#### What is Swine Science Online?

Swine Science Online is the first ever online undergraduate program in swine science. Swine Science Online offers education and training of future pork professionals to benefit the pork industry by inspiring a career interest through academic training and application. The Swine Science Online vision is to ensure that the Pork Industry is led and managed by individuals who have broad educational and production experiences which have prepared them for these roles. Course work revolves around practical pork production and current pork industry issues. Swine Science Online teaches scientific principles and management skills involved in pork production for an efficient and sustainable operation.

# What are the goals of the Swine Science Online Program?

The ultimate goal of the Swine Science Online Program is to have more academically trained students entering the pork industry. After completing required and elective courses students will be able to apply for a Swine Science Online Certificate that is administered by the U.S. Pork Center of Excellence.

# What careers might I pursue with a Swine Science Online certificate?

Swine Genetic Sales Consultant Regional Swine Sales Manager Swine Communications Coordinator Swine Building Construction Swine Pharmaceuticals Swine Production Management Swine Feed Sales

Find more career information from the U.S. Pork Center of Excellence and National Pork Board: www.porkgateway.org or pork.org/careers

#### For more information, please contact:

### **Maggie DenBeste**

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### Or visit the Ag\*IDEA website:

www.agidea.org



An online undergraduate program in swine science administered by the U.S. Pork Center of Excellence, Ag\*IDEA, and agricultural universities across the nation





### **Fall 2010 Course Listings**

#### Basic Swine Science (2 cr.)

### Dr. Tom J. Baas, Iowa State University

Basic disciplines and concepts involved in swine production including: industry structure, trends and statistics; production phases and buildings; genetic improvement; reproduction; nutrition; health and biosecurity; nutrient management; marketing and meat quality; and career opportunities in the swine industry.

### Swine Health and Biosecurity (1 cr.)

### Dr. Locke Karricker, Iowa State University

Overview of standard biosecurity protocols and identification of behavior and clinical signs of illness in pigs. Treatment administration and prevention methods. Introduction to immune system function and basic swine disease transmission.

# <u>Swine Breeding and Gestation Management</u> (1 cr.)

### Dr. William L. Flowers, North Carolina State University

Concepts related to: reproductive physiology and endocrinology of boars and sows; genetic selection programs; development programs for future replacement gilts and boars; semen collection, evaluation, and preparation; detection of estrus and artificial insemination; pregnancy diagnosis; feeding and housing programs for gestating sows; environmental management; records; diseases; and development of quality assurance programs for identifying and solving reproductive problems.

### <u>Swine Environment Management (1 cr.)</u> Dr. Jay D. Harmon, Iowa State University

Response of swine to thermal environment, ventilation system design and analysis, heating and cooling systems and examples of various designs for all phases of production. Troubleshooting ventilation systems and energy analysis of production units.

# <u>Contemporary Issues in the Swine Industry</u> (1 cr.)

#### Dr. Jodi Sterle, Texas A&M University

Evaluation of issues facing today's swine industry including: welfare, nutrient management, and food safety and security. Development of skills needed for effective community relations such as media interviews and message points.

# Swine Business and Records Analysis (1 cr.) Dr. James Kliebenstein, Iowa State University Evaluation of swine operations using farm and en-

terprise records, budgeting, and financial analysis and benchmarks.

### Farrowing Management (1 cr.)

## Dr. Duane Reese, University of Nebraska-Lincoln

Advanced integration and application of reproductive management concepts during farrowing and lactation. Identification of production trends; formulation of strategies to improve productivity; and parturition and neonatal management.

#### **Enrollment Information:**

Cost per credit hour: \$320/credit hour

Fall class begin date: 9/6/10 Fall class end date: 12/3/10

\*Computer and High-speed Internet access

required

\*Enrollment is limited

### Swine Science Online Certificate Requirements

### **Required Courses**

- Basic Swine Science (2 credits)
- Basic Lab Course (1 credit)
- Swine Health and Biosecurity (1 credit)
- Employee Management for the Swine Industry (1 credit)
- Production Internship in the Swine Industry (1 credit)
- Production Management Course (Choose ONE)
  - Swine Breeding and Gestation Management (1 credit)
  - Farrowing Management (1 credit)
  - Swine Nursery and Finishing Management (1 credit)

#### **Elective Courses (Choose 5 Courses)**

- Swine Feed Mill Management (1 credit)
- Marketing and Risk Management in the Pork Industry (1 credit)
- Pork Product Quality and Safety (1 credit)
- Pork Export Markets (1 credit)
- Swine Environment Management (1 credit)
- Contemporary Issues in the Swine Industry (1 credit)
- Swine Manure and Nutrient Management (1 credit)
- Advanced Lab Course (1 credit)
- Production Management Course (able to take other two not taken as required course)
- Swine Breeding and Gestation Management (1 credit)
- Farrowing Management (1 credit)
- Swine Nursery and Finishing Management (1 credit)
- Swine Business and Records Analysis (1 credit)