or laboratory report in which dishonesty was involved. If a student facing sanctions due to academic dishonesty in an Animal Science course wishes to appeal such a sanction, the following process must be followed. First a written appeal is submitted by the student to the chief instructor of the course. If resolution is not obtained, the student may submit a written appeal to the Animal Science Department Head who will forward the matter to the Animal Science Curriculum Committee. If a satisfactory solution is still not achieved at the departmental level, the student may then appeal through the CASNR Dean's Office and the University Director of Student Judicial Affairs, in that order and subject to the processes and requirements of those offices.

Emergency Responses (<https://emergency.unl.edu/>)

- 1) **Fire Alarm (or other evacuation):** In the event of a fire alarm, gather belongings (purse, keys, cellphone, N-card, etc.), and use the nearest exit to leave the building. Do not use the elevators. After exiting, notify emergency personnel of the location of persons unable to exit the building. Do not return to the building, unless told to do so by emergency personnel.
- 2) **Tornado Warning:** When sirens sound, move to the lowest interior area of the building or designated shelter. Stay away from windows and stay near an inside wall when possible.
- 3) **Active Shooter:**
 - a. **Evacuate** - If there is a safe escape path, leave belongings behind, keep hands visible and follow police officer instructions.
 - b. **Hide out** - If evaluation is impossible, secure yourself in your space by turning out lights, closing blinds, and barricading doors, if possible.
 - c. **Take action** - As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter.
- 4) **UNL Alert:** Notifications about serious incidents on campus are sent via text message, email, unl.edu website, and social media. For more information, go to <http://unlalert.unl.edu>.
- 5) **Additional Emergency Procedures** can be found at ... <https://emergency.unl.edu/>.

Disability Clause: The University strives to make all learning experiences as accessible as possible. If you anticipate or experience barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can discuss options privately. To establish reasonable accommodations, I may request that you register with Services for Students with Disabilities (SSD). If you are eligible for services and register with their office, make arrangements with me as soon as possible to discuss your accommodations so they can be implemented in a timely manner. SSD contact information: 117 Louise Pound Hall Bldg., 402-472-3787.

Mental Health and Well-being Resources: UNL offers a variety of options to students to aid them in dealing with stress and adversity. Counseling and Psychological & Services (CAPS) is a multidisciplinary team of psychologists and counselors that works collaboratively with Nebraska students to help them explore their feelings and thoughts and learn helpful ways to improve their mental, psychological and emotional well-being issues arise. CAPS can be reached by calling 402-472-7450. Big Red Resilience & Well-Being provides one-on-one well-being coaching to any student who wants to enhance their well-being. Trained well-being coaches help students create and be grateful for positive experiences, practice resilience and self-compassion, and find support as they need it. BRRWB can be reached by calling 402-472-8770.

Face Coverings: We do not know everyone's individual situation, and we should fully respect everyone's right to wear a face covering to protect themselves from communicable diseases including COVID-19. At the current time, however, face coverings will not be required for ASCI 150. This obviously is subject to change, if face masks become mandated by upper administration in efforts to protect the general and University community.

We, the members of the University of Nebraska community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.