



Republic of the Philippines
DEPARTMENT OF EDUCATION



K to 12 BASIC EDUCATION CURRICULUM

TECHNOLOGY AND LIVELIHOOD EDUCATION

CURRICULUM GUIDE

**Exploratory Course on
TILES SETTING**

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

**INDUSTRIAL ARTS – TILES SETTING
(Exploratory)**

Curriculum Guide for the Exploratory Course on Tiles Setting

For you to get a complete picture of the complete TLE exploratory course on Tiles Setting, you are hereby provided with the Curriculum Guide on Tiles Setting.

Content Standard	Performance Standard	Learning Competencies	Project/ Activities	Assessment	Duration
LESSON 1:PREPARE CONSTRUCTION MATERIALS AND TOOLS					
<p><i>Demonstrate understanding of/on:</i></p> <ul style="list-style-type: none"> Materials in tile setting Tools used in tile setting 	<ol style="list-style-type: none"> Tools and materials are identified per job requirements Tools are classified according to their functions per job requirements. Materials are classified according to their uses for specific construction project. Tools and materials are selected per job requirement. 	<p>LO1. Identify materials and tools applicable to a specific job</p>	<ol style="list-style-type: none"> List down the materials needed in tile setting. Use tile setting tools properly 	<ul style="list-style-type: none"> Direct observation Written test/questioning 	<p>3 hours</p>
<ul style="list-style-type: none"> Accomplishing different forms like job order slips, tools and materials requisition slips, and borrower’s slips Following accurate requisition procedures Schematic Diagram 	<ol style="list-style-type: none"> Needed materials and tools are listed per job requirement. Materials and tools are requested according to the prepared list. Requests are done per company’s standard operating procedures (SOP). Materials and tools are 	<p>LO2. Receive and inspect materials</p>	<ol style="list-style-type: none"> Accomplish different forms needed in requisitioning, receiving, borrowing and inspecting tile setting materials 	<ul style="list-style-type: none"> Oral questioning Direct observation Written test 	<p>2 hours</p>

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

**INDUSTRIAL ARTS – TILES SETTING
(Exploratory)**

Content Standard	Performance Standard	Learning Competencies	Project/ Activities	Assessment	Duration
	provided and unavailable ones substituted without sacrificing cost and quality of work.				
LESSON 2: PERFORMING MENSURATIONS AND CALCULATIONS					
<p><i>Demonstrate understanding of/on:</i></p> <ul style="list-style-type: none"> • Kinds of Measurements <ul style="list-style-type: none"> • English • Metric • Measurements Conversions from English to metric and vice versa 	<ol style="list-style-type: none"> 1. Calculation needed to complete work tasks are performed using the four basic processes of addition (+), subtraction(-), multiplication (x) and division (/) including but not limited to: Trigonometric functions and Algebraic computations. 2. Calculations involving fractions, percentages, and mixed numbers are used to complete workplace tasks. 3. Numerical computations are self-checked and corrected for accuracy. 4. Accurate measurements are obtained according to job requirements. 5. Systems of measurements are identified and converted 	<p>LO1.Carry out measurements and calculations</p>	<ol style="list-style-type: none"> 1. Making simple computations using the four fundamental operations 3.Measuring the lengths, width and thickness of some pieces of ceramic tile and wood which will be presented in the class. 4.Role play 	<ul style="list-style-type: none"> • Oral questioning • Direct observation • Written test 	<p>4 hours</p>

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

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(Exploratory)**

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	according to job requirements 6. Work pieces are measured according to job requirements.				
<ul style="list-style-type: none"> • Select measuring tools • Visualizing objects and shapes specifically geometric shapes. • Measuring Instruments/Measuring Tools 	<ol style="list-style-type: none"> 1. Objects or components to be measured are identified, classified, and interpreted according to the appropriate regular geometric shapes. 2. Measuring tools are selected/identified per object to be measured or according to job requirements 3. Correct specifications are obtained from relevant sources. 4. Measuring instruments are selected according to job requirements. 5. Alternative measuring tools are used without sacrificing cost and quality of work. 6. Measurements are obtained according to job requirements. 	LO2. Select Measuring Instrument	<ol style="list-style-type: none"> 1. Identify shapes of tiles 	<ul style="list-style-type: none"> • Actual demonstration • Direct observation • Written test/questioning 	4 hours

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

**INDUSTRIAL ARTS – TILES SETTING
(Exploratory)**

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LESSON 3: INTERPRETING TECHNICAL DRAWINGS AND PLANS					
<p><i>Demonstrate understanding of/on:</i></p> <ul style="list-style-type: none"> Drawing symbols and signs according to job specifications Alphabet of line Ways of drawing different types of lines 	<ol style="list-style-type: none"> Signs, symbols, and data are identified according to job specifications. Signs, symbols and data are determined according to classification or as appropriateness in drawing. 	LO1 Read/Interpret blueprints and plans	<ol style="list-style-type: none"> Enumerate the lines necessary in making working drawing. Perform proper strokes in drawing different types of line. 	<ol style="list-style-type: none"> Demonstration Direct observation Writtentest/questioning 	3 hours
<ul style="list-style-type: none"> Basic technical drawing Freehand sketching Five general uses of freehand sketching schematic diagram and illustration 	<ol style="list-style-type: none"> Necessary tools, materials and equipment are identified according to the plan. Components, assemblies or objects are recognized per job requirement. Dimensions and specifications are identified according to job requirements. Freehand sketch is produced in accordance with job requirements. 	LO2. Perform freehand sketching	<ol style="list-style-type: none"> Make a sketch of an area of four feet long and four feet wide to be tiled with 4 by 4 tiles. 	<ul style="list-style-type: none"> Practical application/performance test Written test/questioning 	3hours

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

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LESSON 4: MAINTAINING TOOLS AND EQUIPMENT					
<p><i>Demonstrate understanding of/on:</i></p> <ul style="list-style-type: none"> Types of Tools and Equipment Classification of functional and non-functional tools Uses of Personal Protective Equipment (PPE). 	<ol style="list-style-type: none"> Tools and equipment are identified according to classification/specification and job requirements. Functional and non-functional tools and equipment are segregated and labeled according to classification. Safety of tools and equipment are observed in accordance with manufacturer's instructions. Conditions of PPE are checked in accordance with manufacturer's instructions. 	<p>LO1. Check condition of tools and equipment</p>	<ol style="list-style-type: none"> Enumerate the conditions of tools and equipment that needs maintenance or repair. 	<ul style="list-style-type: none"> Oral questioning Direct observation Written test 	<p>6hours</p>
<ul style="list-style-type: none"> Types and uses of lubricants Types and uses of cleaning materials/solvent OSHC workplace regulations (General precaution) 	<ol style="list-style-type: none"> Lubricants are identified according to types of equipment. Tools and equipment are lubricated according to preventive maintenance schedule or manufacturer's specifications. 	<p>LO2. Perform basic preventive maintenance.</p>	<ol style="list-style-type: none"> Explain the importance of lubricants in tool and equipment maintenance. Perform lubrication of tools 	<ul style="list-style-type: none"> Oral questioning Direct observation Written test 	<p>3 hours</p>

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

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	<ol style="list-style-type: none"> 3. Tools are cleaned and lubricated according to standard procedures. 4. Defective equipment and tools are inspected and replaced according to manufacturer’s specification. 5. Work place is cleaned and kept in safe state in line with OSHC regulations. 				
<ul style="list-style-type: none"> • Inventory of tools and equipment • Tools and equipment handling • Tool safe-keeping/storage 	<ol style="list-style-type: none"> 1. Inventory of tools, instruments, and equipment are conducted and recorded per company practices. 2. Tools are inspected and stored after use. 3. Tools and equipment are stored safely in accordance with manufacturer’s specifications or company procedures. 	<p>LO3. Store tools and equipment.</p>	<ol style="list-style-type: none"> 1. Explain the disadvantages of improper storing of tools and equipment. 	<ul style="list-style-type: none"> • Practical examination • Direct observation • Written test/questioning 	<p>2 hours</p>

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LESSON 5: PRACTICE OCCUPATIONAL HEALTH AND SAFETY PROCEDURES					
<p><i>Demonstrate understanding of/on:</i></p> <ul style="list-style-type: none"> • Threshold limit values (TLV) • TLV table • Philippine OHS standards • Hazardous occupations to young workers • Effects of hazards in the workplace • Ergonomics • ECC regulations 	<ol style="list-style-type: none"> 1. Terms of maximum tolerable limits are identified based on threshold limit value (TLV). 2. Effects of hazards are determined. 3. OHS issues and concerns are identified in accordance with workplace requirements. 4. Requirements and relevant workplace OHS legislation. 	<p>LO1. Evaluate hazards and risks</p>	<ol style="list-style-type: none"> 1. Identify known hazards and risks in the workplace. 	<ul style="list-style-type: none"> • Interview • Written examination • Simulation 	<p>2 hours</p>
<ul style="list-style-type: none"> • Safety regulations • Clean air act in relation to tile setting • Electrical and fire safety code • Waste management • Disaster preparedness and management • Contingency measures and procedures 	<ol style="list-style-type: none"> 1. OHS procedures for controlling hazards and risks are strictly followed. 2. Procedures in dealing with workplace accidents, fire and emergencies are followed in accordance with the organization's OHS policies. 3. Personal protective equipment (PPE) is correctly used in accordance with organization's OHS procedures and practices. 	<p>LO2. Control hazards and risks.</p>	<ol style="list-style-type: none"> 1. Demonstrate proper use of PPEs. 2. Perform waste segregations 	<ul style="list-style-type: none"> • Written examination • Interview 	<p>2 hours</p>

K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

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	4. Procedures in providing appropriate assistance in the event of workplace emergencies are identified in line with the established organizational protocol.				
<ul style="list-style-type: none"> Operational health and safety procedure, practices and regulations 5S Emergency-related drills and training 	<ul style="list-style-type: none"> Procedures in emergency related drill are strictly followed in line with the established organizational guidelines and procedures. OHS personal records are filled up in accordance with workplace requirements. PPE are maintained in line with organization guidelines and procedures. 	LO3. Maintain occupational health and safety awareness	<ol style="list-style-type: none"> Make reaction papers about the emergency drills undertaken in the schools such as fire drill and earthquake drill Role play 	<ul style="list-style-type: none"> Demonstration Interview Written examination 	4hours
					40 hrs.

“By three methods we may learn wisdom: First, by reflection, which is noblest; second, by imitation, which is easiest; and third by experience, which is the bitterest.”

- Confucius