

Syllabus on AS 2203

**POULTRY PRODUCTION WITH
EMPHASIS ON PHILIPPINE
NATIVE CHICKEN**

Poultry Production with Emphasis on Commercial Production of PNC Outcomes

Course Outcomes (CO) and Relationship to Program Outcomes (PO)*															
After completing the course, the student must be able to:	PO**														
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
1. Organize the learning experiences in identifying the enterprise to engage and the possible control measures in dealing with hindrances										D					
2. Design the housing and lay-out the ranging yards for native chickens conducive for the flock and ease in the movement of caretakers										D					
3. Prepare a simplified breeding plan for the project										D					
4. Perform and apply the practical concepts in hatching eggs and brooding chicks												D			
5. Formulate and compound least-cost organic rations												D			
6. Demonstrate skills in handling feedstuffs before, during, and after compounding												D			
7. Demonstrate knowledge in diagnosing, identifying, and controlling infections through the use of phytomedicines												D			
8. Examine the collected data for efficient farm operations											D				
9. Prepare the proper costing and the possible margins for the products											D				
10. Demonstrate skill in performing established protocols from brooding, growing, and up to the marketing of Philippine native chickens												D			

*Program Outcomes

- Central Philippine University-based
 - a. Diligently and religiously strive to offer the best that they can to answer the needs of the world;
 - b. Manifest the CPU Core Values instilled with them;
- PSG in BS Agriculture
 - c. Articulate and discuss the latest developments in the specific field of practice
 - d. Effectively communicate orally and in writing using both English and Filipino;
 - e. Work effectively and independently in multi-disciplinary and multi-cultural teams;
 - f. Act in recognition of professional, social, and ethical responsibilities;
 - g. Preserve and promote "Filipino historical and cultural heritage";
 - h. Generate and share knowledge relevant to specific fields in the study of agriculture;
 - i. Formulate and implement agricultural development plans and programs;
 - j. Apply scientific methods in knowledge generation and knowledge application;
 - k. Understand and apply the concepts of agricultural productivity and sustainability in the context of national, regional, and global developments;
 - l. Engage in agricultural production and post-production activities;
 - m. Promote sound agricultural technologies to various clients and in the manpower development for agriculture;
 - n. Employ relevant tools in information technology in solving agriculture-related problems;
 - o. And, an ability to participate in the generation of new knowledge or in research and development projects.

**PO – Level: I – Introductory; E – Enabling; D – Demonstrate

Module 1: COURSE INFORMATION

Course Title	<i>Poultry Production with Emphasis on Philippine Native Chicken</i>		
Course Description	<i>Discusses different aspects of raising the Philippine native chicken from prospects, housing designs & ranging yards by lay-outing, breeding, hatchery operation, flock nutrition & health management, recordkeeping, and production protocol of growing native chicken for market</i>		
Prerequisites	<i>Animal Science 1 & Animal Science 2</i>		
Credit Units	3 units		
Business units	Lecture:	2 units	Laboratory: 3 units
Textbook	Cabarles, J. (2018). <i>Commercial Production of Organic Philippine Native Chicken</i> . Iloilo City: CPU Printing Press.		
Learning Materials	<ul style="list-style-type: none"> - Textbook - Online flipbook - Audio-video book - Recorded lectures 		
Resources Needed	<i>Connectivity, Native Chicken Production Project, Mini-Feed Mill, Mini-Phytobiotic Processing Equipment</i>		
Assessment Techniques	<i>Online and Practical Exams</i>		

<i>Program Outcome</i>	Topics	<i>Course Outcome</i>	Learning Activities
Module 2: PRODUCTION AND MARKETING ASSESSMENT			
<i>Apply scientific methods in knowledge generation and knowledge application</i>	<ul style="list-style-type: none"> ○ Raiser’s production practices <ul style="list-style-type: none"> – Gender aspects in decision-making and work-sharing – Production and utilization – Production trends over the season – Natural environment contribution to production performance ○ Marketing of native chicken products <ul style="list-style-type: none"> – Supply chain map of Philippine Native Chicken – Pricing of live native chickens ○ Prospects and hindrances of the Philippine Native Chicken Industry <ul style="list-style-type: none"> – Hindrances for the commercialization of native chicken – Investment opportunities 	<i>Organize the learning experiences in identifying the enterprise to engage and the possible control measures in dealing with hindrances</i>	<ul style="list-style-type: none"> ○ Self-learning pace through the online learning management system ○ Teacher lead-learning process through the blended form in the online and limited face-to-face interactions ○ Laboratory Activity #1. Finding the Market for Philippine Native Chicken

<i>Program Outcome</i>	Topics	<i>Course Outcome</i>	Learning Activities
Module 3: HOUSING DESIGN AND RANGING YARD			
<i>Apply scientific methods in knowledge generation and knowledge application</i>	<ul style="list-style-type: none"> ○ Production environment <ul style="list-style-type: none"> - Drainage - Tree cover - Presence of households ○ Housing designs and yards <ul style="list-style-type: none"> - Requirements <ul style="list-style-type: none"> • Ease of movement for the caretaker when inside the housing • Ventilation • Access to natural light • Flooring - Housing design for <ul style="list-style-type: none"> • Breeder stocks • Grow-out 	<i>Design the housing and lay-out the ranging yards for native chicken conducive for the flock and ease in the movement of caretakers</i>	<ul style="list-style-type: none"> ○ Self-learning pace through the online learning management system ○ Teacher lead-learning process through the blended form in the online and limited face-to-face interactions ○ Laboratory Activity #2. Survey of the Project Site and Lay-out of Housing
Module 4: BREEDING TECHNIQUES			
<i>Apply scientific methods in knowledge generation and knowledge application</i>	<ul style="list-style-type: none"> ○ Anatomy of the chicken ○ Plumage color ○ Plumage color pattern ○ Feather distribution ○ Feather morphology ○ Comb type ○ Earlobe color ○ Skeletal variants ○ Color of the iris ○ Shank color ○ Head shape ○ Breast and body shape ○ Body measurement ○ Genetic groups of native chickens in the Philippines <ul style="list-style-type: none"> - Larger genetic group - Smaller genetic group ○ Breeding techniques <ul style="list-style-type: none"> - Breeding system - Breeding program - Cultural management of breeding stocks 	<i>Prepare a simplified breeding plan for the project</i>	<ul style="list-style-type: none"> ○ Self-learning pace through the online learning management system ○ Teacher lead-learning process through the blended form in the online and limited face-to-face interactions ○ Laboratory Activity #3. Evaluate the Sample Plan as Basis for the Development of Personalized Breeding Plan
Module 5: PRACTICAL CONCEPTS IN HATCHING EGGS AND BROODING OF CHICKS			
<i>Engage in agricultural production and post-production activities</i>	<ul style="list-style-type: none"> ○ Hatching native chicken eggs <ul style="list-style-type: none"> - Natural incubation - Artificial incubation 	<i>Perform and apply the practical concepts in hatching eggs and brooding of chicks</i>	<ul style="list-style-type: none"> ○ Self-learning pace through the online learning management system

<i>Program Outcome</i>	Topics	<i>Course Outcome</i>	Learning Activities
	<ul style="list-style-type: none"> - <i>Handling of eggs for incubator/setter</i> - <i>Incubating and candling of eggs</i> - <i>Handling of fertile eggs from setter to hatcher</i> - <i>Interpretation of common problems in hatching eggs</i> o Sourcing of one-day-old chicks <ul style="list-style-type: none"> - <i>Management of newly arrived one-day-old chicks of native chicken</i> o Brooding of chicks of native chicken <ul style="list-style-type: none"> - <i>Litter materials</i> - <i>Temperature</i> - <i>Access to feeds, drinking water, and lighting</i> - <i>Ventilation and humidity</i> 		<ul style="list-style-type: none"> o Teacher lead-learning process through the blended form in the online and limited face-to-face interactions o Laboratory Activity #4. <i>Assessment of the Efficiency of Brooder Designs in Terms of Cost and Survival Rate of Chicks</i>
Module 6: FLOCK NUTRITION MANAGEMENT			
<i>Engage in agricultural production and post-production activities</i>	<ul style="list-style-type: none"> o Naturally-occurring feedstuffs o Ingesta of free-range native chicken o Formulating and compounding supplemental rations <ul style="list-style-type: none"> - <i>Characteristics of good quality rations</i> - <i>Functions of rations</i> - <i>Supplemental rations for native chicken</i> o Amino acid profile of selected feedstuffs o Handling and storing of feedstuffs and compounded rations <ul style="list-style-type: none"> - <i>Handling and storage of feedstuffs and rations</i> o Feed milling <ul style="list-style-type: none"> - <i>Home-based feed milling</i> - <i>Community-based feed milling</i> 	<p><i>Formulate and compound least-cost organic rations</i></p> <p><i>Demonstrate skills in handling feedstuffs before, during, and after compounding</i></p>	<ul style="list-style-type: none"> o Self-learning pace through the online learning management system o Teacher lead-learning process through the blended form in the online and limited face-to-face interactions o Laboratory Activity #5. <i>Familiarization with the Basic Procedures in Formulating and Compounding Feeds for Native Chicken</i>

<i>Program Outcome</i>	Topics	<i>Course Outcome</i>	Learning Activities
Module 7: FLOCK HEALTH MANAGEMENT			
<i>Engage in agricultural production and post-production activities</i>	<ul style="list-style-type: none"> ○ The practical method of diagnosing diseases <ul style="list-style-type: none"> - <i>Examine the appearance of chicken</i> - <i>Evaluate the places where the chickens commonly range or stray</i> - <i>Check the housing and equipment used</i> - <i>History of disease occurrence</i> - <i>Life stages at which native chickens get infected</i> - <i>Post-mortem inspection</i> - <i>Summarize your observations</i> ○ Disease identification, prevention, and control <ul style="list-style-type: none"> - <i>Newcastle disease</i> - <i>Chronic respiratory diseases</i> - <i>Avian malaria</i> - <i>Fowl pox</i> - <i>Fowl cholera</i> - <i>Avian influenza</i> - <i>Infectious coryza</i> - <i>Pendulous crop</i> - <i>Internal parasites</i> ○ Herbal plants for native chicken health management <ul style="list-style-type: none"> - <i>Aloe vera</i> - <i>Chili hot pepper</i> - <i>Garlic</i> - <i>Ginger</i> - <i>Onion</i> - <i>Turmeric</i> - <i>Oregano</i> - <i>Red seaweed</i> - <i>Other herbal plants</i> ○ Equipment for the processing of phytobiotics into <ul style="list-style-type: none"> - <i>Meal form</i> - <i>Pure juice extracts</i> - <i>Tea form</i> - <i>Tablet</i> - <i>Capsule</i> 	<i>Demonstrate knowledge in diagnosing, identifying, and controlling infections through the use of phytomedicines</i>	<ul style="list-style-type: none"> ○ Self-learning pace through the online learning management system ○ Teacher lead-learning process through the blended form in the online and limited face-to-face interactions ○ Laboratory Activity #6. Microbial Sensitivity Tests of Processed Phytomedicines

<i>Program Outcome</i>	Topics	<i>Course Outcome</i>	Learning Activities
Module 8: RECORDKEEPING FOR EFFICIENT FARM OPERATIONS			
<i>Understand the concepts of agricultural productivity and sustainability in the context of national, regional, and global developments</i>	<ul style="list-style-type: none"> ○ Daily records of activities ○ Disease occurrence record ○ Feedstuff processing and costing ○ Feed milling and costing ○ Weekly feed consumption report ○ Sales report ○ Income and expense report ○ Pricing of primary products 	<i>Examine the collected data for efficient farm operations</i>	<ul style="list-style-type: none"> ○ Self-learning pace through the online learning management system ○ Teacher lead-learning process through the blended form in the online and limited face-to-face interactions ○ Laboratory Activity #7. Examining the Efficiency of Native Chicken Farm Operation through Records
Module 9: ECONOMICS OF PRODUCING NATIVE CHICKEN PRODUCTS			
<i>Understand the concepts of agricultural productivity and sustainability in the context of national, regional, and global developments</i>	<ul style="list-style-type: none"> ○ Production of native chicken eggs ○ Production of one-day-old chicks of native chicken ○ Production of native chicken for market 	<i>Prepare the proper costing and the possible margins for the products</i>	<ul style="list-style-type: none"> ○ Self-learning pace through the online learning management system ○ Teacher lead-learning process through the blended form in the online and limited face-to-face interactions
Module 10: COMMERCIAL PRODUCTION OF NATIVE CHICKEN TO BE DRESSED			
<i>Engage in agricultural production and post-production activities</i>	<ul style="list-style-type: none"> ○ Brooder age <ul style="list-style-type: none"> – Cultural management – Commonly occurring infections – General recommendation to prevent infections – Herbal plants for possible control of infections – Alternative sources of vitamins and minerals ○ Starter age <ul style="list-style-type: none"> – Cultural management – Commonly occurring diseases – General recommendations to prevent internal parasites – Herbal for possible control of parasites 	<i>Demonstrate skills in performing established protocols from brooding growing and up to the marketing of Philippine native Chicken</i>	<ul style="list-style-type: none"> ○ Self-learning pace through the online learning management system ○ Teacher lead-learning process through the blended form in the online and limited face-to-face interactions ○ This laboratory activity will begin after a month of lectures. Briefing on what should be done be given prior to implementing this season long exercise. Laboratory Activity #7. Growing Philippine Native Chicken for Market

<i>Program Outcome</i>	Topics	<i>Course Outcome</i>	Learning Activities
	<ul style="list-style-type: none"> - <i>Alternative sources of vitamins and minerals</i> ○ <i>Grower age</i> - <i>Cultural management</i> - <i>Commonly occurring diseases</i> - <i>General recommendations to prevent diseases or infections</i> - <i>Alternative sources of vitamins and minerals</i> ○ <i>Marketing</i> 		