****

**REPUBLIC OF KENYA**

**COMPETENCY BASED CURRICULUM**

 **FOR**

**FIRE MANAGEMENT**

**LEVEL 6**



TVET CDACC

 P.O. BOX 15745-00100

NAIROBI

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# FOREWORD

The provision of quality education and training is fundamental to the Government’s overall strategy for social economic development. Quality education and training will contribute to achievement of Kenya’s development blueprint and sustainable development goals.

Reforms in the education sector are necessary for the achievement of Kenya Vision 2030 and meeting the provisions of the Constitution of Kenya 2010. The education sector had to be aligned to the Constitution and this resulted to the formulation of the Policy Framework for Reforming Education and Training (Sessional Paper No. 4 of 2016). A key feature of this policy is the radical change in the design and delivery of TVET training. This policy document requires that training in TVET be competency based, curriculum development be industry led, certification be based on demonstration of competence and mode of delivery allows for multiple entry and exit in TVET programmes.

These reforms demand that Industry takes a leading role in curriculum development to ensure the curriculum addresses its competence needs. It is against this background that this curriculum has been developed.

It is my conviction that this curriculum will play a great role towards development of competent human resource for the Disaster Management Sector’s growth and development.

**PRINCIPAL SECRETARY, VOCATIONAL AND TECHNICAL TRAINING**

**MINISTRY OF EDUCATION**

# PREFACE

Kenya Vision 2030 aims to transform the country into a newly industrializing, “middle-income country providing a high-quality life to all its citizens by the year 2030”. Kenya intends to create a globally competitive and adaptive human resource base to meet the requirements of a rapidly industrializing economy through life-long education and training. TVET has a responsibility of facilitating the process of inculcating knowledge, skills and attitudes necessary for catapulting the nation to a globally competitive country, hence the paradigm shift to embrace Competency Based Education and Training (CBET).

The Technical and Vocational Education and Training Act No. 29 of 2013 and Sessional Paper No. 4 of 2016 on Reforming Education and Training in Kenya, emphasized the need to reform curriculum development, assessment and certification. This called for a shift to CBET to address the mismatch between skills acquired through training and skills needed by industry as well as increase the global competitiveness of Kenyan labor force.

TVET Curriculum Development, Assessment and Certification Council (TVET CDACC) in conjunction with Fire Sector Skills Advisory Committee (SSAC) have developed this curriculum.

This curriculum has been developed following the CBET framework policy; the CBETA Standards and guidelines provided by the TVET Authority and the Kenya National Qualification framework designed by the Kenya National Qualification Authority.

This curriculum is designed and organized with an outline of learning outcomes; suggested delivery methods, training/learning resources and methods of assessing the trainee’s achievement. The curriculum is competency-based and allows multiple entry and exit to the course.

I am grateful to the Council Members, Council Secretariat, Fire SSAC, expert workers and all those who participated in the development of this curriculum.

**Prof. CHARLES M. M. ONDIEKI, PhD, FIET (K), Con. EngTech.**

**CHAIRMAN, TVET CDACC**

# ACKNOWLEDGMENT

This curriculum has been designed for competency-based training and has independent units of learning that allow the trainee flexibility in entry and exit. In developing the curriculum, significant involvement and support was received from various organizations.

I recognize with appreciation the role of the Fire Sector Skills Advisory Committee (SSAC) in ensuring that competencies required by the industry are addressed in the curriculum. I also thank all stakeholders in the Disaster Management sector for their valuable input and all those who participated in the process of developing this curriculum.

I am convinced that this curriculum will go a long way in ensuring that workers in Disaster Management Sector acquire competencies that will enable them to perform their work more efficiently.

**Dr. LAWRENCE GUANTAI M’ITONGA, PhD**

**COUNCIL SECRETARY/CEO**

**TVET CDACC**

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# **ACRONYMS**

CDACC Curriculum Development Assessment and Certification Council

CU Curriculum

BC Basic Competency

CR Core Competency

CC Common Units

KCSE Kenya Certificate of Secondary Education

KNQA Kenya National Qualifications Authority

OSHA Occupation Safety and Health Act

PPE Personal Protective Equipment

SSAC Sector Skills Advisory Committee

TVET Technical and Vocational Education and Training

SOP Standard operating procedures

# KEY TO UNIT CODE

 DS/CU/FIR/BC/01/6/A

Industry or sector

Curriculum

Occupational area

Type of competency

Competency number

Competency level

Version control

# COURSE OVERVIEW

**Description of the Course**

Fire fighter level 6 qualification consists of competencies that a person must achieve to enable him/her to effectively manage fire service, fight fire outbreak, prevent fire outbreak, manage firefighting resources, conduct search and rescue, offer first aid, perform emergency vehicle operations and manage hazardous material incident.

**Units of Learning**

This course consists of basic, common and core units of learning as indicated below:

**Basic Units of Learning**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit of Learning Code** | **Unit of Learning Title** | **Duration in Hours** | **Credit Factor** |
| DM/CU/FIR/BC/01/6/A | Communication skills | 40 | 4 |
| DM/CU/FIR/BC/02/6/A | Occupational safety and health practices | 40 | 4 |
| DM/CU/FIR/BC/03/6/A | Numeracy skills | 60 | 6 |
| DM/CU/FIR/BC/04/6/A | Digital literacy | 60 | 6 |
| DM/CU/FIR/BC/05/6/A  | Entrepreneurial skills | 100 | 10 |
| DM/CU/FIR/BC/06/6/A | Employability skills | 80 | 8 |
| DM/CU/FIR/BC/07/6/A | Environmental literacy | 40 | 4 |
| **Total**  |  | **420** | **42** |

**Common units**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit of Learning Code** | **Unit of Learning Title** | **Duration in Hours** | **Credit Factor** |
| DM/CU/FIR/CC/01/6/A | Fire service | 150 | 15 |

**Core units of learning**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit of Learning Code** | **Unit of Learning Title** | **Duration in Hours** | **Credit Factor** |
| DM/CU/FIR/CC/01/6/A | Fire Outbreak  | 200 | 20 |
| DM/CU/FIR/CC/02/6/A | Fire Prevention  | 220 | 22 |
| DM/CU/FIR/CC/03/6/A | Firefighting Resources  | 200 | 20 |
| DM/CU/FIR/CC/04/6/A | Search and Rescue  | 180 | 18 |
| DM/CU/FIR/CC/05/6/A | First Aid  | 200 | 20 |
| DM/CU/FIR/CC/06/6/A |  Emergency Vehicle Operation  | 180 | 18 |
| DM/CU/FIR/CC/07/6/A | Hazardous Material  | 240 | 24 |
|  | Attachment | 480 | 48 |
| **Total**  | **1900** | **190** |
| **Grand total**  | **2470** | **247** |

The total duration of the course is. 2470 hours

**Entry Requirements**

An individual entering this course should have any of the following minimum requirements:

1. Fire Management craft certificate Level 5

 **Or**

1. Kenya Certificate of Secondary Education (KCSE) C- (C Minus)

 **Or**

1. Equivalent qualifications as determined by Kenya National Qualifications Authority (KNQA)

**Assessment**

The course will be assessed at two levels: internally and externally. Internal assessment is continuous and is conducted by the trainer who is monitored by an accredited internal verifier while external assessment is the responsibility of TVET CDACC.

**Certification**

A candidate will be issued with a Record of Achievement for each Unit of Competency. To attain the qualification National Diploma Level 6 Fire Management, the candidate must demonstrate competence in all the units of competency as given in qualification pack. These certificates will be issued by TVET CDACC in conjunction with training provider.

# BASIC UNITS

# COMMUNICATION SKILLS

**UNIT CODE:** DM/CU/FIR/BC/01/6/A

**Relationship to Occupational Standards**

This unit addresses the Unit of Competency: Demonstrate Communication Skills

**Duration of Unit:** 40 hours

**Unit Description**

This unit covers the competencies required to demonstrate communication skills. It involves, meeting communication needs of clients and colleagues; developing communication strategies, establishing and maintaining communication pathways, conducting interviews, facilitating group discussion and representing the organization.

**Summary of Learning Outcomes**

1. Meet communication needs of clients and colleagues
2. Develop communication strategies
3. Establish and maintain communication pathways
4. Promote use of communication strategies
5. Conduct interview
6. Facilitate group discussion
7. Represent the organization

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Meet communication needs of clients and colleagues
 | * Communication process
* Modes of communication
* Medium of communication
* Effective communication
* Barriers to communication
* Flow of communication
* Sources of information
* Organizational policies
* Organization requirements for written and electronic communication methods
* Report writing
* Effective questioning techniques (clarifying and probing)
* Workplace etiquette
* Ethical work practices in handling communication
* Active listening
* Feedback
* Interpretation
* Flexibility in communication
* Types of communication strategies
* Elements of communication strategy
 | * Interview
* Written texts
 |
| 1. Develop communication strategies
 | * Dynamics of groups
* Styles of group leadership
* Openness and flexibility in communication
* Communication skills relevant to client groups
 | * Interview
* Written texts
 |
| 1. Establish and maintain communication pathways
 | * Types of communication pathways
 | * Interview
* Written texts
 |
| 1. Promote use of communication strategies
 | * Application of elements of communication strategies
* Effective communication techniques
 | * Interview
* Written texts
 |
| 1. Conduct interview
 | * Types of interview
* Establishing rapport
* Facilitating resolution of issues
* Developing action plans
 | * Interview
* Written texts
 |
| 1. Facilitate group discussion
 | * Identification of communication needs
* Dynamics of groups
* Styles of group leadership
* Presentation of information
* Encouraging group members participation
* Evaluating group communication strategies
 | * Interview
* Written texts
 |
| 1. Represent the organization
 | * Presentation techniques
* Development of a presentation
* Multi-media utilization in presentation
* Communication skills relevant to client groups
 | * Interview
* Written texts
 |

**Suggested Methods of Instruction**

* Discussion
* Role playing
* Simulation
* Direct instruction

**Recommended Resources**

* Desktop computers/laptops
* Internet connection
* Projectors
* Telephone

# NUMERACY SKILLS

**UNIT CODE:** DM/CU/FIR/BC/02/6/A

**Relationship to Occupational Standards**

This unit addresses the Unit of Competency: Demonstrate Numeracy Skills.

**Duration of Unit:** 60 hours

**Unit Description**

This unit describes the competencies required to demonstrate numeracy skills. It involves applying a wide range of mathematical calculations for work; applying ratios, rates and proportions to solve problems; estimating, measuring and calculating measurement for work; using detailed maps to plan travel routes for work; using geometry to draw and construct 2D and 3D shapes for work; collecting, organizing and interpreting statistical data; using routine formula and algebraic expressions for work and using common functions of a scientific calculator.

**Summary of Learning Outcomes**

1. Apply a wide range of mathematical calculations for work
2. Apply ratios, rates and proportions to solve problems
3. Estimate, measure and calculate measurement for work
4. Use detailed maps to plan travel routes for work
5. Use geometry to draw and construct 2D and 3D shapes for work
6. Collect, organize and interpret statistical data
7. Use routine formula and algebraic expressions for work
8. Use common functions of a scientific calculator

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Apply a wide range of mathematical calculations for work
 | * Fundamentals of mathematics
* Addition, subtraction, multiplication and division of positive and negative numbers
* Algebraic expressions manipulation
* Forms of fractions, decimals and percentages
* Expression of numbers as powers and roots
 | * Written tests
* Assignments
* Supervised exercises
 |
| 1. Apply ratios, rates and proportions to solve problems
 | * Rates, ratios and proportions
* Meaning
* Conversions into percentages
* Direct and inverse proportions determination
* Performing calculations
* Construction of graphs, charts and tables
* Recording of information
 | * Written tests
* Assignments
* Supervised exercises
 |
| 1. Estimate, measure and calculate measurement for work
 | * Units of measurements and their symbols
* Identification and selection of measuring equipment
* Conversion of units of measurement
* Perimeters of regular figures
* Areas of regular figures
* Volumes of regular figures
* Carrying out measurements
* Recording of information
 | * Assignments
* Supervised exercises
* Written tests
 |
| 1. Use detailed maps to plan travel routes for work
 | * Identification of features in routine maps and plans
* Symbols and keys used in routine maps and plans
* Identification and interpretation of orientation of map to North
* Demonstrate understanding of direction and location
* Apply simple scale to estimate length of objects, or distance to location or object
* Give and receive directions using both formal and informal language
* Planning of routes
* Calculation of distance, speed and time
 | * Written
* Practical test
 |
| 1. Use geometry to draw and construct 2D and 3D shapes for work
 | * Identify two dimensional shapes and routine three dimensional shapes in everyday objects and in different orientations
* Explain the use and application of shapes
* Use formal and informal mathematical language and symbols to describe and compare the features of two dimensional shapes and routine three dimensional shapes
* Identify common angles
* Estimate common angles in everyday objects
* Evaluation of unknown angles
* Use formal and informal mathematical language to describe and compare common angles
* Symmetry and similarity
* Use common geometric instruments to draw two dimensional shapes
* Construct routine three dimensional objects from given nets
 |  |
| 1. Collect, organize and interpret statistical data
 | * + Classification of data
* Grouped data
* Ungrouped data
	+ Data collection
* Observation
* Recording
	+ Distinguishing between sampling and census
	+ Importance of sampling
	+ Errors in sampling
	+ Types of sampling and their limitations e.g.
* Stratified random
* Cluster
* Judgmental
	+ Tabulation of data
* Class intervals
* Class boundaries
* Frequency tables
* Cumulative frequency
	+ Diagrammatic and graphical presentation of data e.g.
* Histograms
* Frequency polygons
* Bar charts
* Pie charts
* Cumulative frequency curves
	+ Interpretation of data
 | * Assignments
* Supervised exercises
* Written tests
 |
| 1. Use routine formula and algebraic expressions for work
 | * + Solving linear equations
	+ Linear graphs
* Plotting
* Interpretation
* Applications of linear graphs
* Curves of first and second degree
* Plotting
* Interpretation
 | * Assignments
* Supervised exercises
* Written tests
 |
| 8. Use common functions of a scientific calculator | * Identify and use keys for common functions on a calculator
* Calculate using whole numbers, money and routine decimals and percentages
* Calculate with routine fractions and percentages
* Apply order of operations to solve multi-step calculations
* Interpret display and record result
 | * Written
* Practical test
 |

**Suggested Methods of Instruction**

* Group discussions
* Demonstration by trainer
* Practical work by trainee
* Exercises

**Recommended Resources**

* Calculators
* Rulers, pencils, erasers
* Charts with presentations of data
* Graph books
* Dice

# DIGITAL LITERACY

**UNIT CODE:** DM/CU/FIR/BC/03/6/A

**Relationship to Occupational Standards**

This unit addresses the Unit of Competency: Demonstrate Digital Literacy

**Duration of Unit:** 60 hours

**Unit Description**

This unit describes competencies required to demonstrate digital literacy. It involves in identifying computer software and hardware, applying security measures to data, hardware, software in automated environment, computer software in solving task, internet and email in communication at workplace, desktop publishing in official assignments and preparing presentation packages.

**Summary of Learning Outcomes**

1. Identify computer software and hardware
2. Apply security measures to data, hardware, software in automated environment
3. Apply computer software in solving tasks
4. Apply internet and email in communication at workplace
5. Apply desktop publishing in official assignments
6. Prepare presentation packages

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Identify computer hardware and software
 | * Concepts of ICT
* Functions of ICT
* History of computers
* Components of a computer
* Classification of computers
 | * Written tests
* Oral presentation
 |
| 1. Apply security measures to data, hardware, software in automated environment
 | * Data security and control
* Security threats and control measures
* Types of computer crimes
* Detection and protection against computer crimes
* Laws governing protection of ICT
 | * Written tests
* Oral presentation
* Project
 |
| 1. Apply computer software in solving tasks
 | * Operating system
* Word processing
* Spread sheets
* Data base design and manipulation
* Data manipulation, storage and retrieval
 | * Oral questioning
* Project
 |
| 1. Apply internet and email in communication at workplace
 | * Computer networks
* Network configurations
* Uses of internet
* Electronic mail (e-mail) concept
 | * Oral questioning
* Written report
 |
| 1. Apply desktop publishing in official assignments
 | * Concept of desktop publishing
* Opening publication window
* Identifying different tools and tool bars
* Determining page layout
* Opening, saving and closing files
* Drawing various shapes using DTP
* Using colour pellets to enhance a document
* Inserting text frames
* Importing and exporting text
* Object linking and embedding
* Designing of various publications
* Printing of various publications
 | * Oral questioning
* Written report
* Project
 |
| 1. Prepare presentation packages
 | * Types of presentation packages
* Procedure of creating slides
* Formatting slides
* Presentation of slides
* Procedure for editing objects
 | * Oral questioning
* Written report
* Project
 |

**Suggested Methods of Instruction**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos
* Project
* Group discussions

**Recommended Resources**

* Computers
* Printers
* Storage devices
* Internet access

# ENTREPRENEURIAL SKILLS

**UNIT CODE:** DM/CU/FIR/BC/04/6/A

**Relationship to Occupational Standards**

This unit addresses the Unit of Competency: Demonstrate Entrepreneurial Skills

**Duration of unit:** 100 hours

**Unit Description**

This unit covers the competencies required to demonstrate understanding of entrepreneurship. It involves demonstrating understanding of an entrepreneur, entrepreneurship and self-employment. It also involves identifying entrepreneurship opportunities, creating entrepreneurial awareness, applying entrepreneurial motivation and developing business innovative strategies.

**Summary of Learning Outcomes**

* 1. Demonstrate understanding of who an entrepreneur
	2. Demonstrate knowledge of entrepreneurship and self-employment
	3. Identify entrepreneurship opportunities
	4. Create entrepreneurial awareness
	5. Apply entrepreneurial motivation
	6. Develop business innovative strategies
	7. Develop Business plan

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Demonstrate knowledge of entrepreneurship and self-employment
 | * Importance of self-employment
* Requirements for entry into self-employment
* Role of an Entrepreneur in business
* Contributions of Entrepreneurs to National development
* Entrepreneurship culture in Kenya
* Born or made entrepreneurs
 | * Individual/group assignments
* Projects
* Written tests
* Oral questions
* Third party report
 |
| 1. Identify entrepreneurship opportunities
 | * Business ideas and opportunities
* Sources of business ideas
* Business life cycle
* Legal aspects of business
* Assessment of product demand
* Business environment
* Factors to consider when evaluating business environment
* Technology in business
 | * Individual/group assignments
* Projects
* Written tests
* Oral questions
* Third party report
* Interviews
 |
| 1. Create entrepreneurial awareness
 | * Forms of businesses
* Sources of business finance
* Factors in selecting source of business finance
* Governing policies on Small Scale Enterprises (SSEs)
* Problems of starting and operating SSEs
 | * Individual/group assignments
* Projects
* Written tests
* Oral questions
* Third party report
* Interviews
 |
| 1. Apply entrepreneurial motivation
 | * Internal and external motivation
* Motivational theories
* Self-assessment
* Entrepreneurial orientation
* Effective communications in entrepreneurship
* Principles of communication
* Entrepreneurial motivation
 | * Case studies
* Individual/group assignments
* Projects
* Written tests
* Oral questions
* Third party report
* Interviews
 |
| 1. Develop business innovative strategies
 | * Innovation in business
* Small business Strategic Plan
* Creativity in business development
* Linkages with other entrepreneurs
* ICT in business growth and development
 | * Case studies
* Individual/group assignments
* Projects
* Written tests
* Oral questions
* Third party report
* Interviews
 |
| 1. Develop Business Plan
 | * Business description
* Marketing plan
* Organizational/Management
* plan
* Production/operation plan
* Financial plan
* Executive summary
* Presentation of Business Plan
 | * Case studies
* Individual/group assignments
* Projects
* Written tests
* Oral questions
* Third party report
* Interviews
 |

**Suggested Methods of Instruction**

* Direct instruction
* Project
* Case studies
* Field trips
* Discussions
* Demonstration
* Question and answer
* Problem solving
* Experiential
* Team training

**Recommended Resources**

* Case studies
* Business plan templates
* Computers
* Overhead projectors
* Internet
* Mobile phone
* Video clips
* Films
* Newspapers and Handouts
* Business Journals
* Writing materials

# EMPLOYABILITY SKILLS

**UNIT CODE:** DM/CU/FIR/BC/05/6/A

**Relationship to Occupational Standards**

This unit addresses the Unit of Competency: Demonstrate Employability Skills

**Duration of Unit:** 80 hours

**Unit Description**

This unit covers competencies required to demonstrate employability skills. It involves conducting self-management, demonstrating interpersonal communication, critical safe work habits, leading a workplace team, planning and organizing work, maintaining professional growth and development, demonstrating workplace learning, problem solving skills and managing ethical performance.

**Summary of Learning Outcomes**

1. Conduct self-management
2. Demonstrate interpersonal communication
3. Demonstrate critical safe work habits
4. Lead a workplace team
5. Plan and organize work
6. Maintain professional growth and development
7. Demonstrate workplace learning
8. Demonstrate problem solving skills
9. Manage ethical performance

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Conduct self-management
 | * Self-awareness
* Formulating personal vision, mission and goals
* Strategies for overcoming life challenges
* Managing emotions
* Emotional intelligence
* Assertiveness versus aggressiveness
* Expressing personal thoughts, feelings and beliefs
* Developing and maintaining high self-esteem
* Developing and maintaining positive self-image
* Setting performance targets
* Monitoring and evaluating performance
* Articulating ideas and aspirations
* Accountability and responsibility
* Good work habits
* Self-awareness
* Values and beliefs
* Self-development
* Financial literacy
* Healthy lifestyle practices
* Adopting safety practices
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |
| 1. Demonstrate interpersonal communication
 | * Meaning of interpersonal communication
* Listening skills
* Types of audience
* Public speaking
* Writing skills
* Negotiation skills
* Reading skills
* Meaning of empathy
* Understanding customers’ needs
* Establishing communication networks
* Assertiveness
* Sharing information
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |
| 1. Demonstrate critical safe work habits
 | * Stress and stress management
* Time concept
* Punctuality and time consciousness
* Leisure
* Integratingpersonal objectives into organizational objectives
* Resources mobilization
* Resources utilization
* Setting work priorities
* Developing healthy relationships
* HIV and AIDS
* Drug and substance abuse
* Managing emerging issues
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |
| 1. Lead a workplace team
 | * Leadership qualities
* Power and authority
* Team building
* Determination of team roles and objectives
* Team parameters and relationships
* Individual responsibilities in a team
* Forms of communication
* Complementing team activities
* Gender and gender mainstreaming
* Human rights
* Developing healthy relationships
* Maintaining relationships
* Conflicts and conflict resolution
* Coaching and mentoring skills
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |
| 1. Plan and organize work
 | * Functions of management
* Planning
* Organizing
* Time management
* Decision making concept
* Task allocation
* Developing work plans
* Developing work goals/objectives and deliverables
* Monitoring work activities
* Evaluating work activities
* Resource mobilization
* Resource allocation
* Resource utilization
* Proactive planning
* Risk evaluation
* Problem solving
* Collecting, analysing and organising information
* Negotiation
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |
| 1. Maintain professional growth and development
 | * Avenues for professional growth
* Training and career opportunities
* Assessing training needs
* Mobilizing training resources
* Licenses and certifications for professional growth and development
* Pursuing personal and organizational goals
* Managing work priorities and commitments
* Recognizing career advancement
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |
| 1. Demonstrate workplace learning
 | * Managing own learning
* Mentoring
* Coaching
* Contributing to the learning community at the workplace
* Cultural aspects of work
* Networking
* Variety of learning context
* Application of learning
* Safe use of technology
* Taking initiative/proactivity
* Flexibility
* Identifying opportunities
* Generating new ideas
* Workplace innovation
* Performance improvement
* Managing emerging issues
* Future trends and concerns in learning
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |
| 1. Demonstrate problem solving skills
 | * Critical thinking process
* Data analysis tools
* Decision making
* Creative thinking
* Development of creative, innovative and practical solutions
* Independence in identifying and solving problems
* Solving problems in teams
* Application of problem-solving strategies
* Testing assumptions
* Resolving customer concerns
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |
| 1. Manage ethical performance
 | * Meaning of ethics
* Ethical perspectives
* Principles of ethics
* Ethical standards
* Organization code of ethics
* Common ethical dilemmas
* Organization culture
* Corruption, bribery and conflict of interest
* Privacy and data protection
* Diversity, harassment and mutual respect
* Financial responsibility/accountability
* Etiquette
* Personal and professional integrity
* Commitment to jurisdictional laws
* Emerging issues in ethics
 | * Written tests
* Oral questioning
* Interviewing
* Portfolio of evidence
* Third party report
 |

**Suggested Methods of Instruction**

* Demonstrations
* Simulation/Role play
* Group Discussion
* Presentations
* Assignments
* Q&A

**Recommended Resources**

* Computers
* Stationery
* Charts
* Video clips
* Audio tapes
* Radio sets
* TV sets
* LCD projectors

# ENVIRONMENTAL LITERACY

**UNIT CODE**:DM/CU/FIR/BC/06/6/A

**Relationship to Occupational Standards**:

This unit addresses the Unit of Competency : Demonstrate Environmental Literacy

**Duration of Unit:** 40 hours

**Unit Description**

This unit describes the competencies required demonstrate environmental literacy.it involves controlling environmental hazard, controlling environmental pollution, complying with workplace sustainable resource use, evaluating current practices in relation to resource usage, identifying environmental legislations/conventions for environmental concerns, implementing specific environmental programs, monitoring activities on environmental protection/programs, analysing resource use and developing resource conservation plans.

**Summary of Learning Outcomes**

1. Control environmental hazard
2. Control environmental Pollution
3. Demonstrate sustainable resource use
4. Evaluate current practices in relation to resource usage
5. Identify Environmental legislations/conventions for environmental concerns
6. Implement specific environmental programs
7. Monitor activities on Environmental protection/Programs
8. Analyze resource use
9. Develop resource conservation plans

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** |  **Content** | **Suggested Assessment Methods** |
| 1. Control environmental hazard
 | * Purposes and content of Environmental Management and Coordination Act 1999
* Storage methods for environmentally hazardous materials
* Disposal methods of hazardous wastes
* Types and uses of PPE in line with environmental regulations
* Occupational Safety and Health Standards (OSHS)
 | * Written questions
* Oral questions
 |
| 1. Control environmental Pollution control
 | * Types of pollution
* Environmental pollution control measures
* Types of solid wastes
* Procedures for solid waste management
* Different types of noise pollution
* Methods for minimizing noise pollution
 | * Written questions
* Oral questions
* Role play
 |
| 1. Demonstrate sustainable resource use
 | * Types of resources
* Techniques in measuring current usage of resources
* Calculating current usage of resources
* Methods for minimizing wastage
* Waste management procedures
* Principles of 3Rs (Reduce, Reuse, Recycle)
* Methods for economizing or reducing resource consumption
 | * Written questions
* Oral questions
* Role play
 |
| 1. Evaluate current practices in relation to resource usage
 | * Collection of information on environmental and resource efficiency systems and procedures,
* Measurement and recording of current resource usage
* Analysis and recording of current purchasing strategies.
* Analysis of current work processes to access information and data
* Identification of areas for improvement
 | * Written questions
* Oral questions
* Role play
 |
| 1. Identify Environmental legislations/conventions for environmental concerns
 | * Environmental issues/concerns
* Environmental legislations /conventions and local ordinances
* Industrial standard /environmental practices
* International Environmental Protocols (Montreal, Kyoto)
* Features of an environmental strategy
 | * Written questions
* Oral questions
 |
| 1. Implement specific environmental programs
 | * Community needs and expectations
* Resource availability
* 5s of good housekeeping
* Identification of programs/Activities
* Setting of individual roles /responsibilities
* Resolving problems /constraints encountered
* Consultation with stakeholders
 | * Written questions
* Oral questions
* Role play
 |
| 1. Monitor activities on Environmental protection/Programs
 | * Periodic monitoring and Evaluation of activities
* Gathering feedback from stakeholders
* Analyzing data gathered
* Documentation of recommendations and submission
* Setting of management support systems to sustain and enhance the program
* Monitoring and reporting of environmental incidents to concerned /proper authorities
 | * Oral questions
* Written tests
* Practical test
 |
| 1. Analyze resource use
 | * Identification of resource consuming processes
* Determination of quantity and nature of resource consumed
* Analysis of resource flow through different parts of the process.
* Classification of wastes for possible source of resources.
 | * Written tests
* Oral questions
* Practical test
 |
| 1. Develop resource Conservation plans
 | * Determination of efficiency of use/conversion of resources
* Causes of low efficiency of use of resources
* Plans for increasing the efficiency of resource use
 | * Written tests
* Oral questions
* Practical test
 |

**Suggested Methods of Instruction**

* Instructor led facilitation of theory
* Practical demonstration of tasks by trainer
* Practice by trainees
* Observations and comments and corrections by trainers

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Environmental Management and Coordination Act 1999
* Machine/equipment manufacturer’s specifications and instructions
* Personal Protective Equipment (PPE)
* ISO standards
* Company environmental management systems (EMS)
* Montreal Protocol
* Kyoto Protocol

# OCCUPATIONAL SAFETY AND HEALTH PRACTICES

**UNIT CODE:** DM/CU/FIR/BC/07/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: Demonstrate Occupational Safety and Health Practices

**Duration of Unit:** 40 hours

**Unit Description**

This unit specifies the competencies required to demonstrate occupational health and safety practices. It involves identifying workplace hazards and risk, identifying and implementing appropriate control measures to hazards and risks and implementing OSH programs, procedures and policies/guidelines.

**Summary of Learning Outcomes**

1. Identify workplace hazards and risk
2. Control OSH hazards
3. Implement OSH programs

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Identify workplace hazards and risks
 | * Identification of hazards in the workplace and/or the indicators of their presence
* Evaluation and/or work environment measurements of OSH hazards/risk existing in the workplace
* Gathering of OSH issues and/or concerns
 | * Oral questions
* Written tests
* Portfolio of evidence
* Third party report
 |
| 1. Control OSH hazards
 | * Prevention and control measures e.g. use of PPE
* Risk assessment
* Contingency measures
 | * Oral questions
* Written tests
* Portfolio of evidence
* Third party report
 |
| 1. Implement OSH

 programs | * Company OSH program, evaluation and review
* Implementation of OSH programs
* Training of team members and advice on OSH standards and procedures
* Implementation of procedures for maintaining OSH-related records
 | * Oral questions
* Written tests
* Portfolio of evidence
* Third party report
 |

**Suggested Methods of instruction**

* Assigments
* Discussion
* Q&A
* Role play
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Machine/equipment manufacturer’s specifications and instructions
* Personal Protective Equipment (PPE) e.g.
* Mask
* Face mask/shield
* Safety boots
* Safety harness
* Arm/Hand guard, gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Hair Net/cap/bonnet
* Hard hat
* Face protection (mask, shield)
* Apron/Gown/coverall/jump suit
* Anti-static suits
* High-visibility reflective vest

# COMMON UNIT

# FIRE SERVICE

**UNIT CODE:** **DM/CU/FIR/CC/01/6/A**

**Relationship to Occupational Standards**

This unit addresses the unit of competency: manage fire service.

**Duration of Unit: 150**

**Unit Description**

This unit specifies the competencies required manage fire service. It involves incident management systems and performing paramilitary functions.

**Summary of Learning Outcomes**

1. Incident management systems
2. Perform paramilitary function

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Perform paramilitary function
 | * Importance of chain of command
* Commands
* Foot drills
* Parade formation
 | * Oral questions
* Written tests
* Observation
 |
| 1. Manage emergency Incident operations
 | * Scene identification
* Dispatch
* Scene size up
* Scene safety
* Resource allocation
* Scene monitoring
* Scene debrief
 | * Oral questions
* Written tests
* Practical test
* Observation
 |

**Suggested Delivery Methods**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Uniform
* Personal Protective Equipment (PPE) e.g.
* Mask
* Tunic
* Safety boots
* Legging
* Gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Flash hood
* Jump suit
* Radios

# CORE UNITS

# FIRE OUTBREAK

**UNIT CODE:** DM/CU/FIR/CR/01/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: Fight fire outbreak.

**Duration of Unit: 200**

**Unit Description**

This unit specifies the competencies required to fight fire outbreak. It involves determining type of fire, obtaining firefighting equipment, managing firefighter self-safety, saving life of victims and conducting property salvage.

**Summary of Learning Outcomes**

1. Determine type of fire
2. Obtain firefighting equipment
3. Manage firefighter self-safety
4. Save life of victims
5. Conduct property Salvage

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Determine type of fire
 | * Fire chemistry
* Types of fire
* Classes of fire
* Stages of fire development
 | * Oral questions
* Written tests
* Observation
 |
| 1. Determine firefighting medium
 | * Classes of fire
* Method of fire extinction
* Medium of fire extinction
* Water
* Sources
* Hydraulics
* Dry powder
* Foam
* Carbon dioxide
 | * Oral questions
* Written tests
* Observation
 |
| 1. Obtain firefighting equipment
 | * Firefighting equipment
* Classification
* Uses
* Stowing
 | * Oral questions
* Written tests
* Practical test
* Observation
 |
| 1. Manage firefighter self-safety
 | * PPEs
* Importance of PPEs
 | * Written tests
* Observation
* Oral questions
* Third party report
 |
| 1. Save life of victims
 | * Safety
* Personal
* Bystander
* victim
* Methods of evacuation
 | * Written tests
* Observation
* Oral questions
* Third party report
 |
| 1. Conduct property Salvage
 | * Fire suppression
* Methods of fire suppression
* Ways of reducing fire spread
* Importance of property salvage
 | * Written tests
* Observation
* Oral questions
* Third party report
 |

**Suggested Delivery Methods**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Uniform
* Radios
* Fire trucks/fire engines
* Fixed installation
* Portable fire extinquishers
* Breaking-in-gears
* Personal Protective Equipment (PPE) e.g.
* Mask
* Tunic
* Safety boots
* Legging
* Gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Flash hood
* Jump suit
* Self contained breathing apparatus

# FIRE PREVENTION

**UNIT CODE:** DM/CU/FIR/CR/02/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: Prevent fire outbreak

**Duration of Unit: 220**

**Unit Description**

This unit specifies the competencies required to prevent fire outbreak. It involves conducting fire risk assessment, sensitizing community on fire risk, advising on fire suppression and scrutinizing development plans.

**Summary of Learning Outcomes**

1. Conduct fire risk assessment
2. Sensitize community on fire risk
3. Advise on fire suppression
4. Scrutinize development plan

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Conduct fire risk assessment
 | * Components of fire investigation
* Fire risks and hazards
* Identification of fire risks
* Risk management
* Fire safety audit report
 | * Oral questions
* Written tests
* Observation
 |
| 1. Sensitize community on fire risk
 | * Fire science
* Classes of fire
* Causes of fire
* Importance of sensitization
* Ways of sensitization
* Domestic fire safety
* Evacuation
* Emergency call procedures
 | * Oral questions
* Written tests
* Practical test
* Observation
 |
| 1. Advise on fire suppression
 | * Fire suppression
* Methods of fire suppression
* Types of extinguisher
* Usage of fire extinguisher
 | * Written tests
* Observation
* Oral questions
* Third party report
 |
| 1. Scrutinize development plans
 | * Building construction
* Types of building
* Types of building materials
* Building occupancy
* Exits
* Basic electricity
 | * Written tests
* Observation
* Oral questions
* Third party report
 |

**Suggested Delivery Methods**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Uniform
* Radios
* Fixed installation
* Portable fire extinquishers
* Stationery
* Breaking-in-gears
* Personal Protective Equipment (PPE) e.g.
* Mask
* Tunic
* Safety boots
* Legging
* Gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Flash hood
* Jump suit
* Self contained breathing apparatus

# FIREFIGHTING RESOURCES

**UNIT CODE:** DM/CU/FIR/CR/03/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: maintain firefighting resources

**Duration of Unit:** 200 hours

**Unit Description**

This unit specifies the competencies required to maintain firefighting resources. It involves managing usage of firefighting equipment, cleaning firefighting equipment, repairing firefighting equipment and storing firefighting equipment.

**Summary of Learning Outcomes**

1. Manage usage of firefighting equipment
2. Clean firefighting equipment
3. Repair firefighting equipment
4. Store firefighting equipment

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Manage usage of firefighting equipment
 | * Firefighting equipment
* Classification
* Uses
 | * Oral questions
* Written tests
* Observation
 |
| 1. Clean firefighting equipment
 | * Cleaning procedures
* PPEs
* Breaking in gears
* Hoses
* Extrication equipment
* Rope rescue equipment
* Pumps
* Drying procedures
* Draining procedures
* Cleaning agents
 | * Oral questions
* Written tests
* Practical test
* Observation
 |
| 1. Repair firefighting equipment
 | * Hoses repairing procedures
* Maintenance of firefighting equipment
 | * Written tests
* Observation
* Oral questions
* Third party report
 |
| 1. Store firefighting equipment
 | * Equipment inventory
* Requisition
* Restocking
* Importance of locker drills
* Safe storage
* Stowing
 | * Written tests
* Observation
* Oral questions
* Third party report
 |

**Suggested Delivery Methods**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Uniform
* Radios
* Portable fire extinquishers
* Stationery
* Breaking-in-gears
* Personal Protective Equipment (PPE) e.g.
* Mask
* Tunic
* Safety boots
* Legging
* Gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Flash hood
* Jump suit
* Self contained breathing apparatus

# SEARCH AND RESCUE

**UNIT CODE:** DM/CU/FIR/CR/04/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: conduct search and rescue

**Duration of Unit: 180**

**Unit Description**

This unit specifies the competencies required to conduct search and rescue. It involves determining search and rescue equipment, determining safety of search and rescue, establishing search and rescue procedures and preparing rescue and search report.

**Summary of Learning Outcomes**

1. Determine search and rescue equipment
2. Determine safety of search and rescue
3. Establish search and rescue procedures
4. Prepare rescue and search report

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Determine search and rescue equipment
 | * Nature of incidents
* Search and rescue equipment
* Categories
* Uses and care
* Maintenance
* Storage
 | * Oral questions
* Written tests
* Observation
 |
| 1. Determine safety of search and rescue
 | * Scene size up
* Safety
* Rescuer
* Bystanders
* Casualty
 | * Oral questions
* Written tests
* Practical test
* Observation
 |
| 1. Establish search and rescue procedures
 | * Search and rescue procedures
* Rope rescue
* High-rise buildings
* Pits
* Building collapse
* Confined spaces
* Structural fires
* Automotive fires
* Wild land fires
 | * Written tests
* Observation
* Oral questions
* Third party report
 |
| 1. Prepare rescue and search report
 | * Debrief
* Critical incidence stress management
* Report writing
 | * Written tests
* Observation
* Oral questions
* Third party report
 |

**Suggested Delivery Methods**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Uniform
* Radios
* Portable fire extinquishers
* Stationery
* Breaking-in-gears
* Personal Protective Equipment (PPE) e.g.
* Mask
* Tunic
* Safety boots
* Legging
* Gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Flash hood
* Jump suit
* Self contained breathing apparatus

# FIRST AID

**UNIT CODE:** DM/CU/FIR/CR/05/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: offer first Aid

**Duration of Unit:** 200 hours

**Unit Description**

This unit specifies the competencies required offer to first aid. It involves determining scene safety, offering life support services conducting patient evacuation and preparing incident report.

**Summary of Learning Outcomes**

1. Determine scene safety
2. Offer life support services
3. Conduct casualty evacuation
4. Prepare incident report

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Determine scene safety
 | * Scene size up
* Safety
* Responder
* Bystander
* Casualty
 | * Oral questions
* Written tests
* Observation
 |
| 1. Offer life support services
 | * Nature of incident
* Ambulance services calling procedures
* Life support services
* Patient assessment
* Interventions/treatment
* Airway management
* Bleeding and circulation
* Fracture
* Cardio pulmonary resuscitation
 | * Oral questions
* Written tests
* Practical test
* Observation
 |
| 1. Conduct casualty evacuation
 | * Evacuation
* Casualty packaging
* Lifting and carrying method
* Lifting and carrying equipment
* Casualty handing over procedure
 | * Written tests
* Observation
* Oral questions
* Third party report
 |
| 1. Prepare incident report
 | * Nature of incidence
* Casualty intervention
* Casualty response to interventions
 | * Written tests
* Observation
* Oral questions
* Third party report
 |

**Suggested Delivery Methods**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Uniform
* Radios
* Stationery
* Extrication gears
* Breaking-in-gears
* Medical kit
* Lifting and carrying equipment
* Personal Protective Equipment (PPE) e.g.
* Mask
* Tunic
* Safety boots
* Legging
* Gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Flash hood
* Jump suit
* Self contained breathing apparatus

# EMERGENCY VEHICLE OPERATIONS

**UNIT CODE:** DM/CU/FIR/CR/06/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: perform emergency vehicle operations

**Duration of Unit:** 180 hours

**Unit Description**

This unit specifies the competencies required to perform emergency vehicle operations. It involves driving emergency vehicle, maintaining emergency vehicles, operating emergency service vehicle and managing equipment inventory.

**Summary of Learning Outcomes**

1. Drive emergency vehicle
2. Maintain emergency vehicle
3. Operate emergency service vehicle
4. Manage equipment inventory

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Drive emergency vehicle
 | * Road signs
* Speed limits
* Defensive driving
 | * Oral questions
* Written tests
* Observation
 |
| 1. Maintain emergency vehicle
 | * Vehicle maintenance
* Pressure
* Oil
* Coolant
* Service card
 | * Oral questions
* Written tests
* Practical test
* Observation
 |
| 1. Operate emergency service vehicle
 | * Mounted pump operations
* Engage power take off
* Pump controls
* Pump draining
* Water discharge
* Hydraulic platform operations
* Generator operations and maintenance
* Oil
* Fuel
* Power connection
* Cleaning and care
 | * Written tests
* Observation
* Oral questions
* Third party report
 |
| 1. Manage equipment inventory
 | * Equipment inventory
* Restocking of consumables
* Storage
 | * Written tests
* Observation
* Oral questions
* Third party report
 |

**Suggested Delivery Methods**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Uniform
* Radios
* Portable fire extinquishers
* Stationery
* Breaking-in-gears
* Personal Protective Equipment (PPE) e.g.
* Mask
* Tunic
* Safety boots
* Legging
* Gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Flash hood
* Jump suit
* Self contained breathing apparatus

# HAZARDOUS MATERIAL MANAGEMENT

**UNIT CODE:** DM/CU/FIR/CR/07/6/A

**Relationship to Occupational Standards**

This unit addresses the unit of competency: manage hazardous material incident

**Duration of Unit:** 240 hours

**Unit Description**

This unit specifies the competencies required manage hazardous material incident. It involves identifying hazardous material, establishing scene safety, controlling hazardous material and decontaminating affected people and the scene.

**Summary of Learning Outcomes**

1. Identify hazardous material
2. Establish scene Safety
3. Control hazardous material
4. Decontaminate affected people and scene

**Learning Outcomes, Content and Suggested Assessment Methods**

|  |  |  |
| --- | --- | --- |
| **Learning Outcome** | **Content** | **Suggested Assessment Methods** |
| 1. Identify hazardous material
 | * Identify nature of hazardous material
* Types of hazardous material
 | * Oral questions
* Written tests
* Observation
 |
| 1. Establish scene Safety
 | * Scene size up
* Safety
* Responder
* Bystander
* Casualty
* Establish safe zones
 | * Oral questions
* Written tests
* Practical test
* Observation
 |
| 1. Control hazardous material
 | * Handling hazardous material
* Management of hazardous material
* Neutralising hazardous material
 | * Written tests
* Observation
* Oral questions
* Third party report
 |
| 1. Decontaminate affected people and scene
 | * Methods of decontamination
* Physical cleaning
* Water purification
* Disinfection
* Sterilization
* Process of decontamination
 | * Written tests
* Observation
* Oral questions
* Third party report
 |

**Suggested Delivery Methods**

* Instructor led facilitation of theory
* Demonstration by trainer
* Practical work by trainee
* Viewing of related videos

**Recommended Resources**

* Standard operating and/or other workplace procedures manuals
* Specific job procedures manuals
* Uniform
* Radios
* Portable fire extinquishers
* Stationery
* Decontamination agents
* Neutralising agent
* Personal Protective Equipment (PPE) e.g.
* Mask
* Tunic
* Safety boots
* Legging
* Gloves
* Eye protection (goggles, shield)
* Hearing protection (ear muffs, ear plugs)
* Flash hood
* Jump suit
* Self contained breathing apparatus