

**ANS 4623C**  
**PORK PRODUCTION**

Lecture: 102 Animal Science Wednesday and Friday (11:45 - 12:35- Period 5)

Lab: Wednesday (12:50-2:45) 156 Animal Science, Swine Unit or TBA

Three Credit Hours

**Instructor**

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**Course description:** ANS 4623C- This course will teach the principles of modern pork production including all aspects of swine production management systems (breeding systems, disease control, applied economics, housing, marketing, pork quality, and nutrition in a systems approach), relative to 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.

**October 19, 2024- UF pig clinic & sale**

**Student Learning Outcomes:**

Understand of the scope of the swine industry in the U.S. and world.

Evaluate the different production systems in the swine industry.

Understand the breeding, reproduction, nutrition, health management and marketing of swine.

Be able to assess pork quality, analyze cash flow and profitability.

Increase awareness of the economic, social, and environmental challenges in the pork industry.

Expand awareness and accessibility of resource materials available to swine producers in the U.S.

Provide opportunity for significant exchange of ideas and fostering critical thinking.

**Laboratory:**

During this course you will spend hands-on time at the University swine barn. Acquire rubber boots and bring old clothes- STUDENTS ARE HIGHLY ENCOURAGED TO NOT CONTACT OTHER PIGS 72 HOURS PRIOR TO LAB FOR BIOSECURITY REASONS.

**Course grading:**

More information on the university wide grading policy can be accessed at:

<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

Grades Based On The Following:		Letter Grades Will Be Determined as Follows:			
Two Exams (100 pts each)	200	A	90 & Above	C	70 - 74.99
Lab-	100	B+	85 -89.99	D+	65 - 69.99
Problems assignments	250	B	80 - 84.99	D	60 - 64.99
Group trial presentation	150	C+	75 - 79.99	E	59.99 & Below
Group Sow project/farrowing chronicle	150				
Comprehensive Final	150				

Laboratory attendance will be worth 6.7 pts each week. The field trip(s) are worth 100 pts. Students who are not able to attend field trip(s) will be given alternate assignments.

**Farm Plan- Your outline should address the following parameters**

Number of animals

Type of operation (Niche meat market/direct to consumer, purebred, show pig, research pigs, commercial farrow to finish, commercial finishing)

Pig Flow/Cash flow/Yearly timeline

Genetics/Breeding Program

Nutrition Program

Housing, Facilities & Equipment

Health plan

Marketing plan

**Your project should address these core questions**

How much does it take for you to live annually?

What are your production costs per pig? (feed, facilities, health)

How much will you mkt your pigs for?

How many sows/marketable pigs will it take to hit your annual cost of living minus taxes?

How else can you accrue money from this gift you have been given?

How will you finance expansion?

Group trial presentation- A small finishing trial will be conducted. All students will be assigned to one of three groups (Live, Carcass data; Meat quality). Each group should prepare an abstract of their portion of the project including objectives, methods, results, and general conclusions, not more than 2500 characters. Groups will present their results and interpretation showing their introduction, methods and materials, results, discussion, and conclusions in class on 12-6 and will be worth 150 pts.

Sow project and picture farrowing chronicle- Students will be assigned a post 100 d bred sow. Students will be responsible for enacting UF swine barn SOPs during late gestation & farrowing. A chronicle including pictures will be kept documenting parturition. Students will be responsible for 1) finding, bringing up, washing, & stalling sow in crate, 2) checking daily progress toward parturition & monitoring sow & litter performance 1 wk post-partum, 3) chronicling parturition (pictures, time interval, interventions, number born, NBA, etc.); 4) within 24 hrs recording litter birth wt, iron injections, clipping needle teeth 5) within 1 wk post-partum ear notching, docking tails, and castrating boars. Picture chronicle is due post-weaning.

**Supporting Material:**

Pork [www.porkmag.com](http://www.porkmag.com)

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

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

Feedstuffs [www.feedstuffs](http://www.feedstuffs)

Chicago Mercantile Exchange [www.cme.com](http://www.cme.com)

Journal of Animal Science [www.asas.org](http://www.asas.org)

USDA-AMS [www.usda.gov](http://www.usda.gov)

National Swine Improvement Federation [www.nsif.com](http://www.nsif.com)

Pork Information Gateway (PIG) [www.porkgateway.com](http://www.porkgateway.com)

National Daily Hog and Pork Summary <http://www.ams.usda.gov/mnreports/lstdhps.pdf>

Daily Livestock Report [www.dailylivestockreport.com](http://www.dailylivestockreport.com)

AgWeb <http://www.agweb.com/>

National Swine Registry <http://nationalswine.com/index.php>

Stages [http://nationalswine.com/pedigree\\_services/stages.php](http://nationalswine.com/pedigree_services/stages.php)

American Assoc. of Swine Veterinarians <https://www.aasv.org/>

### Class Schedule

DATE	TOPIC
8-23	Introductions
8-28	World, U.S. and Regional Pork Industry
Lab 8-28	Introductions- Establish groups/Production Systems- Pig Flow Scheduling- 156
8-30	Biosecurity, Herd Health/Diseases
9-4	Production Systems/ Commodity or Niche Marketing
Lab 9-4	Gilt Selection- Swine Barn
9-6	Genetics & Breeding
9-11	Genetics & Breeding
Lab 9-11	Parturition/ Litter Management- Swine Barn
9-13	Gestation Management
9-18	Gestation Management
Lab 9-18	Genetics/Breeding Program
9-20	Genetics/Breeding Program
9-25	Gestation Management
Lab 9-25	Genetics/Breeding Program due
9-27	Reproduction Management
10-2	Reproduction Management
Lab 10-2	Pork Carcass Cutting- 156
10-4	Farrowing/Lactation Management
10-9	Farrowing/Lactation Management
Lab 10-9	Put pigs on treatment- Swine Barn
10-11	Nutrition
10-16	<b>EXAM 1</b>
Lab 10-16	Prep for Field Day
10-18	Nutrition
10-23	Nutrition
Lab 10-23	Health lab
10-25	Commodity Marketing/Economics/Contracts-
10-30	Marketing
Lab 10-30	Prep for Field Day- Swine Barn Gestation & Reproductive Management-
11-1	Nursery Management
11-6	Nursery Management
Lab 11-6	Final Weights- Swine Barn
11-8	Nutrient Management
11-13	Grow-Finish Management
Lab 11-13	Meat Lab- Fresh Meat and Carcass Merit
11-15	Grow-Finish Management
11-20	Carcass merit
Lab 11-20	Final Weights- Swine Barn
11-22	<b>EXAM 2</b>
11-27	<b>NO CLASS- Thanksgiving</b>
Lab 11-27	<b>NO CLASS- Thanksgiving</b>
11-29	<b>NO CLASS- Thanksgiving</b>
12-4	Reports on Class Lab Trials
Lab 12-4	Student presentations on farm plan
	Smithfield- December 5 & 6

#### **Digital devices (cell phones, iPads, laptops)**

Students are asked to silence their cellular phones before entering the classroom. Unless students are taking notes on their laptops, laptops should be OFF during class. If students are found to be Facebooking or texting, they will be asked to turn off their digital device.

#### **Risk Associated with the Use of Livestock and their tissues**

Working with livestock is inherently *risky*. Many of these animals are capable of injuring people, especially when they are in the *flight or fight* mode inspired by a stressful situation. The instructors will work to

provide students with the ability to manage livestock with minimal stress, thus lowering the risk of injury to people and animals.

Livestock species can carry microorganisms that can cause diarrhea and flu-like symptoms in humans. These microorganisms can be shed in an animal's feces and saliva. These organisms of concern such as Salmonella, Campylobacter, and E.coli can survive on the animal's hide or surroundings, and though unlikely could be present in/on meat. These pathogens can cause significant illness, especially to someone who is immunocompromised. Students should wash their hands after handling livestock and/or raw meat.

### **Attendance policy:**

Requirements for class attendance and make-up exams, assignments, and other work are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

The following are considered authorized (excused) absences if the indicated conditions are met:

University approved field trip or activity: These must be cleared at least one week in advance of the major examination. If not cleared in an appropriate fashion, a grade of zero will be assigned for the missed examination.

Death or serious illness in the family: A letter of explanation from the physician or minister who attended the patient or was in charge of the funeral services, respectively, must verify this. This letter must be within 14 days following the missed examination or the grade of zero will be assigned.

Personal illness that is too severe or contagious for the student to attend class: A letter of explanation from a physician on official letterhead must verify this. This letter must be within 14 days following the missed examination or the grade of zero will be assigned.

Legal procedure, administrative procedure, or military duty: The instructor must be notified at least one week in advance of the major examination and have a verification letter on official letterhead. If not cleared in an appropriate fashion, a grade of zero will be assigned for the missed examination.

Religious observance: The instructor must be notified at least one week in advance of the major examination. If not cleared in an appropriate fashion, a grade of zero will be assigned for the missed examination.

Mandatory admission interview for professional school which cannot be rescheduled:

The instructor must be notified at least one week in advance of the major examination and have a notification from the appropriate individual on official letterhead. If not cleared in an appropriate fashion, a grade of zero will be assigned for the missed examination.

### **General Information:**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/> . Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/> . Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

### **Health and Wellness**

U Matter, We Care: If you or someone you know is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) , 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the

care you need, or visit the Student Health Care Center website.

University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website or call 352-273-4450.

#### Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.

On-Line Students Complaints: View the Distance Learning Student Complaint Process Policy on Course Syllabi 4