



Republic of Rwanda
Ministry of Education



RTB | RWANDA
TVET BOARD

CCMHE402

SAFETY HEALTH AND ENVIRONMENT AT THE WORKPLACE

Implement S.H.E policies and procedures

Competence

RQF Level: 4

Learning Hours



Credits: 3

Sector: All

Trade: All

Module Type: Complementary

Curriculum: All

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Purpose statement	This module covers the skills, knowledge and attitude required to implement Safety, Health and Environmental (SHE) policies and procedures on a site adhering to defined policies and procedures to ensure own safety and that of others; together with protection of the environment. The learner will therefore be able to identify hazardous areas to be improved; apply SHE practices; assess and control of risks and promote awareness of SHE in working place.				
Delivery modality	Training delivery	100%	Assessment	Total 100%	
	Theoretical content	70%	Formative assessment	70%	
	Practical work:	30%		30%	100%
	• Group project and presentation				
• Individual project /Work	20%				
		Summative Assessment		N.A	

Elements of Competency and Performance Criteria

Elements of competency	Performance criteria
1. Identify hazardous areas to be improved	1.1. Tools and materials are properly selected as per types of hazards.
	1.2. Hazardous areas are adequately inspected as per methods of hazard identification with respect to inspection process.
	1.3. Workplace hazards are accurately reported with respect to ways of reporting
2. Apply SHE practices	2.1. Occupational Health, Safety and Environmental (OHSE) requirements are properly identified as per their types.
	2.2. Instructions on safety best practices are appropriately set in line with health and safety regulations
	2.3 Workplace communication is properly maintained in line with SHE requirements
	2.4. Tasks are safely performed at the workplace in line with environmental policy

3 Assess and control risks	3.1 Workplace health and safety risks are effectively assessed and reported with respect to risk assessment steps
	3.2. Hazards are properly controlled with respect to methods of hazard control and SHE signs in the workplace
	3.3. Work practices and processes to identify areas for improvement are properly analysed in relation to SHE procedures and hazards control.
4. Promote awareness of SHE in working place	4.1. Environmental procedures are properly implemented in line with SHE practices.
	4.2. Workers are adequately trained to operate tools and equipment in line with SHE practices.
	4.3. Working area is appropriately inspected and remedial actions are properly taken in line with hazard control measures

Course content

Learning outcomes	At the end of the module the learner will be able to:
	<ol style="list-style-type: none"> 1. Identify hazardous areas to be improved 2. Apply SHE practices 3. Assess and control risks 4. Promote awareness of SHE in working place
Learning outcome 1: Identify hazardous areas to be improved	Learning hours: 7

Indicative content	
<ul style="list-style-type: none"> • Selection of tools and materials to identify hazards <ul style="list-style-type: none"> ✓ Types of tools, materials and equipment used to identify hazards <ul style="list-style-type: none"> ✚ Tools to identify biological hazards ✚ Tools to identify physical hazards ✚ Tools to identify safety hazards ✚ Tools to identify chemical hazards ✚ Tools to identify ergonomic hazards ✓ Types of tools, materials and equipment used to control hazards <ul style="list-style-type: none"> ✚ Tools to control biological hazards ✚ Tools to control physical hazards ✚ Tools to control safety hazards ✚ Tools to control chemical hazards ✚ Tools to control ergonomic hazards • Inspection of physical hazardous area at the workplace 	

- ✓ Definition of terms
 - ✚ Hazards inspection
 - ✚ Physical hazard
- ✓ Methods of hazard identification in the workplace
 - ✚ Routine hazard and housekeeping inspections and audit activities.
 - ✚ Study of information provided by manufacturers and suppliers of equipment and substances.
 - ✚ Investigation of incidents and accidents.
- ✓ Workplace hazard inspection process
 - ✚ Select inspection team.
 - ✚ Inspect workplace using checklist
 - ✚ Identify hazards.
 - ✚ Record hazards/ action on hazard log.
 - ✚ Implement OHS action plan.
 - ✚ Monitor and review outcomes.
- ✓ Workplace hazard inspection Checklists
 - ✚ Environment (dust, gases, fumes, sprays, lighting, noise, ventilation.)
 - ✚ Buildings. (Windows, doors, floors, stairs, roofs, walls, elevators).
 - ✚ Containers
 - ✚ Electrical
 - ✚ Fire protection equipment
 - ✚ Hand tools
 - ✚ Hazardous products
 - ✚ Materials handling
- **Reporting workplace hazardous areas**
 - ✓ **Ways to report workplace hazardous areas**
 - ✚ Verbally
 - ✚ Electronically
 - ✚ Filling out company specific forms
 - ✓ **Importance to report workplace hazard areas**
 - ✚ Identification of potential causes of incidents
 - ✚ Mitigation of hazards before an incident

Resources required for the learning outcome

Equipment

– Flipcharts stand , Computer, Projector, PPE

Materials	- Module manuals, Timber, Nails, Cement, Sand, Paint, stones, Barricade tap, Steel bar, etc.
Tools	<ul style="list-style-type: none"> • Module manuals, Dust sampler, Mining anemometer, Noise meter. • Hammer, Brushes, Crowbar, Wire mesh, Roller, Extension pore • Pic axe, spade, Tape measure, Infrared thermometer, Strings and ropes • Reference books, Visual aids • Reference books • Visual aids • Etc.
Facilitation techniques	<ul style="list-style-type: none"> • Demonstration and simulation • Individual and group work • Individualized • Trainer guided • Group discussion • Field visit
Formative assessment methods	<ul style="list-style-type: none"> • Written assessment • Oral presentation • Performance assessment

Learning outcome 2: Apply SHE practices	Learning hours: 8
Indicative content	
<ul style="list-style-type: none"> • Identification of Occupational, Health, Safety and environmental (OHSE) requirements <ul style="list-style-type: none"> ✓ Occupational and organizational requirements <ul style="list-style-type: none"> ✚ Organizational policies and procedures about the occupation ✚ Manual handling (Shifting, Lifting and Carrying) ✚ Machine guarding ✚ Organizational and site guidelines ✚ Own role and responsibility ✚ Quality assurance and continuous improvement processes and standards ✚ Emergency and evacuation procedures ✚ Ethical values ✚ Recording and reporting ✚ Equipment use, maintenance and storage ✓ Healthy and Safety requirements; <ul style="list-style-type: none"> ✚ Personal protective equipment and clothing ✚ First Aid and firefighting equipment ✚ Hazard and risk control equipment ✚ Psychological conditions control mechanisms ✓ Environmental requirements <ul style="list-style-type: none"> ✚ Safe forest practices 	

- ✚ Waste management: (disposal, recycling and re-use guidelines)

- **Setting instructions on safety best practices to enforce health and safety regulations**

- ✓ Description of SHE standards, regulations to be followed

- ✚ Use of PPEs,

- ✚ Use of inspection checklist

- **Maintaining workplace communication**

- ✓ Types of effective communication

- ✚ Verbal and non-verbal communication,

- ✚ Formal and informal communication,

- ✚ Downward and upward communication

- ✓ Categories of effective communication

- ✚ Effective oral communication,

- ✚ Effective written communication

- ✓ Techniques of effective oral communication

- ✚ Active listening

- ✚ Constructive feedback

- ✚ Positive, confident and cooperative language

- ✚ Appropriate language and concepts to individually social and cultural differences

- ✚ Appropriate questioning to clarify and confirm understanding

- ✚ Effective control of tone of voice and body language

- ✓ Types of questions to be asked during a communication process

- ✚ Close-ended questions

- ✚ Open-ended questions

- **Performing tasks in a safe manner**

- ✓ Environmental policy content:

- ✚ Compliance,

- ✚ Improvement (where required to reflect) and

- ✚ Prevention

- ✚ Continuous cycle of (planning, implementing, monitoring, reviewing and improving practices and systems)

Resources required for the indicative content

Equipment	- PPEs, Public Board notices, Communication devices/phones - Safety signage, Computer, Project.
Materials	-Markers, Flipcharts, Pen

Tools	-Template of OHSE requirements, Reference books
Facilitation techniques	<ul style="list-style-type: none"> • Demonstration and simulation • Individual and group work • Individualized • Trainer guided • Group discussion
Formative assessment methods	<ul style="list-style-type: none"> • Written assessment • Oral presentation • Performance assessment

Learning outcome 3: Assess and Control Risk	Learning hours: 7
Indicative content	
<ul style="list-style-type: none"> • Assessing and reporting workplace risks <ul style="list-style-type: none"> ✓ Steps of risk assessment ✓ Elements of good quality risk statement ✓ Principles for effective verbal intervention • Controlling hazard at the workplace <ul style="list-style-type: none"> ✓ Methods of hazard control ✓ SHE signs in the workplace ✓ Setting up workplace safety signs Illumination ✓ Practical Problem-Solving Model <ul style="list-style-type: none"> ✚ Clarify & validate the problem ✚ Break down the problem/identify performance gaps ✚ Set improvement targets ✚ Determine root causes ✚ Develop countermeasures ✚ See countermeasures through ✚ Confirm results & process ✚ Standardize successful processes • Analysis of work practices and process to identify areas for improvement in relation to SHE procedures and hazards control. <ul style="list-style-type: none"> ✓ Elements of process improvement <ul style="list-style-type: none"> ✚ Defining the problem ✚ Collecting data ✚ Analyse data ✚ Identifying potential solution ✚ Implement solution 	

- ✚ Controlling solution
- ✚ Evaluating solution
- ✓ Application of continuous process improvement
 - ✚ Continuous process improvement “musts” and principles
 - ✚ Continuous process improvement methods

Resources required for the indicative content

Equipment	- Projector, Computer, Flipchart stand
Materials	- Flipcharts, Markers, Papers, Papers
Tools	- Pen, Marker pen, Reference books, Video record, Procedural manuals, Environmental policy
Facilitation techniques	<ul style="list-style-type: none"> • Demonstration and simulation • Individual and group work • Individualized • Trainer guided • Group discussion • Role play scenario
Formative assessment methods	<ul style="list-style-type: none"> • Written assessment • Oral presentation • Performance assessment

Learning outcome 4: Awareness of SHE in working place.

Learning hours: 8

Indicative content

- **Implementing environmental procedures**
 - ✓ Definition of environmentally sustainable work practices
 - ✓ Environmental Sustainability Strategies
 - ✚ Recycling strategy
 - ✚ Waste reduction (paper reduction, photocopiers, printers, faxes & office equipment, travel & meetings)
 - ✚ Energy efficiency & conservation (lights, computers and monitors, air conditioning)
 - ✚ Workers & business partner awareness
- **Training workers on operational tools and equipment of SHE**
 - ✓ Design of OHS package for training:
 - ✚ Program awareness
 - ✚ Specific roles in the safety and health program
 - ✚ Hazard identification and controls skills
 - ✓ Use of best methods in crosscutting issues training

- ✚ On the job training
 - ✚ Off the job training
 - ✚ Apprenticeship Training
 - ✚ Vestibule or Training Centre
 - ✚ Training Via Internship
- ✓ Training on SHE regulations
 - ✚ Safety roles of employees
 - ✚ Responsibility of administration
 - ✚ Incident reporting
 - ✚ Ventilation and air quality
 - ✚ First aid facilities
 - ✚ Hazard control in workplace
 - ✚ Equipment and machinery
 - ✚ Emergency response plans
- ✓ Training on SHE standards
 - ✚ Responsibility in working place
 - ✚ Hazard identification and risk control
 - ✚ Making the working area safe
 - ✚ Personnel protective equipment
 - ✚ Health of employees
 - ✚ Facilities
 - ✚ Reporting of incidents and accidents
 - ✚ Emergency preparedness Procedures
- **Inspecting the working area and remedial action Environmental impacts awareness**
 - ✓ Means of environmental awareness
 - ✓ Objective of environmental awareness
 - ✓ Ways to practice environmental awareness
 - ✚ Using safe and non-toxic building supplies
 - ✚ Conserving energy and water
 - ✚ Recycling, activism
 - ✓ Remedial actions
 - ✚ Workplace waste management systems
 - ✚ Emissions control of greenhouse gases
 - ✚ Use of non-renewable resources control
 - ✚ Chemical use control
 - ✚ Supply chain management

Resources required for the indicative content

Equipment	- Fire extinguisher, Fire triangle, PPE, Computer, Projector, Flipchart stand -
Materials	<ul style="list-style-type: none">• Flipcharts, Markers, Pen
Tools	- Procedural manuals, First aid kit
Facilitation techniques	<ul style="list-style-type: none">• Demonstration and simulation• Individual and group work• Individualized• Trainer guided• Group discussion
Formative assessment methods	<ul style="list-style-type: none">• Written assessment• Oral presentation• Performance assessment

References:

1. *International Organization for Standardization (ISO), ISO 31000:2009, Risk management—Principles and guidelines, Switzerland, 2009*
2. *The Green Workplace: Sustainable Strategies that Leigh Benefit Employees, the Environment and the Bottom Line, Stringer 2009. New York*
3. *Occupational Risk Control: Predicting and Preventing the Unwanted by Viner, Derek , ISBN: 9781472419712, Publication Date: 2015*
4. *OSHA General Industry regulations Book, 29 CFR 1910 Paperback- July1,2014 y MANCOMM Inc. (Author, Editor)*
5. *OH&S: a management guide by Richard Archer, Kerry Northwick, Susanne Tepee. Publication Date: 2009*
6. *Safety Management a Comprehensive Approach To developing A Sustainable System, Chitram Lutchman, 2012, Taylor & Francis Group, NY*