



Republic of the Philippines
DEPARTMENT OF EDUCATION



K to 12 BASIC EDUCATION CURRICULUM

TECHNOLOGY AND LIVELIHOOD EDUCATION

CURRICULUM GUIDE

Exploratory Course on

AGRICULTURAL CROP PRODUCTION

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

**AGRICULTURE / FISHERY – AGRICULTURAL CROP PRODUCTION
(Exploratory)**

Content Standard	Performance Standard	Learning Competencies	Project/ Activities	Assessment	Duration
Lesson 1:PREPARING CONSTRUCTION MATERIALS AND TOOLS					
<p><i>Demonstrate understanding of:</i></p> <ul style="list-style-type: none"> • Farm tools <ul style="list-style-type: none"> ➤ Power tools ➤ Handheld tools • Defects and remedies • Farm tool safety 	<ol style="list-style-type: none"> 1. Appropriate farm tools are identified according to use. 2. Farm tools are checked for faults. 3. Appropriate tools are safely used according to job requirements and manufacturers' conditions. 	LO1. Select and use farm tools.	<ol style="list-style-type: none"> 1. Demonstrate the use of farm tools in: <ul style="list-style-type: none"> ○ land preparation ○ cultivation ○ plant propagation ○ harvesting. 2. Demonstrate skills in using a rake 	<ul style="list-style-type: none"> • Written test • Performance Test 	5 hours
<ul style="list-style-type: none"> • Manual of farm equipment and specifications • Parts and functions of equipment • Pre-operation and check-up • Safety practices during operations of farm equipment 	<ol style="list-style-type: none"> 1. Appropriate farm equipment and facilities are identified. 2. Instructional manual of farm equipment are carefully read prior to operation. 3. Pre-operation check-up is conducted in line with manufacturers' manual. 4. Faults in farm equipment and facilities are identified and reported in line with farm procedures. 5. Farm equipment are used according to its function. 	LO2. Select and operate farm equipment.	<ol style="list-style-type: none"> 1. Operation of a farm equipment 2. Making a scrapbook of pictures of farm equipment and writing down the functions of the farm equipment. 	<ul style="list-style-type: none"> • Written test • Performance Test 	4 hours

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<ul style="list-style-type: none"> • Preventive maintenance <ul style="list-style-type: none"> ➤ Safety measures and practices in cleaning and storing for different farm tools, equipment and facilities. ➤ Upkeep of equipment 	<ol style="list-style-type: none"> 1. Tools and equipment are cleaned immediately. 2. Routine check-up and maintenance are performed. 3. Farm tools and equipment are regularly sharpened and oiled from time to time. 	LO3.Perform preventive maintenance.	<ol style="list-style-type: none"> 1. Creating forms for monitoring the preventive maintenance <ul style="list-style-type: none"> ○ Making a checklist of the conditions of the tools and equipment. ○ Doing regular inspection of the tools and the cabinet/storing places. ○ Doing an inventory of tools and equipment before and after use. 2. Demonstrate skills on sharpening tools 	<ul style="list-style-type: none"> • Written test • Performance Test 	4 hours
Lesson 2: PERFORMING ESTIMATION AND BASIC CALCULATION					
<ul style="list-style-type: none"> • Farm Inputs • Labor requirement in: <ul style="list-style-type: none"> ○ Land preparation ○ Planting ○ Plant care • Estimating farm inputs and labor requirements 	<ol style="list-style-type: none"> 1. Job requirements are identified from written or oral communications. 2. Quantities of materials and resources required to complete a work task are estimated. 3. Time needed to complete a work activity is estimated. 4. Accurate estimates for work completion are made. 5. Estimates of materials and resources are reported to appropriate person. 	LO1. Perform estimation.	1. Estimating farm inputs and labor requirements	<ul style="list-style-type: none"> • Written Test • Performance test 	6 hours

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<ul style="list-style-type: none"> • Perform calculation • Systems of measurement • Units of measurement • Conversion of units • Fractions and decimals • Percentages and ratios 	<ol style="list-style-type: none"> 1. Calculations to be made are identified according to job requirements. 2. Correct method of calculation is determined. 3. Systems and units of measurement to be followed are ascertained. 4. Calculations needed to complete work task are performed using the four basic mathematical operations. 5. Appropriate operations are used to comply with the instruction. 6. Result obtained is reviewed and thoroughly checked. 	<p>LO2.Perform basic workplace calculations.</p>	<ol style="list-style-type: none"> 1. Project proposal should include the following: <ul style="list-style-type: none"> ○ Preparing the operating statement and cash flow. ○ Computing for the total sales, total expenses and net profit or net loss. ○ Computing fertilizer amount of fertilizer 	<ul style="list-style-type: none"> • Written Test • Performance test 	<p>5 hours</p>
<p>Lesson 3: INTERPRETING PLANS AND DRAWINGS</p>					
<p><i>Demonstrate understanding of/on:</i></p> <ul style="list-style-type: none"> • Farm plans and layout • Planting systems in crop production • Farm layouts • Government Plans • Crops arrangement 	<ol style="list-style-type: none"> 1. Farm plans and layout are designed according to crop grown. 2. Planting systems, and practices are strictly followed according to approved cultural practices. 	<p>LO1.Layout Garden Plots.</p>	<ol style="list-style-type: none"> 1. Prepare an ideal farm/field plan& layout. 2. Interpret a field layout, sketch and plan. 3. Demonstrate proper planting based on field/farm plan. 	<ul style="list-style-type: none"> • Written Test • Performance test 	<p>4 hours</p>

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<ul style="list-style-type: none"> • Lay-out plan of irrigation system • Types of irrigation system • Essential features of a plan • Different design of irrigation systems 	<ol style="list-style-type: none"> 3. Irrigation system plan is interpreted according to established procedures. 4. Different designs of irrigation systems are enumerated standard procedures. 	LO2. Interpret irrigation plan and design.	<ol style="list-style-type: none"> 1. Sketch a plan on irrigation system 2. Create a miniature irrigation canal. 	<ul style="list-style-type: none"> • Written Test • Performance test 	4 hours
Lesson 4: APPLYING SAFETY MEASURES IN FARM OPERATIONS					
<ul style="list-style-type: none"> • Applying safety measures • Hazards, risk and exposure in the farm • Farm works that involves using chemicals • Personal protective equipment (PPE) used in farms • Basic first aid • Farm emergency procedures regarding 	<ol style="list-style-type: none"> 1. Safety measures are applied based on work requirement and farm procedures. 2. Tools and materials are utilized in accordance with specification and procedures. 3. Outfits are worn in accordance with farm requirements. 4. Shelf life and or expiration of materials are checked against manufacturer's specifications effectively. 5. Hazard in the workplace are identified and reported in accordance with farm 	LO1. Apply appropriate safety measures while working in farm.	<ol style="list-style-type: none"> 1. Conducting student reporting on hazards in the farm. 2. Demonstrating proper wearing of PPE. 	<ul style="list-style-type: none"> • Written Test • Performance test 	4 hours

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safety working environment	guidelines.				
<ul style="list-style-type: none"> • Cleaning, storing and waste management • Procedure in cleaning and storing outfits • Technique in storing materials and chemicals • Government requirement regarding farm waste disposal • Waste management system (FPA laws, DENR laws, etc.) 	<ol style="list-style-type: none"> 1. Used outfits are cleaned and stored in line with farm procedure. 2. Unused materials are labeled and stored according to manufacturer's recommendation and farm requirements. 3. Waste materials are disposed according to manufacturers, government and farm requirements. 	LO2. Safe keep/ dispose tools, materials and outfit.	<ol style="list-style-type: none"> 1. Making posters/drawings pertaining to proper disposal of waste materials. 2. Conducting slogan making on the proper use of tools and equipment. 	<ul style="list-style-type: none"> • Written test • Performance test 	4 hours
					40 hrs.