ANSC 482 Sheep Industry/Production Systems- 
3 Credits 
Lecture: T/Th 11:00-11:50AM 
Lab: Wednesday 10:00-12:00PM 

Instructor: 
Dr. R. Reid Redden 
169 Hultz Hall- Animal Sciences 
Reid.Redden@ndsu.edu 
701-231-5597 
Office Hours: T/Th 10:00AM -12:00 PM

Bulletin Description: A capstone course that incorporates genetics, nutrition, reproduction, 
disease control, and marketing into sustainable flock enterprises. 2 lectures, 1 two-hour 
laboratory.  Prereq: ANSC 324, 357, 463.

Course Description: This course will teach the principles of modern sheep production including 
all aspects of sheep production management systems and the U.S./Global Sheep Industry.  This 
course is a junior/senior level capstone class and will have oral and written assignments. 
Students will use creativity, problem solving and critical thinking skills.

Course Objectives: 
1) To evaluate the scope of the sheep industry in the U.S. and world. 
2) To assess the different production systems in the sheep industry. 
3) To apply principles of breeding, reproduction, nutrition, health management and 
marketing of sheep. 
4) Examine lamb and wool quality and profitability. 
5) Evaluate economic, social, and environmental challenges in the sheep industry. 
6) Expand awareness and accessibility of resource materials available to sheep producers in 
the U.S. and open the door to exploration of new information that is being developed. 
7) Give students the opportunity for significant exchange of ideas, fostering critical 
thinking.

Attendance:  Attendance in class is expected according to NDSU Policy 333.  Students that miss 
class are expected to get lecture notes from their classmates.  Laboratory quizzes cannot be made 
up.  Students will be allowed to make-up tests, if it is an approved absences or prior notification 
has been made with instructor.

Laboratory:  During this course you will spend time at the University sheep facility attending 
hands-on labs (this may involve time outside of the scheduled class period).  Laboratory periods 
cannot be made up; however, students will be allowed to drop their lowest lab quiz.

Class Material:  Instructor will give handouts and reading assignments.  No book is required. 
Some material will be posted on blackboard.

Recommended Material: 
Testing/Evaluation Procedures: A total of 3 exams (100 pts each) will be administered throughout the semester. Students will be expected to present three presentations throughout the semester (50 pts each). A final project that focuses on development of a sustainable sheep enterprise will be presented to students (50 pts each). Considerations regarding missed quizzes will be allowed ONLY with PRIOR consultation with the instructors and (or) teaching assistant.

Grading:

<table>
<thead>
<tr>
<th>Points (approx)</th>
<th>Source</th>
<th>Points Accumulated</th>
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<tbody>
<tr>
<td>200</td>
<td>Mid-Terms (2 @ 100 pts)</td>
<td>540 + A</td>
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<tr>
<td>100</td>
<td>Final</td>
<td>480 – 539 B</td>
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<tr>
<td>150</td>
<td>Presentations (3 @ 50 pts)</td>
<td>420 – 479 C</td>
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<tr>
<td>100</td>
<td>Lab Quizzes (10 @ 10 pts)</td>
<td>360 – 419 D</td>
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<tr>
<td>50</td>
<td>Capstone Project</td>
<td>0 - 359 F</td>
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600 TOTAL (approximate)

Classroom conduct: The instructor encourages free exchange of information and discussion. Every effort must be taken by the instructor and students to maintain an appropriate classroom environment to foster learning and retention of information presented throughout the semester.

Course Policies: College of Agriculture, Food Systems and Natural Resources Honor System: [http://www.ag.ndsu.edu/academics/honor.htm](http://www.ag.ndsu.edu/academics/honor.htm)

Each student must read and sign the honor pledge on each assignment that is designated as an individual effort. It is the student’s responsibility to take actions that will contribute to the elimination of academic dishonesty. If a student witnesses academic misconduct, he or she may attempt to correct the situation by announcing that academic dishonesty is occurring, by speaking to the individual, or by reporting the incident. As a rule, the identity of the student who witnesses the academic misconduct is held in confidence. As a self-governing entity, students are encouraged to suggest modifications to improve the Honor System. These suggestions can be offered through the Associate Dean for Academic Programs’ office or to any member of the Honor Commission. [http://www.ag.ndsu.edu/academics/honor.htm](http://www.ag.ndsu.edu/academics/honor.htm)

Academic Honesty Policy: All work will be completed in a manner which correlates to: NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct. The honor pledge is “On my honor I have neither given nor received aid in completing this assignment.”

Americans with Disabilities Act Statement:
Any students with disabilities or other special needs, who need special accommodations in this course are invited to share these concerns or requests with the instructor and contact the Disability Services Office as soon as possible.
**Tentative Schedule:**

**Week 1**
- T Aug. 21  Lecture- Introduction-syllabus review
- R Aug. 23  Lecture- Sheep Industry History
- R Aug. 23  Lab- Tour of Sheep Barn

**Week 2**
- T Aug. 28  Lecture- Current Status of Sheep Industry
- R Aug. 30  Lecture- Breed Types
- R Aug. 30  Lab- Discussion of Production Systems

**Week 3**
- T Sept. 4   Lecture- Production Systems
- R Sept. 6   Lecture- Lamb Products
- R Sept. 6   Lab- World Sheep Industry Presentations

**Week 4**
- T Sept. 11  Lecture- Wool Biology
- R Sept. 13  Lecture- Wool Harvest and Grading
- R Sept. 13  Lab- Shearing and Wool Handling

**Week 5**
- T Sept. 18  Lecture- Dairy Sheep
- R Sept. 20  Lecture- Reproduction - Ewe
- R Sept. 20  Lab- Pregnancy Detection Laboratory

**Week 6**
- T Sept. 25  Lecture- Reproduction - Ram
- R Sept. 27  Lecture- Reproduction - Seasonality
- R Sept. 27  Lab- Ram Breeding Soundness Evaluation

**Week 7**
- T Oct. 2    Lecture- Test #1
- R Oct. 4    Lecture- Sheep Handling
- R Oct. 4    Lab- Handling Laboratory

**Week 8**
- T Oct. 9    Lecture- Predator Control
- R Oct. 11   Lecture- Neonatal Lamb Care
- R Oct. 11   Lab- Lambing Duty

**Week 9**
- T Oct. 16   Lecture- Ewe Nutrition
- R Oct. 18   Lecture- Ram Nutrition
- R Oct. 18   Lab- Ration Balancing

**Week 10**
- T Oct. 23   Lecture- Lamb Nutrition
- R Oct. 25   Lecture- Health Management Protocols
- R Oct. 25   Lab- Health Presentations

**Week 11**
- T Oct. 30   Lecture- Marketing
- R Nov. 1    Lecture- Sheep Tour
- R Nov. 1    Lab- Sheep Tour
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<th>Week 12</th>
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<tbody>
<tr>
<td>T Nov. 6</td>
<td>Lecture- Test #2</td>
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<tr>
<td>R Nov. 8</td>
<td>Lecture- Parasites</td>
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<tr>
<td>R Nov. 8</td>
<td>Lab – Parasitology</td>
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| Week 13                       |                           |                           |
| T Nov. 13                     | Lecture- Targeted Grazing |                           |
| R Nov. 15                     | Lecture- Genetic Improvements |                       |
| R Nov. 15                     | Lab- Ram Selection        |                           |

| Week 14                       |                           |                           |
| T Nov. 20                     | Lecture- EPDs             |                           |
| R Nov. 22                     | Thanksgiving              |                           |
| R Nov. 22                     | Thanksgiving              |                           |

| Week 15                       |                           |                           |
| T Nov. 27                     | Lecture- Capstone Presentations |                   |
| R Nov. 29                     | Lecture- Capstone Presentations |                   |
| R Nov. 29                     | Lab- Capstone Presentations  |                           |

| Week 16                       |                           |                           |
| T Dec. 3                      | FINAL REVIEW WILL BE SCHEDULED AS NEEDED. |                   |
| R Dec. 5                      | CAPSTONE PROJECTS WILL BE MADE AVAILABLE TO STUDENTS ON DEC. 5 AT 5 PM. |                   |
| R Dec. 5                      | STUDENTS ON DEC. 5 AT 5 PM. |                           |

| Week 17                       |                           |                           |
| T Dec. 11                     | FINAL WILL BE TAKEN DURING TUESDAY, DECEMBER 11 FROM 1 TO 3 PM |                   |