I. **OVERVIEW**

The following information will appear in the 2009 - 2010 catalog

**ANSC-230 Poultry Science**

3 Units

A study of the principles and practices of commercial poultry production. Emphasis to be placed on poultry nutrition, reproduction, environmental management, health, marketing and recordkeeping to ensure scientifically-based management decisions and consumer product acceptance. Field trips are required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   A. Distribution and importance of poultry
      1. World
      2. United States
      3. California
      4. Contributions of various cultures to the poultry industry

   B. Biosecurity
      1. Importance
      2. Procedures
      3. Common disease problems

   C. Common breeds and strains used in California
      1. Chickens
      2. Turkeys
      3. Ducks/geese

   D. Poultry anatomy and physiology
      1. External anatomy
      2. Major body systems

   E. Brooding and rearing
      1. Egg-type chicks
      2. Meat-type
      3. Small scale brooding
      4. Commercial brooding

   F. Nutrition and feeding
      1. Feed types
      2. Nutritional requirements
         a. Egg Production
         b. Meat Production

   G. Egg Incubation
      1. Requirements
      2. Types of incubators
      3. Hatching
      4. Care of newly hatched chicks
H. Poultry processing
1. Sanitation procedures
2. Gov't regulations
3. Eggs
4. Meat

I. Animal welfare
1. Animal care
2. Animal welfare

2. Required Lab Content:

A. Tour of MJC Poultry Unit
1. Floor house
2. Processing Plant
3. Laying hen facility
4. Incubation area
5. Gamebird area
6. Biosecurity precautions

B. Biosecurity
1. MJC Farm
2. Field trip precautions
3. Situational analysis

C. Poultry breeds
1. Breed, class, variety
2. Common breeds
3. Field trip

D. Poultry Anatomy
1. Necropsy tools
2. Field necropsy procedures
3. Practice

E. Brooding
1. Clean up and sanitation
2. Set up
3. Chick arrival
4. Chick grading
5. Variations in brooding

F. Raising fryers
1. Feeds and nutrients
2. Disease and sanitation
3. Biosecurity
4. Field trip

G. Laying Hens
1. Egg Production
2. Keeping records
3. Procedures
4. Cage vs. Cage-free
5. Biosecurity and sanitation
6. Field trip

H. Egg Incubation
1. Incubators and hatchers
2. Setting eggs
3. Emergencies
4. Sanitation and biosecurity

I. Poultry Processing
B. **HOURS AND UNITS**

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3 Units

C. **METHODS OF INSTRUCTION (TYPICAL)**

Instructors of the course might conduct the course using the following method:

1. Lecture/discussion/lab activities.
2. Industry field trips.
3. Industry guest speakers.
4. Written assignments on current industry issues.
5. Demonstration and practice.

D. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   1. Weekly written laboratory reports.
   2. Weekly textbook and article reading assignments.
   3. Study and preparation for laboratory exams and quizzes - 4 per term.
   4. Study for final exam.
   5. Preparation and participation in several poultry-related activities that take place outside normally scheduled class time.

2. **EVIDENCE OF CRITICAL THINKING**

   *Assignments require the appropriate level of critical thinking*

   Students will demonstrate how to set up a brooding area for baby chicks, light the brood stove and select appropriate feeds and litter materials.

   Students will describe characteristics that make the Leghorn the most important egg laying chicken breed.

E. **TEXTS AND OTHER READINGS (TYPICAL)**


III. **DESIRED LEARNING**

A. **COURSE GOAL**

   *As a result of satisfactory completion of this course, the student should be prepared to:*
Describe the poultry industry, brood, raise and process a small flock of meat-type chickens, properly care for laying hens and eggs and discuss challenges for the future of the poultry industry.

B. STUDENT LEARNING GOALS

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**
   
   Upon satisfactory completion of this course, the student will be able to:

   a. Compare and contrast poultry production in the world, United States, and California.
   
   b. Demonstrate principles and practices used to successfully brood chicks.
   
   c. Identify and describe the productive traits of commercial layers.
   
   d. Define biosecurity, describe its importance to the poultry industry and demonstrate biosecurity precautions throughout the class.
   
   e. Describe conditions and equipment necessary to incubate eggs.
   
   f. Demonstrate practices used in processing and grading poultry meat and eggs.
   
   g. Identify and discuss traits of various breeds and species of poultry.
   
   h. Describe career opportunities and requirements for successful employment.
   
   i. Describe factors involved in poultry production, health, and sanitation.
   
   j. Identify and discuss animal welfare issues in the poultry industry.
   
   k. Describe strategies used in poultry waste management, spent hen use, and other by-products of the poultry industry.
   
   l. Examine the contributions of various cultures to the commercial poultry industry.

2. **Lab Learning Goals**
   
   Upon satisfactory completion of the lab portion of this course, the student will be able to:

   a. Identify poultry equipment and tools, explain how they are used and demonstrate their use.
   
   b. Brood a flock of chickens and raise them to acceptable market weight.
   
   c. Gather eggs, identify proper feeds for laying hens and demonstrate practical sanitation procedures.
   
   d. Explain and demonstrate procedures used in processing poultry and eggs and demonstrate an understanding of both sanitation and biosecurity procedures.
   
   e. Set and transfer eggs in an incubator.
   
   f. Recognize common breeds of poultry, describe their origin and practical uses.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Practical exams that demonstrate skills.
2. Quizzes on required reading and lecture material.

3. Written laboratory reports that include problem-solving, situational analysis and discussion of field trip experiences.

B. **SUMMATIVE ASSESSMENT**

1. Final laboratory practical skill demonstration.

2. Written final exam.