Swine Production
ANS 342

INSTRUCTOR: Dr. John Michael Mehaffey
Room 103
Agriculture Building

OFFICE HOURS: MW 10 – 12 pm; TR 11 – 12 pm
Office: 936-468-4319
Cell: 806-790-4330
E-mail: mehaffeyjm@sfasu.edu

LECTURE: MW 9 – 9:50 am Agriculture Room 121

OPTIONAL TEXT: Pig Production: Biological Principles and Applications.

REQUIRED SUPPLIES
Students will need to purchase a pair of rubber boots to remain at the swine center for wear during class. Students may also purchase coveralls to be worn during lab or visits to the farm for their class projects. Otherwise, clean clothes that have not been exposed to other swine must be worn when visiting the swine center.

COURSE DESCRIPTION
This course will explore how the interactions of breed selection, environmental conditions, mating systems, reproductive physiology, and nutrition all affect the final product in the production swine. The student will gain experience and knowledge as it applies to the commercial and show pig industries.

Program Learner Outcomes
1. The student will demonstrate competence of technical subject matter areas in agriculture including plant and animal sciences, agricultural economics, and mechanized agriculture.
2. The student will exhibit problem-solving skills based on quantitative and analytical reasoning.
3. The student will demonstrate effective communication skills
4. The student will exhibit leadership and other interpersonal skills needed for career placement and advancement.
Student Learning Outcomes

1. Student will demonstrate competence of technical subject matter in animal and poultry sciences (ANS 131)
2. The student will demonstrate effective oral and written communication skills
3. The student will exhibit leadership and other interpersonal skills needed for career placement and advancement
4. The student will exhibit problem-solving skills based on quantitative and analytical reasoning
5. The student will demonstrate knowledge of farm and ranch skills. (ANS 131)

Objectives

1. To be able to identify breeds of swine.
2. To evaluate swine for breeding production and market purposes.
3. To be able to read and mark ear notches on market hogs.
4. To gain a knowledge in swine production practices including management, nutrition, reproduction and general health.
5. To be able to identify the four lean cuts of pork as well as retail cuts of pork.

Lecture Attendance

Attendance is mandatory, if you are late or asked to leave for any reason you will be counted absent. You will be given three absences, for each absence after three your grade will be reduced by a letter grade. Further absences will result in the automatic failure of this course.

Student Academic Dishonesty Policy (4.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism. Definition of Academic Dishonesty: Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit. Please read the complete policy at http://www.sfasu.edu/policies/student_academic_dishonesty.pdf
Course Grades Policy (5.5)

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average. Please read the complete policy at http://www.sfasu.edu/policies/5.5_course-grades.pdf

Academic Accommodation for Students with Disabilities Policy (6.1)

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/

Responsible Use of Technology

It is expected that all students will only use cell phones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class or other penalties.

Acceptable Student Behavior

Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy 10.4). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed. Please read the complete policy at http://www.sfasu.edu/policies/student-code-of-conduct_10.4.pdf
## SWINE PRODUCTION

### TENTATIVE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Wednesday</th>
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<tbody>
<tr>
<td>1 – 1/21</td>
<td>NO CLASS</td>
<td>Introduction</td>
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<tr>
<td>2 – 1/28</td>
<td>Domestication and Early History</td>
<td>Modern Pig Production</td>
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<tr>
<td>3 – 2/4</td>
<td>Societal Issues for Pork Production</td>
<td>Swine Care Handbook</td>
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<tr>
<td>4 – 2/11</td>
<td>Swine Care Handbook</td>
<td>EXAM 1</td>
</tr>
<tr>
<td>5 – 2/18</td>
<td>Biology of the Pig</td>
<td>Reproduction</td>
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<tr>
<td>6 – 2/25</td>
<td>Genetics</td>
<td>Modern Swine Breeds</td>
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<tr>
<td>7 – 3/4</td>
<td>Growth and Development</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>8 – 3/11</td>
<td>NO CLASS</td>
<td>Pork Composition and Quality</td>
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<tr>
<td>9 – 3/18</td>
<td>NO CLASS</td>
<td>NO CLASS</td>
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<tr>
<td>10 – 3/25</td>
<td>Nutrients, Nutrition and Life-Cycle Feeding</td>
<td>NO CLASS</td>
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<tr>
<td>11 – 4/1</td>
<td>Feed Resources</td>
<td>Formulating Diets for Pigs</td>
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<td>12 – 4/8</td>
<td>Creating Comfort</td>
<td>Production Systems for Adult Pigs</td>
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<td>13 – 4/15</td>
<td>Production Systems for Growing Pigs</td>
<td>Waste Management</td>
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<tr>
<td>14 – 4/22</td>
<td>Exam III</td>
<td>Pig Health</td>
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<tr>
<td>15 – 4/29</td>
<td>Management of Breeding Herd</td>
<td>Sows &amp; Piglets (farrowing)</td>
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<tr>
<td>16 – 5/6</td>
<td>Show pigs Industry</td>
<td>Marketing Show pigs</td>
</tr>
<tr>
<td>17 – 5/15</td>
<td>FINAL</td>
<td></td>
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</tbody>
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**FINAL EXAM WEDNESDAY, MAY 15TH @ 8 AM!**
GRADING SYSTEM:
A = 90 %
B = 80 - 89 %
C = 70 - 79 %
D = 60 - 69 %
F = LESS THAN 60 %

POINT SYSTEM:

<table>
<thead>
<tr>
<th>POINT</th>
<th>VALUE</th>
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<tbody>
<tr>
<td>3 LECTURE EXAMS</td>
<td>300</td>
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<tr>
<td>DISCUSSION QUIZZES</td>
<td>200</td>
</tr>
<tr>
<td>LAB PROJECTS</td>
<td>300</td>
</tr>
<tr>
<td>LAB PARTICIPATION</td>
<td>200</td>
</tr>
<tr>
<td>LAB FINAL</td>
<td>100</td>
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<tr>
<td>FINAL EXAM</td>
<td>100</td>
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<td><strong>TOTAL</strong></td>
<td><strong>1200</strong></td>
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Lecture Exams

Lecture exams will consist of material covered prior to each of the three exams in lecture. Material is open to class discussion, presented material and group presentations. Exams will consist of multiple choice, true/false, matching, and short answer questions.

Discussion Quizzes

Discussion quizzes will consist of material covered in lecture mainly used as an attendance check for lecture. The best 10 possible grades will be retained for the students’ 200 possible points. The quizzes will be given at the beginning of lecture will each question given for a total of 30 seconds with no repeating of the question.

Lab Projects

You will be assigned a partner to work with throughout the semester. The two of you will have several responsibilities.

1. Partnerships will be assigned a sow to farrow during the month of April. You will be responsible for assisting the sow as necessary, processing the litter (ear notch, IPD injections, clip needle teeth, weigh, dock tails), wean
the litter at 21 days, at which time you will vaccinate, deworm, and weigh. A report will then need to be written over the experience including the data of the piglets.

2. Partnerships will be responsible for a gilt at the swine farm. They must be cleaned, clipped and worked with on showmanship. The gilts will be selected by random draw order. There will be a show based on the conformation of the pigs and your showmanship ability. Points will be given based on your level of participation. Champion showman will receive a 2 point bonus and Reserve a 1 point bonus on the semester.

3. Partnerships will be required to assist in the breeding of the gilts and the sow that you are assigned during the semester before the semester is complete.

4. Partnerships will also be helping with preparing piglets for any sales throughout the spring.
SWINE PRODUCTION LABORATORY

TENTATIVE SCHEDULE

Week 1  Introduction to Swine Center and Tour
Week 2  Breed ID and Prepare for Farrowing, Sow Selection
Week 3  Swine Reproduction
Week 4  Bio-Security and Health Risks
Week 5  Pest and Odor Management
Week 6  Selection and Evaluation of Market and Breeding Swine
Week 7  Feeding and Nutrients Requirements
Week 8  Estrus Detection and Heat Synchronization
Week 9  Fitting and Showmanship
Week 10 Sale Prep
Week 11 Estrus Detection and Heat Synchronization
Week 12 Artificial Insemination and Boar Collection
Week 13 No Lab
Week 14 Facility Tours
Week 15 Lab Final