

# College of Micronesia-FSM

PO Box 159  
Pohnpei, FM 96941

## AGRICULTURE (AG) 092 Swine and Poultry Production

### Course Description (Catalog)

Introduces the basic skills and principles of swine and poultry production including breed selection, feeds, housing, management, and animal health.

**Course Prepared by:** Lyle Bacongus, Kosrae Campus  
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	Hours / Week	#. Of Weeks	Total Hours	Semester Credits
Lecture	3	16	48	3
Laboratory				
Workshop				
Total Semester Credits				

Purpose of Course:

Degree Requirement: \_\_\_\_\_

Degree Elective: \_\_\_\_\_

Certificate: \_\_\_\_\_ X \_\_\_\_\_

Remedial: \_\_\_\_\_

Other: \_\_\_\_\_

Prerequisite of Courses:

None

\_\_\_\_\_  
Signature, Chair Curriculum Committee

\_\_\_\_\_  
Date Approved by Committee

\_\_\_\_\_  
Signature, President, COM-FSM

\_\_\_\_\_  
Date Approved by President

# **AG 092 Swine and Poultry Production**

## **I COURSE OBJECTIVE**

### **Program Learning Outcomes:**

Upon successful completion of the Certificate of Achievement in Agriculture & Food Technology, students will be able to:

1. Demonstrate an overall knowledge of the crop production process.
2. Practice good agricultural management and marketing skills.
3. Identify and demonstrate the fundamentals of food processing, preparation techniques, the relationship between scientific principles and cooking procedures.
4. Identify and demonstrate basic skills and principles of swine and poultry production techniques including breed selection, feed, housing, management techniques and animal health.
5. Apply the basic skills and knowledge of nursery micropropagation practices, transplanting, harvesting and maintenance.
6. Identify the proper use of land for agriculture purposes, local ornamental and turf management.

### **Student Learning Outcomes**

By the end of this course students will be able to:

1. Identify and give characteristics of the different breeds of swine and poultry.
  - 1.1. Identify the major breeds of swine and poultry and their origins.
  - 1.2. Characterize the major breeds of swine and poultry and give an advantage and disadvantage for each major characteristic.
2. Identify and describe simple swine and poultry needs and management practices related to reproduction, health, and environment.
  - 2.1. Describe the reproductive physiology of swine and poultry.
  - 2.2. Identify major health problems of swine and poultry and recommend a solution for each problem.
  - 2.3. Explain how environment can affect swine and poultry production.
3. Determine feed sources for swine and poultry.
  - 3.1. Determine feed sources for each animal and age group depending on their need.
  - 3.2. Give the components of an ideal feed ration for each animal and age group.
4. Demonstrate simple swine and poultry management procedures.
  - 4.1. Demonstrate castration.
  - 4.2. Demonstrate immunization and administration of veterinary drugs.
  - 4.3. Demonstrate ear notching.
  - 4.4. Demonstrate how to butcher swine and dress poultry.

## II COURSE CONTENT

1. Introduction
  - a. Hunter and gathers
  - b. Domestication of animal (Beginning of animal science)
  - c. Early Husbandry
2. Swine
  - a. Breed
    - i. Selection of breed
  - b. Kinds of feed
    - i. Growth – Weaning Piglets, growers, finishers
    - ii. Sow/ gilts
    - iii. Boar
  - c. Reproduction
    - i. Anatomy
    - ii. Puberty, estrus
    - iii. Selection/ Breeding for quality and quantity (litter size)
    - iv. Gestation
    - v. Ultra sonic – pregnancy test
    - vi. Farrowing
    - vii. Artificial insemination
  - d. Disease
    - i. parasites
    - ii. nutrition and environmental related conditions
    - iii. reproductive related diseases
    - iv. communicable diseases
    - v. cross species transmissible diseases
  - e. Swine management
    - i. Feeder pig production
    - ii. Finish program
    - iii. Farrow to finish
    - iv. Purebred operations
3. Poultry
  - a. Zoological Classification
  - b. Geographical distribution
  - c. Improvements of breed
  - d. Anatomy
  - e. Feeding
    - i. Ingredients – feed
    - ii. Essential nutrients
    - iii. Digestive system
    - iv. Feeding with a purpose
  - f. Diseases
    - i. Disease of the respiratory tract
    - ii. Avian tumor disease
    - iii. Coccidiosis
    - iv. Salmonellosis
  - g. Parasites
    - i. Poultry parasites
    - ii. Internal poultry disease
    - iii. Behavioral problems

- h. Reproduction
  - i. Male reproduction system
  - ii. Female reproduction system
  - iii. Breeding physiology
  - iv. Hatchability
  - v. Brooding
- i. Broiler and layer industry
  - vi. Broiler
  - vii. Layer

**III TEXTBOOK**

Taylor, R.E. *Scientific Farm Animal Production: An Introduction to Animal Science* 9th Edition. Upper Saddle River, NJ: Prentice Hall, 2001. ISBN 9780132447362

**IV REFERENCE**

Ensminger, M.E. *Poultry Science* 3<sup>rd</sup> Edition(or latest edition). Danville, IL: Interstate, 1992. ISBN: 0-8134-292903 (Available at the COM-FSM Library).

**V REQUIRED COURSE MATERIALS**

Rubber boots  
 Rubber gloves  
 Calculator

**VI INSTRUCTIONAL MATERIALS/EQUIPMENT AND COST FOR THE COLLEGE**

Access to swine and poultry for demonstration purposes (either College farm or cooperating farm).

Long-Term Supplies \$1,100

- Castration supplies \$80
- Ear notching supplies \$80
- Poultry Coop \$500
- Exercise Pen \$100
- Veterinary Equipment \$100
- Piglet Pullers \$100
- Weighing scale \$100
- Handtools (shovels) \$50

Short-term supplies/semester

- Veterinary kits \$200

**VII METHODS OF INSTRUCTION**

Lectures, demonstrations and farm visits.

## **VIII EVALUATION**

Theoretical and practical examinations suggested.

100 – 90 = A

89 – 80 = B

79 – 70 = C

69 – 60 = D

59 – Below = F

## **IX CREDIT-BY-EXAMINATION POLICY**

None.

## **X ATTENDANCE POLICY**

College of Micronesia-FSM Attendance Policy will be applied.

## **XI ACADEMIC HONESTY POLICY**

College of Micronesia-FSM Academic Honesty Policy will be applied.