Advanced Swine Science
Kansas State University and National Pork Board

Instructor: Dr. Bob Goodband
Kansas State University
Manhattan, Kansas
(785) 532-1228
E-mail: Goodband@ksu.edu

Course Mission Statement: To become aware and knowledgeable of the science and technology applied in modern, sustainable swine production businesses.

Student Evaluation: There will be 300 points available for the various assignments, the breakdown is as follows:
Section Quizzes (6) = 120 points
Section Reports (6) = 120 points
Final Exam 30 points
Final Presentation 30 points

Section Reports: Over the course of the semester each student will develop a business plan for their particular swine business. Subject reports will be submitted as individual chapters of what will become a final report (Report #6).

Final Presentation: At the final week of the semester, each student will present a 12 minute summary of their farm’s business plan covering the materials they have developed over the semester.

Grading Scale
270 or greater = A
269 to 240 = B
239 to 210 = C
209 to 180 = D
179 or less = F

Assessment of Student Learning Plan
a) Critical thinking skills: In preparing written reports you will distinguish and apply facts learned in and outside of class to develop a comprehensive business plan for your production system.
b) Application of facts: You will need to decide on concepts best suited for your business plan and justify that decision based on information provided in and out of class.

c) Demonstrate effective oral and written skills: Over the semester you will develop communication skills as well as effectively communicate your business plans’ objectives in both written and oral reports.

WEEK 1
Class Introduction and Organization
Benchmarking and Swine Production Standards –

WEEK 2
Swine Production Systems

WEEK 3
Quiz and report # 1
Swine Breeds and Genetics

WEEK 4
Swine Genetics & Pork Quality
Swine Cross Breeding Programs

WEEK 5
Quiz and report # 2
Swine Reproduction

WEEK 6
Swine Reproduction
Pig Flow and Scheduling

WEEK 7
Quiz and report # 3
Facilities Breeding and Gestation

WEEK 8
Facilities – Farrowing & Nursery
Facilities – Grow-finish

WEEK 9
Waste Management
Quiz and report # 4

WEEK 10
Ventilation

WEEK 11
Herd Health
Quiz and report # 5

**WEEK 12**
Nutrition - Breeding Herd

**WEEK 13**
Nutrition – Nursery Pigs
Nutrition – Grow-finish

**WEEK 14**
Marketing

**WEEK 15**
Quiz 6, and Final Report due
Finals Week; Oral presentation and final