POULTRY PRODUCTION (CHICKEN)

TECHNICAL-PROFESSIONAL

Grade 12

Three-Term Budget Of Work (BOW) for Learning Competencies

TECHNICAL-PROFESSIONAL
AGRI-FISHERY BUSINESS AND FOOD INNOVATION
Grade 12

Three-Term Budget of Work
For Learning Competencies

Please note that each Tech-Pro elective is completed within one term if delivered at Grade 12.

Elective	**Poultry Production (Chicken)**
Prerequisite	**None**

Performance Standard	The learners perform pre-operational activities and maintenance of farm facilities in poultry production-chicken in accordance with Occupational Safety and Health Standards.
Content Standard	The learners demonstrate understanding on the overview of poultry production-chicken, pre-operational activities, farm input requirements, and maintenance of farm facilities for poultry production-chicken.

Week	Learning Competency	Suggested Activities
1	• Discuss the overview of poultry production-chicken	• **Importance of Chicken Production** ○ Source of high-quality protein (meat and eggs) ○ Provides livelihood for small-scale and commercial farmers ○ Fast-growing and short production cycle ○ Requires relatively small capital compared to large livestock ○ Contributes to food security

Week	Learning Competency	Suggested Activities
		○ In the Philippines, the poultry industry is supported and regulated by agencies such as the Department of Agriculture to ensure food safety and sustainable production. • **Types of Chicken Production** ○ Broiler Production ■ Chickens raised for meat ■ Fast growth (harvested in about 35–45 days) ■ Example: Cobb 500 ○ Layer Production ■ Chickens raised for egg production ■ Start laying eggs at 18–20 weeks ■ Example: Hy-Line Brown ○ Dual-Purpose Breeds ■ Used for both meat and eggs ■ Example: Rhode Island Red • **Production Systems** ○ Backyard/Free-Range System ■ Small-scale production ■ Birds roam freely ■ Lower capital but lower production output ○ Semi-Intensive System

Week	Learning Competency	Suggested Activities
		■ Combination of free-range and confinement ■ Controlled feeding and housing ○ Intensive/Commercial System ■ Large-scale production ■ Birds kept in controlled housing ■ High production efficiency • **Basic Requirements in Chicken Production** ○ Housing ■ Clean, well-ventilated, and dry ■ Protection from extreme weather and predators ■ Adequate space per bird ○ Feeding ■ Balanced diet (starter, grower, finisher for broilers; chick, grower, layer feeds for layers) ■ Clean and fresh water at all times ○ Health Management ■ Vaccination program ■ Biosecurity measures ■ Proper sanitation and waste disposal ○ Record Keeping ■ Feed consumption

Week	Learning Competency	Suggested Activities
		■ Mortality rate ■ Egg production (for layers) ■ Expenses and income • **Stages of Production** ○ Brooding Stage (0–2 weeks) ■ Provide heat and close monitoring ○ Growing Stage ■ Proper nutrition and space management ○ Finishing/Laying Stage ■ Meat production (broilers) or egg production (layers) • **Common Challenges** ○ Disease outbreaks (e.g., Newcastle disease, avian influenza) ○ High feed costs ○ Climate stress ○ Market price fluctuations
	• Perform pre-operational activities in poultry production chicken in accordance with the Environmental Compliance Certificate	**Pre-Operational Activities:** • **Site Preparation** ○ Choose location away from residential areas and water sources ○ Ensure proper drainage system ○ Install waste disposal facilities • **Secure Legal Requirements**

Week	Learning Competency	Suggested Activities
		○ Obtain ECC and barangay clearance ○ Comply with local zoning regulations ○ Prepare environmental management plan • **Poultry House Preparation** ○ Clean and disinfect poultry house ○ Repair cracks, leaks, and damaged materials ○ Install feeders, drinkers, and lighting ○ Check ventilation system • **Biosecurity Measures** ○ Install footbaths with disinfectant ○ Provide protective clothing ○ Limit farm visitors ○ Set up perimeter fencing • **Waste Management Setup** ○ Prepare manure storage area ○ Provide composting facility ○ Ensure proper wastewater drainage

Week	Learning Competency	Suggested Activities

2	• Discuss farm inputs in poultry production-chicken	• **Farm Inputs in Poultry Production – Chicken**
		  ○ Farm inputs are resources needed to operate a poultry farm efficiently.
		• **Biological Inputs**
		  ○ Day-old chicks (broilers or layers)
		  ○ Vaccines and medications
		• **Feed Inputs**
		  ○ Starter feed
		  ○ Grower feed
		  ○ Finisher feed (broilers)
		  ○ Layer mash (layers)
		• **Housing and Equipment**
		  ○ Poultry house
		  ○ Feeders and drinkers
		  ○ Brooders and heat lamps
		  ○ Ventilation system
		  ○ Egg trays and crates
		• **Utilities**
		  ○ Clean water supply
		  ○ Electricity (for lighting and ventilation)
		• **Labor**
		  ○ Skilled and trained workers
		• **Capital**
		  ○ Investment for chicks, feeds, medicines, utilities, and maintenance

Week	Learning Competency	Suggested Activities

	• Perform maintenance of the poultry house and facilities according to ethical and standard practices	• **Daily Maintenance**
		  ○ Remove wet litter
		  ○ Clean feeders and drinkers
		  ○ Check water supply
		  ○ Observe bird behavior and health
		  ○ Collect eggs regularly (layers)
		• **Weekly Maintenance**
		  ○ Disinfect equipment
		  ○ Inspect ventilation system
		  ○ Repair damaged wires or structures
		• **Waste Management**
		  ○ Remove manure regularly
		  ○ Compost manure properly
		  ○ Prevent odor and fly infestation
		• **Ethical Practices**
		  ○ Provide adequate space per bird
		  ○ Avoid overcrowding
		  ○ Ensure humane handling
		  ○ Provide proper nutrition and clean water
		  ○ Follow vaccination schedule
		• **Record Keeping**
		  ○ Mortality rate
		  ○ Feed consumption
		  ○ Egg production
		  ○ Medication records
		  ○ Expenses and income

Performance Standard	The learners demonstrate understanding the principles in poultry breeds and strain in the Philippines and health and care management in poultry production-chicken.
Content Standard	The learners perform flock selection and culling, brooding of chicks and beak trimming in accordance with Animal Welfare Act

Week	Learning Competency	Suggested Activities
3	• Perform flock selection and culling of chicken.	• **Flock Selection and Health Management Introduction to Flock Selection** ○ **Objective:** Identify characteristics of a healthy and productive chicken. ○ **Activities:** ■ Motivational activity: Show pictures of healthy vs unhealthy chickens. ■ Lecture-discussion on characteristics of good layers and broilers. ■ Group activity: List signs of healthy birds. ■ Short quiz (Identification). • **Performing Flock Selection** ○ **Objective:** Demonstrate proper selection of chickens. ○ **Activities:** ■ Teacher demonstration on selecting birds based on: ● Body weight

Week	Learning Competency	Suggested Activities
		● Feather condition ● Comb color ● Activity level ■ Students practice identifying good and poor-quality birds. ■ Performance checklist assessment. ● **Culling of Chickens** ○ **Objective:** Explain and perform proper culling. ○ **Activities:** ■ Lecture on reasons for culling (low production, sickness, deformities). ■ Discussion on the economic importance of culling. ■ Demonstration (simulation) of safe and humane culling. ■ Reflection writing: Why is culling necessary?
Suggested Performance Tasks	**Individual Task:** ● **Breed Profiling Fact Sheets** ○ **Task Description:** Each student is randomly assigned one commercial strain of broiler (e.g., Cobb 500, Ross 308) or layer (e.g., Lohmann Brown, Hy-Line W-36). They must create a highly concise "Farm Pocket Guide" or fact sheet. ● **Chemical Disinfection Calculator** ○ **Task Description:** Given the dimensions of a mock poultry house (e.g., $10\text{{	

	meters} \times 50\text{ meters}), each student must individually calculate the total floor and wall surface area. They will then determine the exact volume of water and broad-spectrum disinfectant chemical needed based on a provided product label mixing ratio.
	• **Pre-Operational Activities and Environmental Compliance (ECC)**
	  ○ **Expected Output:** A completed calculation worksheet demonstrating step-by-step mathematical solutions for farm sanitation preparation.
	• **Farm Inputs in Poultry Production**
	  ○ **Feed Tag Analysis**
	  ○ **Task Description:** Hand each student a physical or printed feed tag from different commercial bags (Broiler Booster, Broiler Finisher, Chick Starter, Layer Phase 1). Students must analyze the nutrient breakdown.
	• **Maintenance of Poultry Houses and Facilities**
	  ○ **Curtain Adjustment Simulation Logic**
	  ○ **Task Description:** Students face written or digital scenario prompts depicting changing farm weather patterns (e.g., *"A sudden heavy rainstorm hits the farm from the East at 2:00 PM,"* or *"Ammonia levels reach 25 ppm during a humid morning"*). The student writes a standard operating protocol (SOP) response explaining how they would manipulate natural open-sided curtains or closed-house fan settings to fix the issue
	• **Laboratory Bio-Security Hazard Walk**
	  ○ **Task Description:** Conduct a practical walk around the school poultry shed or a simulated facility. The group must hunt for structural and biosecurity hazards (e.g., torn wire netting, wet litter spots around water lines, expired footbath solutions, or signs of rodent burrowing).
	• **Flock Selection and Culling of Chickens**
	  ○ **Culling Identification Live Drill**
	  ○ **Task Description:** Using physical, live hens in the layer laboratory (or highly detailed, randomized photo-cards of bird physical conditions), each student undergoes an individual practical test. They must handle a bird and identify its physical productivity markings.

	Group Task:
	• **The Production Cycle Timeline Mapping**
	  ○ **Task Description:** In groups of 4 to 5, students collaborate to map out the entire lifecycle timeline of a poultry farm, comparing a broiler operation to a layer operation side-by-side.
	• **ECC Compliance Audit Simulation**
	  ○ **Task Description:** Establish a simulated "DENR-EMB Inspection Team" and a "Farm Management Team" within student groups. Using a mock blueprint of a proposed poultry farm near a local community, groups must evaluate if the farm layout complies with standard Environmental Compliance Certificate (ECC) buffer zones, waste infrastructure, and water runoff channels.
	• **Farm Procurement & Logistics Blueprint**
	  ○ **Task Description:** Groups are tasked with setting up the initial inputs for an incoming flock of 1,000 day-old chicks. They must source market costs and compute the total quantities needed for biological inputs (chicks), nutritional inputs (feed bags by phase), veterinary inputs (vaccines), and operational media (bags of rice hull litter).
	• **The Broiler Selection Classification System**
	  ○ **Task Description:** Working in small farm teams, students are given a mock crate of broilers at Day 30 showing varied physical states (simulated via descriptions or dummy models). The team must quickly classify the birds into three treatment groups: *Premium Market Ready*, *Isolate/Treat*, or *Humane Cull (due to severe Ascites or leg deformities)*.

Performance Standard	The learners perform flock selection and culling, brooding of chicks and beak trimming in accordance with Animal Welfare Act.
Content Standard	The learners demonstrate understanding the principles in poultry breeds and strain in the Philippines and health and care management in poultry production-chicken.

Week	Learning Competency	Suggested Activities

4	• Discuss health and care management in poultry production -chicken	• **Health and Care Management Overview**
		  ○ **Objective:** Discuss poultry health management practices.
		  ○ **Activities:**
		  ■ Lecture on:
		  • Vaccination programs
		  • Common poultry diseases (Newcastle, fowl pox, avian influenza)
		  • Biosecurity measures
		  ■ Group task: Create a vaccination schedule.
		  ■ Quiz (Multiple choice).
		• **Health Management and Brooding**
		  ○ **Day 5: Disease Prevention and Biosecurity**
		  ○ **Objective:** Apply preventive measures.
		  ○ **Activities:**
		  ■ Demonstration of footbath preparation.
		  ■ Proper disinfection of poultry house.
		  ■ Install "No Unauthorized Entry" signage.
		  ■ Group activity: Draft a simple biosecurity plan.
		• **Proper Feeding and Water Management**
		  ○ **Objective:** Apply correct feeding practices.
		  ○ **Activities:**

Week	Learning Competency	Suggested Activities
		■ Identify types of feeds (starter, grower, finisher). ■ Demonstration of proper feeder height adjustment. ■ Water sanitation practice. ■ Worksheet activity.
5	• Perform brooding of chicks	• **Introduction to Brooding of Chicks** ○ **Objective:** Explain importance of brooding. ○ **Activities:** ■ Lecture on brooding period (0–14 days). ■ Identify brooding equipment (brooder, heat lamp, thermometer). ■ Video viewing of brooding setup. ■ Recitation • **Perform Brooding Setup** ○ **Objective:** Demonstrate proper brooding management. ○ **Activities:** ■ Set up a broader area. ■ Install a heat lamp and check the temperature. ■ Arrange chick guards, feeders, and drinkers. ■ Monitor chick behavior for proper temperature.

Week	Learning Competency	Suggested Activities
		■ Performance evaluation using a checklist.
	• Perform beak trimming following Animal Welfare Act	• **Beak Trimming and Animal Welfare** ○ Introduction to Beak Trimming ○ **Objective:** Explain purpose of beak trimming. ○ **Activities:** ■ Lecture on reasons for beak trimming (prevent cannibalism, feed wastage). ■ Discuss proper age for trimming. ■ Class discussion on risks of improper trimming. • **Animal Welfare Act** ○ **Objective:** Understand legal and ethical standards.Beak trimming must follow the Animal Welfare Act of 1998 (as amended by RA • **Beak Trimming Practice** ○ **Objective:** Perform proper and humane beak trimming. ○ **Activities:** 1. Quick review about: ○ Purpose of beak trimming ○ Proper age for trimming ○ Rules under the Animal Welfare Act of 1998

Week	Learning Competency	Suggested Activities
		2. .Teacher demonstration of correct trimming procedure. 3. Students practice (actual or simulation): ○ Properly hold the chicken ○ Trim only the tip of the beak ○ Observe the bird after trimming 4. Short discussion: Why must trimming be done carefully? ○ Output: Performance checklist.

Performance Standard	The learners perform growing of chicken-broilers and layers and collection of eggs according to enterprise production requirements.
Content Standard	The learners demonstrate understanding the principle in growing broilers and layers, pre-laying and laying activities of ready to lay-pullets, poultry-chicken breeding activities.

Week	Learning Competency	Suggested Activities
6	• Perform growing of chicken-broilers/layers	• **Growing of Broilers and Layers** ○ **Introduction to Growing Stage** ○ **Objective:** Explain the growing stage of broilers and layers. **Activities:** ■ Lecture on broiler vs layer growing period.

Week	Learning Competency	Suggested Activities
		■ Identify feed types (starter, grower, finisher). ■ Short class discussion. • **Feeding Management** ○ **Objective:** Perform proper feeding. ○ **Activities:** ■ Demonstrate correct feed measurement. ■ Adjust feeder height. ■ Students practice feeding. ■ Observation checklist. • **Water and Ventilation Management** ○ **Objective:** Maintain proper environment. ○ **Activities:** ■ Clean drinkers. ■ Check the water supply. ■ Inspect ventilation and lighting. ■ Group discussion. • **Monitoring Growth** ○ **Objective:** Monitor bird performance. ○ **Activities:** ■ Weigh sample birds. ■ Record body weight. ■ Discuss signs of healthy growing chickens. ■ Simple quiz.

Suggested Performance Tasks	**Individual Task:** • Write a reflection on the importance of biosecurity in poultry production. • Demonstrate proper cleaning and sanitation procedures in poultry facilities. • Draw and label the parts of a brooding area. • Monitor and record brooding temperature for several days. • Demonstrate proper feeding and watering of chicks. • Explain the importance of humane handling during beak trimming. • Demonstrate proper restraint and handling of chickens. • Identify signs of stress in poultry during handling. • Make a reflection paper on responsible poultry management. **Group Task:** • Create a poster on poultry disease prevention and biosecurity measures. • Develop a Poultry Health Management Plan for a small poultry farm. • Role-play proper handling and care of sick poultry. • Construct a model brooding area using available materials. • Perform an actual brooding setup demonstration. • Create a brooding management schedule for the first two weeks of chick growth. • Role-play correct and incorrect beak trimming practices. • Develop a safety and sanitation protocol for beak trimming activities. • Present the provisions of the Animal Welfare Act related to poultry production. • Create a video or live demonstration on humane beak trimming. • Prepare a poster campaign promoting animal welfare in poultry production

Performance Standard	The learners perform growing of chicken-broilers and layers and collection of eggs according to enterprise production requirements.
Content Standard	The learners demonstrate understanding the principle in growing broilers and layers, pre-laying and laying activities of ready to lay-pullets, poultry-chicken breeding activities.

Week	Learning Competency	Suggested Activities
7	• Discuss pre-laying and laying activities of ready-to-lay pullets	• **Pre-Laying, Laying & Breeding** ○ **Pre-Laying Activities** ○ **Objective:** Discuss management of ready-to-lay pullets. **Activities:** ■ Lecture on 16–18 weeks preparation. ■ Install nest boxes. ■ Increase calcium in feeds. ■ Class discussion. • **Laying Management** ○ **Objective:** Explain laying stage management. ○ **Activities:** ■ Discuss lighting programs. ■ Proper feeding for layers. ■ Identify signs of egg production. ■ Worksheet activity.
	• Discuss breeding activities according to the enterprise	• **Introduction to Breeding** ○ **Objective:** Discuss breeding basics. ○ **Activities:**

Week	Learning Competency	Suggested Activities
	production requirements	■ Lecture on selection of breeder chickens. ■ Discuss male-to-female ratio. ■ Group recitation. • **Breeding Activities** ○ **Objective:** Explain breeding management. ○ **Activities:** ■ Identify healthy breeders. ■ Discuss egg fertility. ■ Record breeding performance. ■ Short quiz.
8	• Perform harvest and post-harvest of eggs according to standard procedure	• **Egg Harvesting & Post-Harvest** ○ **Egg Collection** ○ **Objective:** Perform proper egg harvesting. ○ **Activities:** ■ Demonstrate proper egg handling. ■ Collect eggs gently. ■ Sort cracked and clean eggs. • **Egg Cleaning and Grading** ○ **Objective:** Perform post-harvest handling. ○ **Activities:** ■ Dry cleaning of eggs. ■ Grade eggs by size (small, medium, large). ■ Record total production.

Week	Learning Competency	Suggested Activities

		• **Egg Storage and Packaging**
		  ○ **Objective:** Store eggs properly.
		  ○ **Activities:**
		  ■ Demonstrate correct storage temperature.
		  ■ Arrange eggs in trays.
		  ■ Label date of production.
		  ■ Group activity: Prepare a simple marketing plan.

Performance Standard	The learners perform dressing of chicken, marketing of poultry products, and evaluation of records for production expansion.
Content Standard	The learners demonstrate understanding of the principles on harvesting and post-harvesting activities of poultry-chicken based on the industry practices.

Week	Learning Competency	Suggested Activities

9	• Discuss the harvesting and post-harvesting activities of broiler	• **Harvesting of Broilers (Overview)**
		  ○ Discuss market age (35–45 days).
		  ○ Identify signs that broilers are ready for harvest.
		  ○ Class discussion.
		• **Pre-Harvest Preparation**
		  ○ Discuss feed withdrawal (8–12 hours before harvest).

Week	Learning Competency	Suggested Activities
		○ Prepare crates and transport materials. ○ Review biosecurity practices. • **Catching and Handling Broilers** ○ Demonstrate proper catching method. ○ Practice proper handling to avoid injury. ○ Teacher observation. • **Post-Harvest Handling** ○ Discuss transport procedures. ○ Explain the importance of minimizing stress. ○ Short quiz.
	• Perform dressing of chicken	• **Introduction to Dressing of Chicken** ○ Discuss steps in dressing: ■ Slaughtering ■ Scalding ■ Defeathering ■ Evisceration ■ Safety reminders. • **Perform Dressing (Demonstration)** ○ Teacher demonstration of proper dressing. ○ Emphasize sanitation and hygiene. ○ Students observe and take notes. • **Perform Dressing (Student Practice)** ○ Students perform dressing (actual or simulation). ○ Follow proper sanitation procedures. ○ Performance checklist.

Week	Learning Competency	Suggested Activities

10	• Perform marketing of poultry product based on market demand	• **Introduction to Marketing**
		  ○ Discuss market demand.
		  ○ Identify target customers (wet market, supermarkets, restaurants).
		  ○ Group discussion
		• **Pricing and Promotion**
		  ○ Discuss pricing strategies.
		  ○ Compute simple cost and selling price.
		  ○ Create a simple marketing plan.

	• Evaluate records of poultry products for the expansion of production.	• **Record Keeping in Poultry Production**
		  ○ **Identify important records:**
		  ○ **Production record**
		  ○ **Sales record**
		  ○ **Expense record**
		  ○ **Sample record analysis.**
		• **Evaluating Records for Expansion**
		  ○ Compute profit and loss (simple computation).
		  ○ Discuss when to expand production.
		  ○ Group activity: Suggest expansion plan.
		• **Culminating Activity**
		  ○ Practical test (harvesting or dressing steps).
		  ○ Short written quiz.

Week	Learning Competency	Suggested Activities
		○ Reflection: Importance of proper management in poultry business.

Suggested Performance Tasks	**Individual Task:** • Identify the characteristics of ready-to-lay pullets. • Prepare a feeding schedule for pre-laying and laying pullets. • Record daily egg production using a sample monitoring sheet. • Prepare a breeding record form. • Differentiate natural mating and artificial insemination. • List factors affecting breeding efficiency in poultry. • Record harvested eggs using a production log sheet. • Identify common causes of egg damage during handling. • Identify tools and equipment used during harvesting. • Make a reflection paper on proper post-harvest management practices. • Perform proper cleaning and sanitation during dressing. • Arrange the steps in chicken dressing in the correct sequence. • Observe safety precautions while dressing chicken. **Group Task:** • Create a management plan for ready-to-lay pullets. • Develop a breeding program suitable for a poultry enterprise. • Create a chart showing breeding procedures and schedules. • Perform actual egg harvesting and sorting procedures. • Create a flowchart of egg post-harvest handling procedures. • Demonstrate proper catching and handling of broilers. • Create a harvesting schedule for broiler production. • Develop a post-harvest handling plan for broilers.

	• Conduct an actual demonstration of chicken dressing procedures. • Create a flowchart of the dressing process. • Prepare a sanitation and waste disposal plan for poultry dressi