
ARSC 484 Swine Production/Pork Industry Systems

3 Credits

Lecture: Tuesday-Thursday 9:00-9:50AM

Lab: Thursday 12:30-2:20PM

Instructor:

Dr. David Newman
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Office Hours: MW 2:00-
4:00PM

Teaching Assistants:

Mr. James Magolski
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Mrs. Roberta Dahlen
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Lab Instructor:

Mr. Ron Zimprich
NDSU Swine Research Unit
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Location: Lecture: Loftsgard 102 Lab: Sheppard 100 (classroom)

Bulletin description: Capstone course includes breeding systems, disease control, applied economics, housing, marketing, pork quality, and nutrition in a systems approach.

Course description: This course will teach the principals of modern pork production including all aspects of swine production management systems and the U.S./Global Pork Supply. This course is a junior/senior level **capstone class** and will have written assignments. **Students will use creativity, problem solving and critical thinking skills.** Lectures will contain material relevant to the lab portion of the class.

Course objectives:

- 1) To gain an understanding of the scope of the swine industry in the U.S. and world.
- 2) To evaluate the different production systems in the swine industry.
- 3) To comprehend the principles and application of breeding, reproduction, nutrition, health management and marketing of swine.
- 4) To assess pork quality and analyze profitability.
- 5) Increase awareness of the economic, social, and environmental challenges in the pork industry.
- 6) Expand awareness and accessibility of resource materials available to swine producers in the U.S.
- 7) Provide opportunity for significant exchange of ideas and fostering critical thinking.

Attendance: Students are expected to attend all scheduled lecture and laboratory sessions. Any exceptions should be given to the instructor prior to being absent. Attendance in class is expected according to [NDSU Policy 333](#).

Laboratory: During this course you will spend time at the University swine facility attending hands on labs (this may involve time outside of the scheduled class period). Boots and coveralls will be provided for use at the farm.

****STUDENTS MUST NOT HAVE BEEN IN CONTACT WITH PIGS 72 HOURS PRIOR TO LAB FOR BIOSECURITY REASONS.** Laboratory periods cannot be made up. No excuses will be accepted without proper documentation (e.g. doctor's note) or instructor approval.

Testing/Evaluation Procedures: A total of 4 exams (100 pts. each) will be administered throughout the semester.

Grading:

Grades will be determined based on a total of **1000 points.**

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|----|---------------------------------|------------|
| 1) | Four scheduled exams @ 100pts | 400 points |
| | Sixteen scheduled labs* @ 25pts | 400 points |
| 2) | Out of class assignments** (4) | 200 points |

TOTAL 1000 points

***Labs:** An assignment will be given each week pertaining to the subject that is worth 25 pts.

****Assignments:** Four written assignments (50 pts. Each) will be given throughout the semester.

*****Course grading will follow a standard grading system. The grading scale is as follows.**

90 – 100%	(900 to 1000 pts)	A
80 – 90%	(800 to 899 pts)	B
70 – 80%	(700 to 799 pts)	C
60 – 70%	(600 to 699 pts)	D
< 60%	(0 to 599 pts)	F

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>):

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.

Class Material: Instructor will give handouts and reading assignments. No book is required. Some material will be posted on blackboard. Use of the internet will be required on a daily basis to obtain current market news and information from the websites listed below

Supporting Material:

Pork Magazines/Research Publications

Pork www.porkmag.com

National Hog Farmer <http://nationalhogfarmer.com/>

Feedstuffs www.feedstuffs

Journal of Animal Science www.asas.org

National Swine Improvement Federation www.nsis.com

Pork Information Gateway (PIG) www.porkgateway.com

National Pork Board < <http://www.pork.org>

Stages www.ansc.purdue.edu/stages/

Chicago Mercantile Exchange www.cme.com

USDA-AMS www.usda.gov >

Tentative Schedule:

Week 1

M	Jan. 9	No Class
W	Jan. 11	Lecture- Swine Industry History
R	Jan. 12	Lab- Website Resources for swine information

Week 2

M	Jan. 16	No Class
W	Jan. 18	Lecture- Swine systems overview
R	Jan. 19	Lab- Swine systems overview

Week 3

M	Jan. 23	Lecture- Breeding
W	Jan. 25	Lecture- Breeding
R	Jan. 26	Lab- Breeding

Week 4

M	Jan. 30	Lecture- Gestation
W	Feb. 1	Lecture- Gestation
R	Feb. 2	Lab- Gestation

Week 5

M	Feb. 6	Lecture- Farrowing
W	Feb. 8	Lecture- Farrowing
R	Feb. 9	Lab- Farrowing

Week 6

M	Feb. 13	Lecture- Piglet management
W	Feb. 15	Lecture- Piglet management
R	Feb. 16	Lab- Piglet management

Week 7

M	Feb. 20	NO CLASS
W	Feb. 22	Lecture- Nursery
R	Feb. 23	Lab- Nursery

Week 8

M	Feb. 27	Lecture- Grower phase
W	Feb. 29	Lecture- Grower phase
R	Mar. 1	Lab- Grower phase

Week 9		
M	Mar. 5	Lecture- Finishing phase
W	Mar. 7	Lecture- Finishing phase
R	Mar. 8	Lab- Finishing phase
Week 10		
M	Mar. 12	NO CLASS-Spring Break
W	Mar. 14	NO CLASS-Spring Break
R	Mar. 15	NO LAB-Spring Break
Week 11		
M	Mar. 19	Lecture- Pork Quality
W	Mar. 21	Lecture- Pork Quality
R	Mar. 22	Lab- Pork Quality
Week 12		
M	Mar. 26	Lecture- Pork Quality
W	Mar. 28	Lecture- Pork Quality
R	Mar. 29	Lab- Pork Quality
Week 13		
M	Apr. 2	Lecture- Pork Processing
W	Apr. 4	Lecture- Pork Processing
R	Apr. 5	Lab- Pork Processing
Week 14		
M	Apr. 9	NO CLASS
W	Apr. 11	Lecture- Nutrition
R	Apr. 12	Lab- Nutrition
Week 15		
M	Apr. 16	Lecture- Marketing
W	Apr. 18	Lecture- Marketing
R	Apr. 19	Lab- Marketing
Week 16		
M	Apr. 23	Lecture- Marketing
W	Apr. 25	Lecture- Marketing
R	Apr. 26	Lab- Marketing
Week 17		
M	Apr. 30	Lecture- Marketing
W	May 2	Lecture- Marketing
R	May 3	Lab- Marketing
Week 18		
M	May 8	FINALS WEEK
W	May 10	
R	May 11	

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, which need special accommodations in this course, are invited to share these concerns or requests with the instructor and contact the Disability Services Office (<http://www.ndsu.edu/disabilityservices/>) as soon as possible.