****

**REPUBLIC OF KENYA**

**NATIONAL OCCUPATIONAL STANDARDS**

**FOR**

**FITNESS INSTRUCTOR**

**LEVEL 4**

****

TVET CDACC

P.O BOX 15745-00100

NAIROBI

First published 2020

©2020, TVET CDACC

All rights reserved. No part of these Occupational Standards may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods without the prior written permission of the TVET CDACC, except in the case of brief quotations embodied in critical reviews and certain other non-commercial uses permitted by copyright law. For permission requests, write to the Council Secretary/CEO, at the address below:

**Council Secretary/CEO**

**TVET Curriculum Development, Assessment and Certification Council**

**P.O. Box 15745–00100**

**Nairobi, Kenya**

**Email:** [**info@tvetcdacc.go.ke**](mailto:info@tvetcdacc.go.ke)

# 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 Kenya’s development blue print 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 in the formulation of the Policy Framework for Reforming Education and Training (Sessional Paper No. 14 of 2012).

A key feature of this policy is the radical change in the design and delivery of the 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 programs.

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 these Occupational Standards were developed for developing a competency-based curriculum for Fitness Instruction Technology level 4. These Occupational Standards will also be the basis for assessment of an individual for competence certification.

It is my conviction that these Occupational Standards will play a great role towards development of competent human resource for the Sports Science sector’s growth and sustainable 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 the Sessional Paper No. 14 of 2012 on Reforming Education and Training in Kenya, emphasized the need to reform curriculum development, assessment and certification. This called for 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 labour force.

The TVET Curriculum Development, Assessment and Certification Council (TVET CDACC), in conjunction with Sports Science Sector Skills Advisory Committee (SSAC) have developed these Occupational Standards Fitness Instructor technician. These occupational standards will be the basis for development of competency-based curriculum for Fitness Instruction Technology Level 4. These Standards will also be the basis for assessment of an individual for competence certification.

The occupational standards are designed and organized with clear performance criteria for each element of a unit of competency. These standards also outline the required knowledge and skills as well as evidence guide.

I am grateful to the Council Members, Council Secretariat, Sports Science SSAC, expert workers and all those who participated in the development of these occupational standards.

**CHAIRPERSON**

**TVET CDACC**

# ACKNOWLEDGMENT

These Occupational Standards were developed through combined effort of various stakeholders from private and public organizations. I am sincerely thankful to the management of these organizations for allowing their staff to participate in this course. I wish to acknowledge the invaluable contribution of industry players who provided inputs towards the development of these Standards.

I thank TVET Curriculum Development, Assessment and Certification Council (TVET CDACC) for providing guidance on the development of these Standards. My gratitude goes to the Sports Science Sector Skills Advisory Committee (SSAC) members for their contribution to the development of these Standards. I thank all the individuals and organizations who participated in the validation of these Standards.

I acknowledge all other institutions which in one way or another contributed to the development of these Standards.

**CHAIRPERSON**

**SPORTS SCIENCE SECTOR SKILLS ADVISORY COMMITTEE**

TABLE OF CONTENT

[FOREWORD iii](#_Toc66628003)

[PREFACE iv](#_Toc66628004)

[ACKNOWLEDGMENT v](#_Toc66628005)

[ABBREVIATIONS AND ACRONYMS vi](#_Toc66628006)

[KEY TO UNIT CODE viii](#_Toc66628007)

[COURSE OVERVIEW ix](#_Toc66628008)

[BASIC UNITS OF COMPETENCY 1](#_Toc66628009)

[DEMONSTRATE COMMUNICATION SKILLS 2](#_Toc66628010)

[DEMONSTRATE NUMERACY SKILLS 6](#_Toc66628011)

[DEMONSTRATE DIGITAL LITERACY 12](#_Toc66628012)

[DEMONSTRATE ENTREPRENEURIAL SKILLS 16](#_Toc66628013)

[DEMONSTRATE EMPLOYABILITY SKILLS 21](#_Toc66628014)

[DEMONSTRATE ENVIRONMENTAL LITERACY 26](#_Toc66628015)

[DEMONSTRATE OCUPATIONAL SAFETY AND HEALTH PRACTICES 31](#_Toc66628016)

[COMMON UNITS OF COMPETENCY 36](#_Toc66628017)

[APPLY FOUNDATION OF EXERCISE AND SPORTS SCIENCE 37](#_Toc66628018)

[APPLY KNOWLEDGE OF SCIENTIFIC PRINCIPLES I 42](#_Toc66628019)

[APPLY KNOWLEDGE OF SCIENTIFIC PRINCIPLES II 47](#_Toc66628020)

[APPLY KNOWLEDGE OF SPORTS NUTRITION 52](#_Toc66628021)

[APPLY KNOWLEDGE OF EXERCISE AND SPORTS INJURIES 56](#_Toc66628022)

[APPLY EDUCATIONAL PSYCHOLOGY 60](#_Toc66628023)

[APPLY MEASUREMENT AND EVALUATION 64](#_Toc66628024)

[APPLY EDUCATION TECHNOLOGY 67](#_Toc66628025)

[APPLY INSTRUCTION LAW AND ETHICS 69](#_Toc66628026)

[APPLY INSTRUCTION METHODS 72](#_Toc66628027)

[CORE UNITS OF COMPETENCY 76](#_Toc66628028)

[PERFORM GYMNASIUM ATTENDANT DUTIES. 77](#_Toc66628029)

[PERFORM FITNESS RELATED TRAINING 81](#_Toc66628030)

[PERFORM SPECIALIZED FITNESS TRAINING 89](#_Toc66628031)

# ABBREVIATIONS AND ACRONYMS

2D Two Dimensional

AIDS Acquired Immune Deficiency Syndrome

ASC Applied Science

BC Basic Competency

CC Common Competency

CDACC Curriculum Development, Assessment and Certification Council

CR Core Competency

CU Curriculum

HIV Human Immuno-Deficiency Virus

ICT Information Communication Technology

LCD Liquid Crystal Display

NEMA National Environmental Management Authority

OSHA Occupation Safety and Health Act

OSHS Occupation Safety and Health Standards

PESTEL Political Economic Social Technological Environmental and Legal

PPE Personal Protective Equipment

SSAC Sector Skills Advisory Committee

SWOT Strengths Weaknesses Opportunities and Threats

TVET Technical and Vocational Education and Training

# KEY TO UNIT CODE

**ASC/OS/FI/BC/01/4/A**

Industry or sector

Occupational Standards

Occupational area

Type of competency

Competency number

Competency level

Version control

# OVERVIEW

Fitness Instructor Level 4 qualification consists of competencies that an individual must achieve to enable him/her to apply Sports Science skills in a work place. It involves performing gym attendance, performing fitness related training and Performing specialised fitness training

The units of competency comprising Fitness Instructor level 4 qualifications include the following:

**BASIC UNITS OF COMPETENCY**

|  |  |
| --- | --- |
| Unit Code | Unit Title |
| ASC/CU/FI/BC/01/4/A | Demonstrate Communication Skills |
| ASC/CU/FI/BC/02/4/A | Demonstrate Numeracy Skills |
| ASC/CU/FI/BC/03/4/A | Demonstrate Digital Literacy |
| ASC/CU/FI/BC/04/4/A | Demonstrate Entrepreneurial Skills |
| ASC/CU/FI/BC/05/4/A | Demonstrate Employability Skills |
| ASC/CU/FI/BC/06/4/A | Demonstrate Environmental Literacy |
| ASC/CU/FI/BC/07/4/A | Demonstrate Occupational Safety and Health Practices |

**COMMON UNITS OF COMPETENCY**

|  |  |
| --- | --- |
| Unit Code | Unit Title |
| ASC/CU/FI/CC/01/4/A | Apply Knowledge of Foundation Of Sports Science |
| ASC/CU/FI/CC/02/4/A | Apply Knowledge of Scientific Principles I |
| ASC/CU/FI/CC/03/4/A | Apply Knowledge of Scientific Principles II |
| ASC/CU/FI/CC/04/4/A | Apply Knowledge of Apply Sports Nutrition |
| ASC/CU/FI/CC/05/4/A | Apply Knowledge of Exercise And Sports Injuries |
| ASC/CU/FI/CC/06/4/A | Apply Educational Psychology |
| ASC/CU/FI/CC/07/4/A | Apply Measurement and Evaluation |
| ASC/CU/FI/CC/08/4/A | Apply Education Technology |
| ASC/CU/FI/CC/09/4/A | Apply Instruction Law And Ethics |
| ASC/CU/FI/CC/10/4/A | Apply instruction methods |

**CORE UNITS OF COMPETENCY**

|  |  |
| --- | --- |
| Unit Code | Unit Title |
| ASC/CU/FI/CR/01/4/A | Perform Gym Attendance |
| ASC/CU/FI/CR/02/4/A | Perform Fitness Related Training |
| ASC/CU/FI/CR/03/4/A | Perform Specialised Fitness Training |
| ASC/CU/FI/CR/04/4/A | Industrial Attachment |

# BASIC UNITS OF COMPETENCY

**DEMONSTRATE COMMUNICATION SKILLS**

**UNIT CODE:** ASC/CU/FI/BC/01/4/A

**UNIT DESCRIPTION**

This unit covers the competencies required demonstrate communication skills. It involvesobtaining and conveying workplace information, completing relevant work-related documents, communicating information about workplace processes, leading workplace discussion and communicating workplace issues.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range*** |
| 1. Obtain and convey workplace information | 1. Specific and relevant information is accessed from ***appropriate sources*** based on standard procedures 2. Effective questioning, active listening and speaking skills are used to gather and convey information based on communication needs 3. Appropriate ***medium*** is used to transfer information and ideas in accordance with workplace guidelines 4. Appropriate non- verbal communication is used as per the communication needs 5. Appropriate lines of communicationwith supervisors and colleagues are identified and followed based on workplace requirements 6. Location and storage of information is undertaken according to workplace procedures    1. Personal interaction is carried out clearly and concisely according to workplace requirements |
| 1. Complete relevant work-related documents | * 1. Range of forms relating to conditions of employment are completed according to workplace procedures   2. Workplace data is recorded based on workplace requirements   3. Errors in recording information are identified and acted upon in accordance with workplace policies   4. Reporting requirements are completed according to organizational guidelines |
| 1. Communicate information about workplace processes | 1. Information sources are identified according to workplace procedures 2. ***Methods of communication*** are selected based on workplace guidelines 3. Multiple operations are communicated according to workplace structure 4. Work-related questions are asked and responded based on set protocols 5. Information is selected and organized according to workplace requirements 6. Verbal and written reporting is undertaken as per workplace requirements 7. Communication is maintained according to workplace standards |
| 1. Lead workplace discussions | 1. Response to workplace issues is sought and provided as per workplace protocol 2. Constructive contributions are made based on ***workplace discussions*** 3. Workplace objectives and action plan are communicated according to workplace requirements |
| 1. Identify and communicate issues arising in the workplace | 1. Issues and problems are identified as per workplace guidelines 2. Problems and issues in the workplace are organized according to workplace operations 3. Dialogue is initiated with appropriate personnel as per workplace structure 4. Problems and issues raised are communicated as per the workplace reporting procedures |

**RANGE**

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Methods of communication mayinclude but not limited to: | * Non-verbal gestures * Verbal * Face to face * Two-way radio * Speaking to groups * Using telephone * Written * Internet |
| 1. Workplace discussion may include but not limited to: | * Coordination meetings * Toolbox discussion * Peer-to-peer discussion |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication
* Active listening
* Interpretation
* Negotiation
* Writing

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Organization requirements for written and electronic communication methods
* Effective verbal communication methods
* Report writing
* Effective questioning techniques (clarifying and probing)
* Workplace etiquette

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   1. Dealt with a range of communication/information at one time 2. Made constructive contributions in workplace issues 3. Sought workplace issues effectively 4. Responded to workplace issues promptly 5. Presented information clearly and effectively in written form 6. Used appropriate sources of information 7. Asked appropriate questions 8. Provided accurate information |
| 1. Resource Implications | 1. Access to relevant workplace where assessment can take place 2. Appropriately simulated environment where assessment can take place 3. Materials relevant to the proposed activity or tasks |
| 1. Methods of Assessment | 1. Third-party reports 2. Portfolio 3. Interview 4. Written tests 5. Observation 6. Oral questioning |
| 1. Context of Assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

**DEMONSTRATE NUMERACY SKILLS**

**UNIT CODE:** ASC/CU/FI/BC/02/4/A

**UNIT DESCRIPTION**

This unit covers the competencies required to demonstrate numeracy skills. It involves identifying and using whole numbers and simple fractions, decimals and percentages for work, identifying, measuring and estimating familiar quantities for work, reading and using familiar maps, plans and diagrams for work, identifying and describing common 2D and some 3D shapes for work, constructing simple tables and graphs for work using familiar data and identifying and interpreting information in familiar tables, graphs and charts for work.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |  |
| --- | --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range.*** |
| 1. Identify and use whole numbers and simple fractions, decimals and percentages for work | | 1. Simple fractions, decimals and percentages identified and interpreted as per standard operating procedures. 2. Understanding of place value by organising numbers from smallest to largest demonstrated as SOPs 3. Required numerical information located and decision made on appropriate method to solve a problem as per SOPs 4. Limited range of calculations performed using the four operations using SOPs 5. Links between operations described as per SOPs 6. Estimations made to check reasonableness of results of problem-solving process as SOPs 7. Numerical information recorded, and the result of the task communicated using informal and some formal language and symbolism as per workplace procedures |
| 1. Identify, measure and estimate familiar quantities for work | 1. Measurement information in workplace tasks and texts identified and interpreted as per workplace procedures. 2. Familiar units of measurement needed for tasks is identified as per measurements manuals/charts 3. Familiar and simple amounts estimated as per workplace procedures. 4. Appropriate measuring equipment selected as per SOPs 5. ***Simple measuring equipment*** graduated in familiar units to measure relevant quantities is used as per graduation manuals. 6. Calculation done using familiar units of measurement as per SOPs 7. Measurements and results checked against estimates as per job specifications. 8. Results are recorded or reported as per workplace procedures 9. Results relevant to the workplace task are communicated using informal and some formal mathematical and general language as per workplace procedures. |
| 1. Read and use familiar maps, plans and diagrams for work | 1. Items and places are in familiar maps, plans and diagrams as per SOPs 2. Common symbols and keys recognised in familiar maps, plans and diagrams as per SOPs 3. Understanding of direction and location demonstrated by describing the location of objects, or route to familiar places as per SOPs 4. Instructions to locate familiar objects or places are given and followed as per SOPs 5. Informal and some formal oral mathematical language and symbols are used as per SOPs |
| 1. Identify and describe common 2D and some 3D shapes for work | 1. ***Common 2D shapes and some common 3D shapes*** in familiar situations are identified and named as per job requirements 2. Common 2D shapes and designs are compared and classified as per SOPs 3. Informal and some formal language used to describe common two-dimensional shapes and some common three-dimensional shapes in accordance with workplace procedures. 4. Simple items used to draw or construct common 2D shapes as per workplace procedures. 5. Common 3D shapes matched to their 2D sketches or nets as per SOPs |
| 1. Construct simple tables and graphs for work using familiar data | 1. Common types of graphs are identified and named as per SOPs 2. Familiar data to be collected is determined in accordance with job specifications. 3. A method to collect data is selected in accordance with workplace procedures. 4. A small amount of simple familiar data is collected as per workplace procedures 5. One or two variables determined from the data collected as per SOPs. 6. Data ordered and collated as per standard operating procedures. 7. A table is constructed and data entered as per SOPs 8. Graphs are constructed using data from table as per job specifications 9. Results are promptly checked as per workplace procedures 10. Graph information related to work is reported or discussed using informal and some formal mathematical and general language as per workplace procedures |
| 1. Identify and interpret information in familiar tables, graphs and charts for work | 1. Simple tables are identified in familiar texts and contexts in accordance with workplace procedures 2. Title, headings, rows and columns located in familiar tables as per SOPs 3. Information and data in simple tables identified and interpreted as per workplace procedures. 4. Information is related in accordance with workplace tasks 5. Familiar graphs and charts are identified in familiar texts and contexts as per SOPs 6. Title, labels, axes, scale and key from familiar graphs and charts are located as per SOPs 7. Information and data in familiar graphs and charts are identified and interpreted as per job requirements 8. Information is related to relevant workplace tasks as per job requirements. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Simple measuring equipment may include but not limited to: | * Rulers * Watches/clocks * Scales * Thermometers * AVO meter |
| 1. Common 2D shapes and common 3D shapes may include but not limited to: | * Round * Square * Rectangular * Triangle * Sphere * Cylinder * Cube * Polygons * Cuboids |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Measuring
* Logical thinking
* Computing
* Drawing of graphs
* Applying mathematical formulas
* Analytical

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Types of common shapes
* Differentiation between two dimensional shapes / objects
* Formulae for calculating area and volume
* Types and purpose of measuring instruments
* Units of measurement and abbreviations
* Fundamental operations (addition, subtraction, division, multiplication)
* Rounding techniques
* Types of fractions
* Different types of tables and graphs
* Meaning of graphs, such as increasing, decreasing, and constant value
* Preparation of basic data, tables & graphs

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   * 1. Simple fractions, decimals and percentages are correctly identified and interpreted   2. Performed a limited range of calculations using the 4 operations   3. Performed calculations using familiar units of measurement   4. Recognised common symbols and keys in familiar maps, plans and diagrams   5. Constructed simple tables and graphs using familiar data   6. Identified and interpret information in familiar tables, graphs and charts |
| 1. Resource Implications | 1. Access to relevant workplace where assessment can take place 2. Appropriately simulated environment where assessment can take place 3. Materials relevant to the proposed activity or tasks |
| 1. Methods of Assessment | Competency may be assessed through:   1. Written Test 2. Interview 3. Oral Questioning |
| 1. Context of Assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

**DEMONSTRATE DIGITAL LITERACY**

**UNIT CODE:** ASC/CU/FI/BC/01/4/A

**UNIT DESCRIPTION**

This unit covers the competencies required to demonstrate digital literacy in a working environment. It entails identifying computer software and hardware, applying security measures to data, hardware, software, applying computer software in solving task sand applying internet and email in communication at workplace.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range*** |
| 1. Identify computer software and hardware | * 1. ***Appropriate computer software*** is identified according to manufacturer’s specification   2. ***Appropriate computer hardware*** is identified according to manufacturer’s specification |
| 1. Apply security measures to data, hardware, software | * 1. ***Data security and privacy are classified*** in accordance with the technological situation   2. ***Security and control measures*** are applied in accordance with laws governing protection of ICT   3. Computer threats and crimes are detected as per information security management guidelines.   4. Protection against computer crimes is undertaken in accordance with laws governing protection of ICT |
| 1. Apply computer software in solving tasks | * 1. Basic word processing concepts are applied in resolving workplace tasks   2. Word processing utilities are applied in accordance with workplace procedures   3. Data is manipulated on worksheet in accordance with office procedures |
| 1. Apply internet and email in communication at workplace | * 1. Electronic mail is applied in workplace communication in accordance with office procedures   2. Office internet functions are defined and executed in accordance with office procedures   3. Network configuration and uses are determined in accordance with office operations procedures |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Range** | **Variable** |
| 1. Appropriate computer software may include but not limited to: | * Operating system * MS office * Web browser * Media players |
| 1. Appropriate computer hardware may include but not limited to: | * Computer Case * Monitor * Keyboard * Mouse * Hard Disk Drive * Motherboard * Video Card |
| 1. Data security and privacy may include but not limited to: | * Confidentiality * Cloud computing * Confidentiality * Cyber terrorism * Integrity -but-curious data serving |
| 1. Security and control measures may include but not limited to: | * Countermeasures and risk reduction * Cyber threat issues * Risk management |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Analytical
* Interpretation
* Typing
* Communication
* Computing

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Input and output devices
* Central processing Unit (CPU)
* Peripherals
* Storage Media
* Software concept
* Types of concept
* Function of computer software
* Data security and privacy
* Security threats and control measures
* Computer crimes
* Detection and protection of computer crimes
* Laws governing protection of ICT
* Word processing;
* Functions and concepts of word processing.
* Documents and tables creation and manipulations
* Mail merging
* Word processing utilities
* Spread sheet;
* Meaning, formulae, function and charts, uses, layout, data manipulation and application to cell
* Networking and Internet;
* Meaning, functions and uses of networking and internet.
* Electronic mail and world wide web
* Emerging trends and issues in ICT;
* Identify and apply emerging trends and issues in ICT
* Challenges posed by emerging trends and issues

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   * 1. Identified input, output, CPU and storage media devices of computers in accordance to computer specification   2. Identified concepts, types and functions of computer software according to operation manual   3. Identified and controlled security threats   4. Detected and protected computer crimes   5. Applied word processing in office tasks   6. Prepared work sheet and applied data to the cells in accordance to workplace procedures   7. Used Electronic Mail for office communication as per workplace procedure   8. Applied internet and World Wide Web for office tasks in accordance with office procedures   9. Applied laws governing protection of ICT |
| 1. Resource Implications | * 1. Access to relevant workplace where assessment can take place   2. Appropriately simulated environment where assessment can take place   3. Materials relevant to the proposed activity or tasks |
| 1. Methods of Assessment | Competency may be assessed through:   * 1. Written tests   2. Practical assignment   3. Interview   4. Oral Questioning   5. Observation |
| 1. Context of Assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

**DEMONSTRATE ENTREPRENEURIAL SKILLS**

**UNIT CODE:** ASC/CU/FI/BC/01/4/A

**UNIT DESCRIPTION**

This unit covers the competencies required demonstrate entrepreneurial skills. It involvescreating and maintaining small scale business, establishing small scale business customer base, managing small scale business and growing/ expanding small scale business.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the **key outcomes** which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range*** |
| 1. Create and maintain small scale business | 1. Generation and evaluation of business ideas is undertaken in accordance with the existing procedure 2. Competencies are matched with business opportunities in accordance with business practices. 3. Procedure for starting a small business is identified as per the legal requirements 4. SWOT/ PESTEL analysis and or industrial survey is carried out according to office procedures 5. ***Business operations*** are monitored and controlled following established procedures. 6. Quality assurance measures are implemented in accordance with the business practices. 7. Good relations are maintained with staff/workers as per the workplace policies. 8. Policies and procedures on occupational safety and health and environmental concerns are constantly observed as per the workplace policies |
| 1. Establish small scale business customer base | 1. Good customer relations are maintained in accordance with office procedures 2. New customers and markets are identified, explored and reached out to according to the marketing plan 3. Promotions/Incentives are offered to loyal customers in accordance with office procedures 4. Additional products and services are evaluated and tried in accordance with marketing strategy 5. Customer record is maintained in accordance with office procedures |
| 1. Manage small scale business | 1. Enterprise is built up and sustained in line with judicious control of cash flows. 2. Profitability of enterprise is ensured as per the internal controls. 3. Unnecessary or lower-priority expenses and purchases are avoided as per the marketing strategy 4. Basic cost-benefit analysis are undertaken in accordance with office procedures 5. Basic financial management are undertaken in accordance with office procedures 6. Basic financial accounting in undertaken in accordance with office procedures 7. Business ***internal controls*** are implemented in accordance with office procedure 8. Setting business priorities and strategies is carried out according to office procedures 9. Preparation and interpretation of basic financial statements is undertaken in accordance with set procedures 10. Preparation of business plansfor small business is undertaken in accordance with ***business strategy*** 11. Business Social Responsibility is maintained in accordance with Standard Operations Procedures (SOP) |
| 1. Grow/ expand small scale business | 1. Prepared business growth strategy for small sale business in accordance with office procedures 2. Incorporated technology in small scale business growth in accordance with technological trends 3. Emerging issues and trends are considered in accordance with business growth strategy 4. Built audience interest in product/service according to growth strategy 5. Boosted cooperate communication according to business ***communication strategy*** |

**RANGE**

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Business operations may include but not limited to: | * Purchasing * Accounting/administrative * Work production/operations/sales * Marketing |
| 1. Internal control may include but not limited to: | * Accounting systems * Financial statements/reports * Cash management * Human resource management |
| 1. Business Strategy may include but not limited to: | * Management of wastages * Environmental Conservation |
| 1. Communication strategy may include but not limited to: | * Blue print of exchange of information * Technology and exchange of information |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Marketing
* Advertising
* Basic bookkeeping
* Accounting
* Communication

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Generation and evaluation of business ideas
* Legal requirements for starting a small business
* SWOT/ PESTEL analysis
* Occupational Safety and Health
* Public relations concepts
* Business plan
* Business financing
* Marketing strategies
* Business management and control
* Production/ operation process
* Product promotion strategies
* Market and feasibility studies
* Business ethics
* Building customer relations
* Business models and strategies
* Types and categories of businesses
* Business internal controls
* Relevant national and local legislation and regulations
* Basic quality control and assurance concepts
* Building relations with customer and employees
* Building competitive advantage of the enterprise
* Business growth strategies

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |  |
| --- | --- | --- |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   |  | | --- | | 1. Demonstrated entrepreneurial skills 2. Demonstrate competencies to create a small-scale business 3. Demonstrated ability to conceptualize and plan a micro/small business 4. Grew customer base for the small-scale business 5. Demonstrated ability to manage/operate a micro/small-scale business 6. Demonstrated competencies to grow a micro/small-scale business | |
| 1. Resource Implications | |  | | --- | | The following resources should be provided: |  1. Assessment location 2. Case studies on micro/small-scale enterprises 3. Assessment materials |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   |  |  | | --- | --- | | 1. Written tests 2. Observation 3. Oral questioning 4. Portfolio 5. Projects |  | |
| 1. Context of Assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# DEMONSTRATE EMPLOYABILITY SKILLS

**UNIT CODE:** ASC/CU/FI/BC/05/4/A

**UNIT DESCRIPTON**

This unit covers competencies required to demonstrate employability skills. It involves conducting self-management, demonstrating critical safe work habits, demonstrating workplace learning and workplace ethics.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range*** |
| 1. Conduct self-management | 1. Personal vision, mission and goals are formulated based on potential and in relation to organization objectives 2. Emotional intelligence is demonstrated as per workplace requirements. 3. Individual performance is evaluated and monitored according to the agreed targets. 4. Assertiveness is developed and maintained based on the requirements of the job. 5. Accountability and responsibility for own actions are demonstrated based on workplace instructions. 6. Self-esteem and a positive self-image are developed and maintained based on values. 7. Time management, attendance and punctuality are observed as per the organization policy. 8. Goals are managed as per the organization’s objective 9. Self-strengths and weaknesses are identified based on personal objectives |
| 1. Demonstrate critical safe work habits | 1. Stress is managed in accordance with workplace policy. 2. Punctuality and time consciousness is demonstrated in line with workplace policy. 3. Personal objectives are integrated with organization goals based on organization’s strategic plan. 4. ***Resources*** are utilized in accordance with workplace policy. 5. Work priorities are set in accordance to workplace goals and objectives. 6. Leisure time is recognized and utilized in line with personal objectives. 7. ***Drugs and substances of abuse*** are identified and avoided based on workplace policy. 8. HIV and AIDS prevention awareness is demonstrated in line with workplace policy. 9. Safety consciousness is demonstrated in the workplace based on organization safety policy. 10. ***Emerging issues*** are identified and dealt with in accordance with organization policy. |
| 1. Demonstrate workplace learning | * 1. Learning opportunities are sought and managed based on job requirement and organization policy.   2. Improvement in performance is demonstrated based on courses attended.   3. Application of learning is demonstrated in both technical and non-technical aspects based on requirements of the job   4. Time and effort is invested in learning new skills based on job requirements   5. Initiative is taken to create more effective and efficient processes and procedures in line with workplace policy.   6. New systems are developed and maintained in accordance with the requirements of the job.   7. Awareness of personal role in workplace ***innovation*** is demonstrated based on requirements of the job. |
| 1. Demonstrate workplace ethics | 1. Policies and guidelines are observed as per the workplace requirements 2. Self-worth and professionalism is exercised in line with personal goals and organizational policies 3. Code of conduct is observed as per the workplace requirements 4. Integrity is demonstrated as per legal requirement |

**RANGE**

This section provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Range** | **Variable** |
| 1. Personal objectives may include but not limited to: | * Long term * Short term * Broad * Specific |
| 1. Feedback may include but not limited to: | * Verbal * Written * Informal * Formal |
| 1. Team may include but not limited to: | * Small work group * Staff in a section/department * Inter-agency group |
| 1. Drug and substance abuse may include but not limited to: | * Alcohol * Tobacco * Miraa * Over-the-counter drugs * Cocaine * Bhang * Glue |
| 1. Emerging issues may include but not limited to: | * Terrorism * Social media * National cohesion * Open offices |
| 1. Range of media for learning may include but not limited to: | * Mentoring * peer support and networking * IT and courses |
| 1. Innovation may include but not limited to: | * New ideas * Original ideas * Different ideas * Methods/procedures * Processes * New tools |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication
* Interpersonal
* Critical thinking
* Observation
* Organizing
* Record keeping
* Problem solving
* Decision Making
* Resource utilization

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Work values and ethics
* Company policies
* Company operations, procedures and standards
* Occupational Health and safety procedures
* Fundamental rights at work
* Personal hygiene practices
* Workplace communication
* Concept of time
* Time management
* Decision making
* Types of resources
* Work planning
* Record keeping
* Workplace problems and how to deal with them
* Assertiveness
* Team work
* HIV and AIDS
* Drug and substance abuse

1. Safe work habits
2. Professional growth and development
3. Technology in the workplace
4. Emerging issues
   * Social media
   * Terrorism
   * National cohesion

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of Competency | Assessment requires evidence that the candidate:   * 1. Conducted self-management   2. Demonstrated critical safe work habits   3. Demonstrated workplace learning   4. Demonstrated workplace ethics |
| 1. Resource Implications | The following resources should be provided:   1. Access to relevant workplace where assessment can take place 2. Appropriately simulated environment where assessment can take place |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Oral questioning 2. Portfolio of evidence 3. Third Party Reports 4. Written tests |
| 1. Context of Assessment | Competency may be assessed:   1. On-the-job 2. Off-the –job 3. During Industrial attachment |
| 1. Guidance information for assessment | | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

**DEMONSTRATE ENVIRONMENTAL LITERACY**

UNIT CODE: ASC/CU/FI/BC/06/4/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to demonstrate environmental literacy. It involves controlling environmental hazard, controlling environmental pollution, demonstrating sustainable resource use and evaluating current practices in relation to resource usage.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range*** |
| 1. Control environmental hazard | * 1. Storage methods for environmentally hazardous materials are followed according to environmental regulations and OSHS.   2. Disposal methods of hazardous wastes are followed according to environmental regulations and OSHS.   3. ***PPE*** is used according to OSHS. |
| 1. Control environmental pollution | * 1. ***Environmental pollution*** ***control measures*** are compiled following standard protocol.   2. Procedures for solid waste management are observed according Environmental Management and Coordination Act 1999   3. Methods for minimizing noise pollution complied following environmental regulations. |
| 1. Demonstrate sustainable use of resource s | * 1. Methods for minimizing wastage are complied with.   2. ***Waste management procedures*** are employed following principles of 3Rs (Reduce, Reuse, Recycle)   3. Methods for economizing or reducing resource consumption are practiced. |
| 1. Evaluate current practices in relation to resource usage | * 1. Information on resource efficiency ***systems and procedures*** are collected and provided as per work groups/sector   2. ***Current resource usage*** is measured and recorded as per work group/sector   3. Current purchasing strategies are analyzed and recorded according to industry procedures.   4. Current work processes to access information and data is analyzed following enterprise protocol. |
| 1. Identify environmental legislations/conventions for environmental concerns | 1. Environmental legislations/conventions and local ordinances are identified according to the different environmental aspects/impact 2. Industrial standard/environmental practices are described according to the different environmental concerns |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. PPE may include but are not limited to: | * Masks * Gloves * Goggles * Safety hat * Overall * Hearing protector * Safety boots |
| 1. Environmental pollution control measures may include but are not limited to: | * Methods for minimizing or stopping spread and ingestion of airborne particles * Methods for minimizing or stopping spread and inhaling gases and fumes * Methods for minimizing or stopping spread and ingestion of liquid wastes |
| 1. Waste management procedures may include but are not limited to: | * Sorting * Storing of items * Recycling of items * Disposal of items * Handling * Transport |
| 1. Current resources usage may include but are not limited to: | * Electric * Water * Fuel * Telecommunications * Supplies * Materials |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Measuring
* Recording
* Analytical
* Monitoring
* Writing
* Communication

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Storage methods of environmentally hazardous materials
* Disposal methods of hazardous wastes
* Usage of PPE Environmental regulations
* OSHS
* Types of pollution
* Environmental pollution control measures
* Different solid wastes
* Solid waste management
* Different noise pollution
* Methods of minimizing noise pollution
* Solid Waste Act
* Methods of minimizing wastage
* Waste management procedures
* Economizing of resource consumption
* Principle of 3Rs
* Types of resources
* Techniques in measuring current usage of resources
* Calculating current usage of resources
* Types of workplace environmental hazards
* Environmental regulations
* Environmental regulations applying to the enterprise.
* Procedures for assessing compliance with environmental regulations.
* 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 current work processes to access information and data Analysis of data and information

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Controlled environmental hazards 2. Controlled environmental pollution 3. Demonstrated sustainable resource use 4. Evaluated current practices in relation to resource usage |
| 1. Resource Implications | The following resources should be provided:   * 1. Workplace with storage facilities   2. Tools, materials and equipment relevant to the tasks (e.g. cleaning tools, cleaning materials, trash bags, etc.)   3. PPEs   4. Manuals and references   5. Legislation, policies, procedures, protocols and local ordinances relating to environmental protection   6. Case studies/scenarios relating to environmental Protection |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Observation 2. Oral questioning 3. Written tests 4. Third party reports 5. Portfolio |
| 1. Context of Assessment | Competency may be assessed:   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# DEMONSTRATE OCUPATIONAL SAFETY AND HEALTH PRACTICES

**UNIT CODE:** ASC/CU/FI/BC/01/4/A

**UNIT DESCRIPTION**

This unit specifies the competencies required to practice safety and health and comply with OSH requirements relevant to work. It involves observing workplace procedures for hazards and risk prevention and participating in arrangements for workplace safety and health maintenance.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms*** ***are elaborated in the Range*** |
| 1. Adhere to workplace procedures for hazards and risk prevention | 1. Arrangement of work area and items in accordance with   workplace procedures requirements   1. Work standards and procedures are followed based on instructions 2. ***Prevention and control measures*** are applied based on instructions |
| 1. Participate in arrangements for workplace safety and health maintenance | 1. Orientations on ***OSH requirements and regulations*** is undertaken in line with policy. 2. Feedback on occupational health and safety are provided as per workplace instructions. 3. Workplace procedures for reporting hazards, incidents, injuries and sickness are adhered to as per workplace policy. 4. ***OSH-related training needs*** are identified and proposed as per workplace policy. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Prevention and control measures may include but are not limited to: | * Eliminate the hazard * Isolate the hazard * Substitute the hazard with a safer alternative * Use administrative controls to reduce the risk * Use engineering controls to reduce the risk * Use personal protective equipment * Safety, Health and Work Environment Evaluation * Periodic and/or special medical examinations of workers |
| 1. Safety gears /PPE (Personal Protective Equipment’s) may include but are not limited to: | * 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 |
| 1. Incidents and emergencies may include but are not limited to: | * Chemical spills * Equipment/vehicle accidents * Explosion * Fire * Gas leak * Injury to personnel * Structural collapse * Toxic and/or flammable vapors emission. |
| 1. OSH requirements / regulations may include but are not limited to: | * Building code * Permit to Operate |
| 1. OSH-related trainings may include but are not limited to: | * Safety Orientations relevant to tasks * Safe and Correct Operation of Tools and Equipment * Health Orientations/trainings * Prevention and Control of OSH Hazards in the workplace * Chemical Handling * Safety Trainings * Prevention and Control of Work-related Injuries and Illness * Basic First-aid Trainings * Emergency Response Trainings * Trainings on use of fire-extinguisher |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication
* Knowledge management
* Collaborating
* Interpersonal
* Troubleshooting
* Critical thinking
* Observation

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* General OSH principles and legislations
* Principles of good housekeeping (5S)
* Company/workplace policies/ guidelines
* Standards and safety requirements of work process and procedures
* Standard Workplace emergency plan and procedures
* Safety and health requirements of tasks
* Workplace guidelines on providing feedback on OSH and security concerns
* OSH regulations
* Hazard control procedures
* OSH trainings relevant to work

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Arranged work area and items in accordance with 2. workplace procedures requirements 3. Followed work standards and procedures based on instructions 4. Applied ***Prevention and control measures*** based on instructions 5. Undertook orientations on ***OSH requirements and regulations*** in line with policy. 6. Provided feedback on occupational health and safety as per workplace instructions. 7. Adhered to workplace procedures for reporting hazards, incidents, injuries and sickness to as per workplace policy. 8. Identified and proposed ***OSH-related training needs*** as per workplace policy. |
| 1. Resource Implications | The following resources should be provided:   1. Access to relevant workplace where assessment can take place 2. Appropriately simulated environment where assessment can take place |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Oral questioning 2. Portfolio of evidence 3. Third Party Reports 4. Written tests |
| 1. Context of Assessment | Competency may be assessed:   1. On-the-job 2. Off-the –job 3. During Industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# COMMON UNITS OF COMPETENCY

# APPLY FOUNDATION OF EXERCISE AND SPORTS SCIENCE

**UNIT CODE:** ASC/OS/FI/CC/01/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sports trainer in order to apply the foundation of sports science. It involves; Demonstrating knowledge of the history of sports science, demonstrating knowledge of different branches of sports science and their relationships, demonstrating knowledge of physical fitness components in exercise and sports science, demonstrating knowledge of sports-related fitness components, demonstrating knowledge of first aid and sports-related injuries

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range.*** |
| * 1. Demonstrate knowledge of the history of sport science | * 1. knowledge of the origin of the sport is demonstrated as per the procedure   2. knowledge of facility and equipment is demonstrated as per the procedure   3. knowledge of physical firmness and participation in sports activities is demonstrated as per the procedure   4. knowledge of the growth of sports is demonstrated as per the procedure   5. knowledge of programmes of special needs persons is demonstrated as per the procedure |
| * 1. Demonstrate knowledge of different branches of sports science and their relationships | 1. Knowledge of exercise physiology demonstrated as per the procedure 2. Knowledge of motor development and learning is demonstrated as per the procedure 3. Knowledge on sports biomechanics demonstrated as per the procedure 4. Knowledge on sports nutrition demonstrated as per the procedure 5. Knowledge on sports analysis demonstrated as per the procedure 6. Knowledge on sports coaching science demonstrated as per the procedure 7. Knowledge on sports engineering and technology science is demonstrated as per the procedure 8. Knowledge on sports technology science demonstrated as per the procedure 9. Knowledge on sports sociology science demonstrated as per the procedure 10. Knowledge on sports medicine science demonstrated as per the procedure 11. Knowledge of interrelationship amongst branches sports science is demonstrated ad per the branches |
| * 1. Demonstrate knowledge of physical fitness components in sports science | * 1. Knowledge of aerobic fitness is demonstrated as per the procedure   2. Knowledge of anaerobic fitness is demonstrated as per the procedure   3. Knowledge of muscle strength is demonstrated as per the procedure   4. Knowledge of muscle endurance is demonstrated as per the procedure   5. Knowledge of muscle flexibility is demonstrated as per the procedure   6. Knowledge of body composition is demonstrated as per the procedure |
| * 1. Demonstrate knowledge of sports related fitness components | * 1. Knowledge of speed in sports is demonstrated as per the procedure   2. Knowledge of power in sports is demonstrated as per the procedure   3. Knowledge of agility in sports is demonstrated as per the procedure |
| * 1. Demonstrate knowledge of first aid and sports related injuries | * 1. Knowledge of components and uses of components *of first aid kit* is demonstrated as per the procedure   2. Knowledge of *first equipment* is demonstrated as per the procedure   3. Knowledge of principles of first aid is demonstrated as per the procedure   4. Knowledge on common injuries in sports is demonstrated as per the procedure   5. Knowledge on management of *common injuries in sports* is demonstrated as per the procedure |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Components of first aid kit may include but not limited to: | * Syringe * Bandages * Safety pins * Thermometer * Wipes * Gloves * Antiseptics * Pain killer etc. |
| 1. First equipment may include but not limited to: | * Stretcher * Cpr manikin |
| 1. Common injuries in sports may include but not limited to: | * Strains * Sprains * Fractures * Contortions * Cuts * Dislocation * Nose bleeding |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication
* Reflective
* Independent
* Creative
* Team work

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Structure of Skeletal system
* Types of muscle
* Types of fibres
* Theories of muscle contraction
* Circulatory system
* Function respiratory system
* Breathing mechanism
* Blood composition
* blood vessels

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Demonstrated knowledge of functions of skeletal system 2. Demonstrated knowledge of types of muscles contraction 3. Demonstrated Knowledge of functions of cardio vascular system 4. Demonstrated Knowledge of functions of respiratory |
| 1. Resource Implications | The following resources should be provided:   * 1. Museums   2. Gyms   3. Texts   4. Video   5. Learning aids   6. First aid box   7. Artefacts |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Oral 2. Written 3. Observation 4. Third party 5. Case study |
| 1. Context of Assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# APPLY KNOWLEDGE OF SCIENTIFIC PRINCIPLES I

UNIT CODE: ASC/OS/FI/CC/02/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sport scientist in order to apply anatomy for sports and exercise. It involves-: Demonstrating knowledge of structure and functions of skeletal system, muscular system, and circulatory system, respiratory system, digestive system, renal system and excretory system, immune system and endocrine system.

**ELEMENTS AND PERFORMANCE CRITERIA**

| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range.*** |
| --- | --- |
| 1. Demonstrate knowledge of structure and functions of Skeletal System | 1. Knowledge of structure of *skeletal system* is demonstrated as per the procedure 2. Knowledge of functions of skeletal system is demonstrated as per the procedure 3. Knowledge of types of joint and their movement is demonstrated as per the procedure |
| 1. Demonstrate knowledge of structure and functions of Muscular System | 1. Knowledge of types of muscles is demonstrated as per the procedure 2. Knowledge of types of muscles fibres is demonstrated as per the procedure 3. Knowledge of theories of muscles contraction is demonstrated as per the procedure 4. Knowledge of types of muscles contraction is demonstrated as per the procedure |
| 1. Demonstrate knowledge of structure and functions of nervous System | 1. Knowledge of structural and functional classification of nervous system is demonstrated as per the procedure 2. Knowledge on structure and function on the major parts of the brain is demonstrated as per the procedure 3. Knowledge on major nerves in the body is demonstrated as per the procedure |
| 1. Demonstrate knowledge of structure and functions of cardiovascular System | 1. Knowledge of structure of the heart is demonstrated as per the procedure 2. Knowledge of structure of *blood vessels* is demonstrated as per the procedure 3. Knowledge of structure and types of blood vessels is demonstrated as per the procedure 4. Knowledge of *composition of blood* is demonstrated as per the procedure 5. Knowledge of functions of cardio vascular system is demonstrated as per the procedure 6. Knowledge of cardiac cycle is demonstrated as per the procedure |
| 1. Demonstrate knowledge of structure and functions of Respiratory System | 1. Knowledge of structure of respiratory is demonstrated as per the procedure 2. Knowledge of functions of respiratory is demonstrated as per the procedure 3. Knowledge of mechanisms of breathing is demonstrated as per the procedure |
| 1. Demonstrate knowledge of structure and functions of digestive System | 1. Knowledge of structure of major digestive organs is demonstrated as per the procedure 2. Knowledge of function (Secretion and absorption) of major digestive organs is demonstrated as per the procedure |
| 1. Demonstrate knowledge of structure and functions of renal and excretory System | 1. Knowledge of structure and function of skin in excretion is demonstrated as per the procedure 2. Knowledge of structure and function of kidneys is demonstrated as per the procedure 3. Knowledge of structure and function of lungs in excretion is demonstrated as per the procedure |
| 1. Demonstrate knowledge of structure and functions of immune System | 1. Knowledge of structure lymphatic vessels and nodes is demonstrated as per the procedure 2. Knowledge of specific and nonspecific immune defence mechanism is demonstrated as per the procedure. 3. Knowledge of *1st, 2nd and 3rd* line defence is demonstrated as per the procedure. |
| 1. Demonstrate knowledge of structure and functions of endocrine System | 1. Knowledge of structure is demonstrated as per the procedure. 2. Knowledge of function is demonstrated as per the procedure. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Skeletal System may include but not limited to: | * Joints * Bones |
| 1. Blood vessels may include but not limited to: | * Capillaries * Arteries * Veins |
| 1. Composition of blood may include but not limited to: | * Plasma * White blood cells * Red blood cells * Platelets |
| 1. 1st line defence may include but not limited to: | * Skin * Mucus membrane * Secretions of the skin |
| 1. 2nd line defence may include but not limited to: | * Phagocytes * Natural killers * Antimicrobial * Fever * Inflammation |
| 1. 3rd line defence may include but not limited to: | * Lymphocytes * Antibodies * Microphages |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication
* Reflective
* Independent
* Creative
* Team work

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Structure of Skeletal system
* Types of muscle
* Types of fibres
* Theories of muscle contraction
* Circulatory system
* Function respiratory system
* Breathing mechanism
* Blood composition
* blood vessels

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Demonstrated knowledge of structure and functions of Skeletal System 2. Demonstrated knowledge of structure and functions of Muscular System 3. Demonstrated knowledge of structure and functions of Nervous System 4. Demonstrated knowledge of structure and functions of Circulatory System 5. Demonstrated knowledge of structure and functions of Respiratory System 6. Demonstrated knowledge of structure and functions of Digestive System 7. Demonstrated knowledge of structure and functions of Renal System and excretory System 8. Demonstrated knowledge of structure and functions of Immune System 9. Demonstrated knowledge of structure and functions of Endocrine System |
| 1. Resource Implications | The following resources should be provided:   * 1. Human skeleton   2. Biological lab   3. Teaching aids   4. Computer   5. Internet   6. Stationary |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Oral 2. Written 3. Observation 4. Third-party 5. Case study |
| 1. Context of Assessment | Competency may be assessed  4.1 On the job  4.2 Off the job  4.3 During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# APPLY KNOWLEDGE OF SCIENTIFIC PRINCIPLES II

**UNIT CODE:** ASC/OS/FI/CC/03/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sports trainer in order to apply sports and exercise physiology. It involves Demonstrating immediate and long-term knowledge on adaptations of the skeletal system to exercise, the muscular system to exercise, nervous system to exercise, the cardiovascular system to exercise, the respiratory system to exercise, digestive to exercise, the renal system to exercise, immune system to exercise and endocrine to exercise

**ELEMENTS AND PERFORMANCE CRITERIA**

| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range****.* |
| --- | --- |
| * + 1. Demonstrate immediate and long-term knowledge on adaptations of skeletal system to exercise | 1. Knowledge of effect of exercise on structure of the skeleton is demonstrated as per the procedure. 2. Knowledge of type of exercise responsible for the change in structure and functional capacity of the skeleton is demonstrated as per the procedure |
| * + 1. Demonstrate immediate and long-term knowledge on adaptations of muscular system to exercise | * 1. Knowledge of effect of exercise on muscular system *is* demonstrated as per the procedure.   2. knowledge of type of exercise responsible for the change in structure and functional capacity of the muscle is demonstrated as per the procedure |
| * + 1. Demonstrate immediate and long-term knowledge on adaptations of the nervous system to exercise | * 1. Knowledge of effect of exercise on nervous system is demonstrated as per the procedure.   2. knowledge of type of exercise responsible for the change in structure and functional capacity of thenervousis demonstrated as per the procedure |
| * + 1. Demonstrate immediate and long-term knowledge on adaptations of the cardiovascular system to exercise | * 1. Knowledge of effect of exercise on system is demonstrated as per the procedure.   2. knowledge of type of exercise responsible for the change in structure and functional capacity of *cardiovascular* system is demonstrated as per the procedure |
| * + 1. Demonstrate acute and chronic knowledge on adaptations of the respiratory system to exercise | 1. Knowledge of the effect of exercise on the system *is* demonstrated as per the procedure. 2. knowledge of the type of exercise responsible for the change in structure and functional capacity ofcardiovascular is demonstrated as per the procedure |
| 1. Demonstrate immediate and long-term knowledge on adaptations of digestive to exercise | 1. Knowledge of the effect of exercise on the digestive system is demonstrated as per the procedure. 2. knowledge of the type of exercise responsible for the change in energy requirementis demonstrated as per the procedure |
| 1. Demonstrate immediate and long-term knowledge on adaptations of renal system to exercise | 1. Knowledge of the effect of exercise on the renal system *is* demonstrated as per the procedure. 2. knowledge of the type of exercise responsible for the change in functional capacity in the renal system is demonstrated as per the procedure |
| 1. Demonstrate immediate and long-term knowledge on adaptations of the immune system to exercise | 1. Knowledge of the effect of exercise on the immune system *is* demonstrated as per the procedure. 2. knowledge of the type of exercise responsible for the change in the functional capacity of the immune systemis demonstrated as per the procedure |
| 1. Demonstrate immediate and long-term knowledge on adaptations of endocrine to exercise | 1. Knowledge of the effect of exercise on the endocrine systemis demonstrated as per the procedure. 2. knowledge of the type of exercise responsible for the change in the functional capacity of the endocrine *s*ystemis demonstrated as per the procedure |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Cardiovascular System may include but not limited to: | * Heart rate * Blood pressure |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication
* Reflective
* Independent
* Creative
* Teamwork

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Effect of exercise on cardiovasculars responses
* Effect of exercise on respiratory responses
* Effect of exercise on neuromuscular responses
* Effect of exercise on digestive responses
* Effect of exercise on renal responses
* Effect of exercise on nervous responses
* Effect of exercise on endocrine responses
* Types of exercises responsible for the responses on the cardiovascular, respiratory, neuromuscular, digestive, renal, nervous and endocrine system

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| * + - 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Demonstrated immediate and long-term knowledge on adaptations of skeletal system to exercise 2. Demonstrated immediate and long-term knowledge on adaptations of muscular system to exercise 3. Demonstrated immediate and long-term knowledge on adaptations of the nervous system to exercise 4. Demonstrated immediate and long-term knowledge on adaptations of the cardiovascular system to exercise 5. Demonstrated acute and chronic knowledge on adaptations of the respiratory system to exercise 6. Demonstrated immediate and long-term knowledge on adaptations of digestive to exercise 7. Demonstrated immediate and long-term knowledge on adaptations of renal system to exercise 8. Demonstrated immediate and long-term knowledge on adaptations of the immune system to exercise 9. Demonstrated immediate and long-term knowledge on adaptations of endocrine to exercise |
| * + - 1. Resource Implications | The following resources should be provided:   1. Doxa (Dual-energy X-ray absorber) 2. Human skeleton 3. Cadaver or model (for all body system) 4. Anatomy laboratory 5. Electromyography 6. Biochemistry analyser 7. Spirometer 8. Blood pressure monitor 9. Glucometer 10. Lactate meter 11. Heart rate monitor 12. Biological lab 13. Teaching aids 14. Computer 15. Internet 16. Stationary |
| * + - 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Oral questioning 2. Written test 3. Observation 4. Third-party 5. Case study |
| * + - 1. Context of Assessment | Competency may be assessed  4.1 On the job  4.2 Off the job  4.3 During industrial attachment |
| * + - 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# APPLY KNOWLEDGE OF SPORTS NUTRITION

**UNIT CODE:** ASC/OS/FI/CC/04/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sports trainer in order to demonstrate knowledge on sports nutrition. It involves demonstrating and applying knowledge of nutrition and digestion, demonstrating knowledge of utilization and performance, demonstrating knowledge of hydration for health and sports performance and demonstrating knowledge on sport’s planning for health and selected sports.

**ELEMENTS AND PERFORMANCE CRITERIA**

| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range*** |
| --- | --- |
| 1. Demonstrate knowledge of nutrition and digestion | * 1. Knowledge *macronutrients* is demonstrated as per the procedure   2. Knowledge of *micronutrients* is demonstrated as per the procedure   3. Knowledge of the structure of the digestive system is demonstrated as per the procedure   4. Knowledge of the function of the digestive system is demonstrated as per the procedure |
| 1. Demonstrate knowledge of energy utilization and performance | * 1. Knowledge of sources of energy is demonstrated as per the procedure.   2. Knowledge of *measuring body requirement* is demonstrated as per the procedure.   3. knowledge of energy balance is demonstrated as per the procedure   4. knowledge of basal metabolism is demonstrated as per the procedure |
| 1. Demonstrate knowledge of hydration for health and sports performance | * 1. Knowledge of definition of hydration are demonstrated as per the procedure.   2. Knowledge of types, signs and symptoms of dehydration are demonstrated as per the procedure.   3. Knowledge of types of sports drink is demonstrated as per the procedure.   4. Knowledge of effects of hydration is demonstrated as per the procedure |
| 1. Demonstrate knowledge on sport’s diet planning for health and selected sports | * 1. Knowledge of the composition of a balanced diet is demonstrated as per the procedure   2. Knowledge dietary requirements on various activities are demonstrated as per the procedure   3. Knowledge of dietary planning is demonstrated as per the procedure   4. Knowledge of dietary sources is demonstrated as per the procedure |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Macronutrients may include but not limited to | * Carbohydrate * Proteins * Fats |
| 1. Micronutrients may include but not limited to | * Vitamins * Minerals |
| 1. Measuring body requirement may include but not limited to | * Body composition * Lean body mass * Percentage of body fat * Skinfold analysis * Bioelectrical Impedance Analysis * Hydro-densitometry |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication skills
* Reflective
* Independent
* Creative
* Teamwork
* Critical thinking

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Macronutrients
* Micronutrients
* Sports nutritional requirements
* Structure and functions of the digestive system
* Sources of energy and measurements
* Bodyweight
* Energy balance
* Basal metabolism
* Hydration and dehydration
* Sport drinks
* Balanced diet and composition

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| * 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   * 1. Demonstrated knowledge of nutrition and digestion   2. Demonstrated knowledge of energy utilization and performance   3. Demonstrated knowledge of hydration for health and sports performance   4. Demonstrated knowledge on sport’s diet planning for health and selected sports |
| * 1. Resource Implications | The following resources should be provided:   * 1. Callipers   2. Heart rate monitor   3. Stationery   4. Computer  1. Teaching aids 2. Internets |
| * 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Oral questioning 2. Written test 3. Observation 4. Third-party 5. Case study |
| * 1. Context of Assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| * 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# APPLY KNOWLEDGE OF EXERCISE AND SPORTS INJURIES

**UNIT CODE:** ASC/OS/FI/CC/05/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sports trainer in order to apply knowledge of exercise and sports injuries. It involves: applying first aid skills, diagnosing/identifying exercise and sports injuries, rehabilitating exercise and sports injuries and perform injury prevention programs.

**ELEMENTS AND PERFORMANCE CRITERIA**

| **ELEMENT**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the Range****.* |
| --- | --- |
| 1. Apply first aid skills | * 1. Management of a client who as fainted is demonstrated as per the procedure   2. ***Management of sudden injuries*** is demonstrated as per the injury   3. Management of fatigue is demonstrated as per the set procedure |
| 1. Diagnose/identify exercise and sports injuries | * 1. *Different injury diagnosis method* to identify musculoskeletal injury is applied as per the injury   2. Different *clinical test* for injury diagnosis is applied as per the injury   3. Use of equipment in diagnosis of muscle imbalances is demonstrated as per the body part. |
| 1. Rehabilitate exercise and sports injuries | 1. *Equipment used for different injury rehabilitation* is identified as per the injury 2. Knowledge of evacuation of an injured person is demonstrated as per the injury 3. Return to sports protocol is applied as per the injury |
| 1. Perform Injury prevention programs | * 1. Knowledge of injury prevention strategies is demonstrated as per the sport activity   2. Knowledge of performance enhancement drugs in injury causing injuries is demonstrated as per the drug   3. The safe Posture of the client is determined as per the task being performed.   4. Warmup activities are conducted as per the training programme. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Management of sudden injuries may include but not limited to | * Strapping * Taping * Wrapping |
| 1. Different injury diagnosis method may include but not limited to | * Anterior drawer test * Jobs test * MacMurray test * Belly lift-off test * Physical examination |
| 1. Equipment used for different injury rehabilitation may include but not limited to | * Braces * Ice packs * Bandages * Stretcher |

**REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit of competency.

**Required Skills**

The individual needs to demonstrate the following skills:

* Communication skills
* Reflective
* Independent
* Creative
* Teamwork
* Critical thinking
* Digital literacy
* Interpersonal skills

**Required Knowledge**

The individual needs to demonstrate knowledge of:

* Causes of injury
* Classification of injury
* General principles of rehabilitation
* General physical modalities
* General injury prevention programs
* General injury diagnostic tools

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical Aspects of Competency | Assessment requires evidence that the candidate:   1. Applied first aid skills 2. Diagnosed/identified exercise and sports injuries 3. Rehabilitated exercise and sports injuries 4. Performed injury prevention programs |
| 1. Resource Implications | The following resources should be provided:   1. Human model 2. TENS machine 3. Ultrasound 4. Ice and heat packs 5. Different types of tapes 6. Different types of braces 7. Dry needling and acupuncture 8. Massage oil 9. Ointments 10. Medications 11. Computer 12. Software |
| 1. Methods of Assessment | Competency in this unit may be assessed through:   1. Oral 2. Written 3. Observation 4. Practical 5. Third-party 6. Case study 7. Project |
| 1. Context of Assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# APPLY EDUCATIONAL PSYCHOLOGY

**UNIT CODE:** ASC/CU/FI/CC/06/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sport scientist and a sports trainer in order to apply education psychology in sports. It involves goals of education psychology, human growth and development, characteristics of human behaviour, principles and theories of learning and their application in a learning set up.

**ELEMENTS AND PERFORMANCE CRITERIA.**

|  |  |
| --- | --- |
| **ELEMENT**  These describe key outcomes which make up work place function. | **PERFORMANCE CRITERIA.**  These are assessable statements which specify the required level of performance for each element.  ***Bold items are elaborated in the range.*** |
| 1. Demonstrate knowledge of goals of education psychology | 1. Knowledge of goals of education psychology is demonstrated as per procedure. 2. Knowledge of ***branches of psychology*** is demonstrated as per procedure. 3. Knowledge of foundations of human behaviour is demonstrated as per procedure. 4. Importance of psychology to instructors is demonstrated as per procedure. |
| 2. Demonstrate knowledge of human growth and development. | 1. Knowledge of the principles of growth and development are demonstrated as per procedure. 2. Knowledge of mechanisms of heredity/chromosomal disorder is demonstrated as per procedure 3. Knowledge of factors that influence human growth is demonstrated as per procedure |
| 3. Demonstrate knowledge of personality development behaviour | 1. Knowledge of factors that influence personality development is demonstrated as per procedure 2. Knowledge of theories of personality development is demonstrated as per procedure 3. Knowledge of defence mechanisms is demonstrated as per procedure |
| 4. Demonstrate knowledge of principles and theories of learning | 1. Knowledge of major principles of learning is demonstrated as per procedure. 2. Knowledge of theories of learning is demonstrated as per procedure 3. Knowledge of exceptional children is demonstrated as per procedure |
| 5. Apply learning theories | 1. Knowledge of applying learning theories to a learning set up is demonstrated as per procedure 2. Knowledge of the process of memory, discipline and learning environment management is demonstrated as per procedure |
| 1. Demonstrate knowledge of sports psychological and sociological aspects in fitness and sports. | 1. Knowledge of the basic concepts of psychology related to learning and coaching of fitness and sports skills. 2. Knowledge of the role of psychology in fitness and sports 3. Knowledge of the theories of personality and self-image in choice and participation. 4. Knowledge of the effects of anxiety, stress and motivation on fitness and 5. Knowledge of the sociological theories of functional approach, conflict theory, critical theory and symbolic interactions. 6. Knowledge of the concepts of culture and socialization, economy, religion, mass media and politics performance. |

**RANGE.**

This sector provides work environment and conditions to which the performance criteria apply. It allows for different work environment and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Branches of psychology may include but not limited to: | * Basic (experimental psychology) * Applied common branches (clinical, counselling, sports, industrial) |

**REQUIRED SKILLS AND KNOWLEDGE.**

This section describes the skills and knowledge required for this unit of competency.

**Required skills.**

The individual needs to demonstrate the following skills:

* Communication
* Reflective
* Creativity
* Independence

**Required knowledge**

The individual needs to demonstrate knowledge of:

* Human behavior and its effects/application to learning
* Influences on human growth and development of cognitive, language and intelligence and motivation
* Factors influencing personality development
* Memory and use of reinforcement
* Application of theories of learning to a learning environment

**EVIDENCE GUIDE.**

This provides evidence of assessment and must be read in conjunction with the performance criteria required skills, knowledge and range.

|  |  |
| --- | --- |
| * + 1. Critical aspects of competency | Assessment requires evidence that the candidate:   1. Demonstrated knowledge of goals of education psychology 2. Demonstrated knowledge of human growth and development. 3. Demonstrated knowledge of personality development behaviour 4. Demonstrated knowledge of principles and theories of learning 5. Applied learning theories 6. Demonstrated knowledge of sports psychological and sociological aspects in fitness and sports. |
| * + 1. Resource implications | The following resources should be provided:   1. Textbooks 2. Computer 3. Internet 4. Stationary 5. Learning room |
| 1. Methods of assessment | Competency may be assessed through:   1. Oral 2. Written 3. Observation 4. Third party 5. Case study |
| 1. Context of assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, work place and job is recommended |

# APPLY MEASUREMENT AND EVALUATION

**UNIT CODE:** ASC/CU/FI/CC/07/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sports scientist and sport instructor in order to apply measurements and evaluation. It involves demonstrating knowledge of types and role of evaluation in instruction process, demonstrating knowledge of planning a test, applying elementary statistics, demonstrating knowledge of sports specific tests, measurements and evaluations, managing examinations.

**ELEMENTS AND PERFORMANCE CRITERIA.**

|  |  |
| --- | --- |
| **ELEMENT.**  These describe key outcomes which make up work place function. | **PERFORMANCE CRITERIA.**  These are assessable statements which specify the required level of performance for each element.  ***Bold items are elaborated in the range.*** |
| 1. Demonstrate knowledge of types and role of evaluation in instruction process. | 1. Knowledge of meaning of tests, measurement and evaluation is demonstrated as per procedure 2. Knowledge of types of tests and concepts of evaluation is demonstrated as per procedure 3. Knowledge of blooms taxonomy of objectives is demonstrated as per procedure |
| 1. Demonstrate knowledge of planning a test | 1. Knowledge of construction and qualities of a good test and types of test validity is demonstrated as per procedure |
| 1. Apply elementary statistics | 1. Knowledge of value of educational statistics, use of frequency tables, histograms frequency polygons and ogives is demonstrated as per procedure. 2. Knowledge of interpretation of sports data and statistics |
| 1. Demonstrate knowledge of sports specific tests, measurements and evaluations | 1. Knowledge of cardiovascular fitness testing is demonstrated as per the procedure 2. Knowledge of muscular strength testing is demonstrated as per the procedure 3. Knowledge of muscular endurance testing is demonstrated as per the procedure 4. Knowledge of flexibility testing is demonstrated as per the procedure 5. Knowledge of body composition testing is demonstrated as per the procedure 6. Knowledge of power testing is demonstrated as per the procedure 7. Knowledge of speed testing is demonstrated as per the procedure 8. Knowledge of co-ordination testing is demonstrated as per the procedure 9. Knowledge of balance testing is demonstrated as per the procedure |
| 1. Manage examinations | 1. Knowledge of test moderation administration recording and reporting is demonstrated as per procedure |

**REQUIRED SKILLS AND KNOWLEDGE.**

**Required Skills**

The Individual needs to demonstrate the following skills:

* Communication
* Reflective
* Analytical
* Team work
* Independence
* Critical thinking
* Inter personal skill
* Persuasion skills
* Digital literacy

**Required knowledge:**

The individual needs to demonstrate knowledge of:

* Sports performance criteria
* Sport skills
* Sports movement
* Skill analysis
* Feedback in sports
* Sport skills market
* Skills record

**EVIDENCE GUIDE.**

This provides evidence of assessment and must be read in conjunction with the performance criteria required skills, knowledge and range**.**

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate   1. Demonstrated knowledge of types and role of evaluation in instruction process. 2. Demonstrated knowledge of planning a test 3. Applied elementary statistics 4. Demonstrated knowledge of sports specific tests, measurements and evaluations 5. Managed examinations |
| 1. Resource implication | The following resources should be provided:   1. sports field/gym 2. sports equipment 3. computer 4. internet 5. writing material 6. stationary 7. timer |
| 1. Methods of assessment | Competency may be assessed through:   1. Oral 2. Written 3. Observation 4. Third party 5. Case study |
| 1. Context of assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, work place and job is recommended |

# APPLY EDUCATION TECHNOLOGY

**UNIT CODE:** ASC/CU/FI/CC/08/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sports scientist and sports trainer in order to apply education technology. It involves demonstrating knowledge of instructional communication, three-dimension objects, projection equipment in learning and use of media and graphic material equipment in learning.

**ELEMENTS AND PERFORMANCE CRITERIA.**

|  |  |
| --- | --- |
| **ELEMENT.**  These describe key outcomes which make up work place function. | **PERFORMANCE CRITERIA.**  These are assessable statements which specify the required level of performance for each element.  ***Bold items are elaborated in the range.*** |
| 1. Demonstrate knowledge of instructional communication. | 1. Knowledge of models of communication is demonstrated as per procedure 2. Knowledge of instructional barriers is demonstrated as per procedure |
| 2. Demonstrate knowledge of use of three-dimensional objects | 1. Knowledge of objects used in instruction and their use is demonstrated as per procedure |
| 3.Demonstrate knowledge of use of projection equipment in learning | 1. Knowledge of use of slide projector and other forms of projection equipment is demonstrated as per procedure |
| 4. Demonstrate knowledge of use of media and graphic material equipment in learning. | 1. Knowledge of use of print and electronic media resources is demonstrated as per procedure 2. Knowledge of use of graphic material is demonstrated as per procedure |

**REQUIRED SKILLS AND KNOWLEDGE.**

This section describes the skills and knowledge required for this unit competency.

**Required skills:**

The individual needs to demonstrate the following skills:

* Communication
* Creative
* Digital literacy
* Reflective
* Creativity
* Inter personal skills

**Required knowledge:**

The individual needs to demonstrate knowledge of:

* Model production
* Presentation methods
* Display equipment
* Improvisation

**EVIDENCE GUIDE**

This provides evidence of assessment and must be read in conjunction with the performance criteria required skills, knowledge and range**.**

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate:   1. Demonstrated knowledge of instructional communication. 2. Demonstrated knowledge of use of three-dimensional objects 3. Demonstrated knowledge of use of projection equipment in learning 4. Demonstrated knowledge of use of media and graphic material equipment in learning. |
| 1. Resource implication | The following resources should be provided:   1. Written material 2. Models 3. Internet 4. Computers 5. Textbooks 6. Instruction room |
| 3.Methods of assessment | Competency may be assessed through:   1. Oral 2. Written 3. Observation 4. Third party 5. Case study |
| 4.Context of assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 5.Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, work place and job is recommended |

# APPLY INSTRUCTION LAW AND ETHICS

**UNIT CODE:** ASC/CU/FI/CC/09/4/A

**UNIT DESCRIPTION:**

This unit described the competencies required by a sports scientist and sports trainer in order to apply instruction law and ethics: It involves demonstrating knowledge of the; Kenyan Law System, Law of Contracts in fitness and Sports, Arbitration of Sports Disputes in Kenya, anti-doping law, Professional Ethics in fitness and Sports and sports insurance.

**ELEMENTS AND PERFORMANCE CRITERIA.**

|  |  |
| --- | --- |
| **ELEMENT**  These describe key outcomes which make up work place function. | **PERFORMANCE CRITERIA.**  These are assessable statements which specify the required level of performance for each element**.**  ***Bold items are elaborated in the range****.* |
| * + 1. Demonstrate knowledge of the of Kenyan Law System | 1. Demonstrate in depth knowledge of the sports act as per the procedure 2. Demonstrate knowledge of children and young person act as per the procedure 3. Demonstrate knowledge of persons living with disability act as per the procedure |
| * + 1. Demonstrate knowledge of the Law of Contracts in fitness and Sports | 1. Demonstrate knowledge on contracts in sports and fitness as per the procedure 2. Demonstrate knowledge on evaluation of the elements necessary for a contract to be binding and enforceable in sports as per the procedure 3. Demonstrate knowledge on designing different forms of contracts in sports and fitness as per the procedure |
| * + 1. Demonstrate knowledge of Arbitration of Sports Disputes in Kenya | 1. Demonstrate knowledge on the constitution of the sports dispute’s tribunal as per the procedures 2. Demonstrate knowledge on the jurisdiction of the sports dispute’s tribunal as per the procedures |
| * + 1. Demonstrate knowledge of anti-doping law | 1. Demonstrate knowledge on the Role of ADAK as per the procedure 2. Demonstrate knowledge on the prohibited substances as per the procedure 3. Demonstrate knowledge of protocol for testing of drugs as per the procedure 4. Demonstrate knowledge of penalties of doping as per the procedure 5. Demonstrate knowledge on the side effects of doping |
| * + 1. Demonstrate knowledge of Professional Ethics in fitness and sports | 1. Demonstrate knowledge on the ethics in sports and fitness as per the procedure 2. Demonstrate knowledge on the key elements of sportsmanship as per the procedure 3. Demonstrate knowledge on evaluation of emerging ethical issues in sports and fitness as per the procedure |
| * 1. Demonstrate knowledge of Sports insurance | 1. Demonstrate knowledge on the purpose of insurance as per the procedures 2. Demonstrate knowledge on the Benefits, claims and compensation of insurance as per the procedure 3. Demonstrate knowledge on the Scope of the cover as per the procedure 4. Demonstrate knowledge on the types of insurance as per the procedure |

**REQUIRED SKILLS AND KNOWLEDGE.**

This section describes the skills and knowledge required for this unit of competency.

**Required skills:**

The individual needs to demonstrate the following skills:

* Attention to details
* Reflective
* Critical thinking
* Communication skills
* Digital literacy

**Required knowledge:**

The individual needs to demonstrate knowledge of:

* Legal rights and obligations
* Sports skills
* Management skills
* Negotiation
* Labour relations

**EVIDENCE GUIDE.**

This provides evidence of assessment and must be read in conjunction with the performance criteria required skills, knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate:   1. Demonstrated knowledge of the of Kenyan Law System 2. Demonstrated knowledge of the Law of Contracts in fitness and Sports 3. Demonstrated knowledge of Arbitration of Sports Disputes in Kenya 4. Demonstrated knowledge of anti-doping law 5. Demonstrated knowledge of Professional Ethics in fitness and Sports 6. Demonstrated knowledge of Sports insurance |
| 1. Resource implication | The following resources should be provided:   1. Textbooks 2. Relevant Acts of parliament 3. Stationary 4. Instruction room 5. Internet 6. Computer |
| 1. Methods of assessment | Competency may be assessed through:   1. Oral 2. Written 3. Observation 4. Third party 5. Case study |
| 1. Context of assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, work place and job is recommended |

# APPLY INSTRUCTION METHODS

**UNIT CODE:** ASC/CU/FI/CC/10/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sports scientist and sports instructor in order to apply instruction methods. It involves: demonstrating knowledge of sources of types of sports and fitness instruction methods, demonstrating knowledge of sources of instructional goals in sports and fitness, demonstrating knowledge of preparing seasonal/term sports and fitness plans, demonstrating knowledge of preparing session (daily and weekly) theory and practical sports and fitness instruction plan, conducting a sports and fitness practical instruction session, conducting a theory sports and fitness instruction session, conduct a sports and fitness practical skills evaluation and review session, demonstrating knowledge of improvisation of sports and fitness instruction aids and demonstrating knowledge of self-presentation and communication skills in fitness and sports.

**ELEMENTS AND PERFORMANCE CRITERIA.**

|  |  |
| --- | --- |
| **ELEMENT**  These describe key outcomes which make up work place function. | **PERFORMANCE CRITERIA.**  These are assessable statements which specify the required level of performance for each element.  ***Bold items are elaborated in the range****.* |
| * + 1. Demonstrate knowledge of sources of types of sports and fitness instruction methods. | 1. Knowledge of direct, indirect and combined methods of instruction in sports and fitness is demonstrated as per procedure 2. Demonstrate the use of each of the instruction methods in a sports or fitness setting |
| * + 1. Demonstrate knowledge of sources of instructional goals in sports and fitness | 1. Knowledge of: interpreting the course curriculum/the course syllabus is demonstrated 2. Knowledge of organization training plan is demonstrated as per procedure |
| * + 1. Demonstrate knowledge of preparing seasonal/term sports and fitness plans. | 1. Knowledge of contents of a seasonal/course sports and fitness scheme plan or schedule is demonstrated as per procedure 2. Prepare a practical sports and fitness seasonal/term course plan or scheme 3. Prepare a theory sports and fitness seasonal/term course plan or scheme 4. Evaluate the scheme |
| * + 1. Demonstrate knowledge of preparing session (daily and weekly) theory and practical sports and fitness instruction plan. | 1. Knowledge of the session preparation steps is demonstrated as per procedure 2. Knowledge of the practical plan format is demonstrated as per procedure 3. Knowledge of the theory plan format is demonstrated as per procedure 4. Prepare a theory and practical sports and fitness instruction plan |
| * + 1. Conduct a sports and fitness practical instruction session | 1. Knowledge of instruction contents and learner management is demonstrated as per procedure 2. Knowledge of time management is demonstrated as per procedure 3. Conduct a 1-hour skills practical session |
| * + 1. Conduct a theory sports and fitness instruction session | 1. Knowledge of instruction contents and learner management is demonstrated as per procedure 2. Conduct a 1-hour theory instruction session |
| * 1. Conduct a sports and fitness practical skills evaluation and review session | 1. Knowledge of skills content is demonstrated as per procedure 2. Knowledge of managing individual intra and extra practical skills assessment is demonstrated as per procedure 3. Demonstrate a practical skill assessment and review process |
| 1. Demonstrate knowledge of improvisation of sports and fitness instruction aids | 1. Knowledge of subject learning aids is demonstrated as per procedure 2. Knowledge of education technology instruction material is demonstrated as per procedure 3. Design, develop and produce learning resources using local and manufactured material |
| 1. Demonstrate knowledge of self-presentation and communication skills in fitness and sports | 1. Knowledge of self-grooming and communication for each type of learning session is demonstrated as per procedure 2. Knowledge of public speaking, motivation and persuasion is demonstrated as per procedure |

**REQUIRED KNOWLEDGE AND SKILLS.**

This section describes the skills and knowledge required for this unit of competency.

**Required skills:**

The individual needs to demonstrate the following skills:

* Communication skills
* Persuasion skills
* Creative
* Independence
* Critical thinking
* Inter personal skills
* Confidence
* Assertive

**Required knowledge:**

The individual needs to demonstrate the following skills:

* Sports skills
* Public speaking
* Special needs person
* First aid and safety
* Psychology of learning
* Report writing and feedback in sports

**EVIDENCE GUIDE.**

This provides evidence of assessment and must be read in conjunction with the performance criteria required skills, knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate:   1. Demonstrated knowledge of sources of types of sports and fitness instruction methods**.** 2. Demonstrated knowledge of sources of instructional goals in sports and fitness 3. Demonstrated knowledge of preparing seasonal/term sports and fitness plans. 4. Demonstrated knowledge of preparing session (daily and weekly) theory and practical sports and fitness instruction plan**.** 5. Conducted a sports and fitness practical instruction session 6. Conducted a theory sports and fitness instruction session 7. Conducted a sports and fitness practical skills evaluation and review session 8. Demonstrated knowledge of improvisation of sports and fitness instruction aids 9. Demonstrated knowledge of self-presentation and communication skills in fitness and sports |
| 1. Resource implication | The following resources should be provided:   1. Sports field 2. Sports equipment 3. Stationary 4. Computer 5. Internet |
| 1. Methods of assessment | Competency may be assessed through:   1. Oral 2. Written 3. Observation 4. Third party 5. Case study |
| 1. Context of assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, work place and job is recommended |

# CORE UNITS OF COMPETENCY

# PERFORM GYMNASIUM ATTENDANT DUTIES.

**UNIT DESCRIPTION:** ASC/OS/FI/CR/01/4/A

This unit describes the competencies required by a sports trainer to perform gym attendants duties. It involves performing front office operations, performing facility and equipment maintenance, assembling and setting gym accessories for a training, preparing gymnasium user schedule, setting, assembling and using water aerobics equipment, enforcing gym policies and safety and keeping records.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENT**  These describe key outcomes which make up work place function. | **PERFORMANCE CRITERIA.**  These are assessable statements which specify the required level of performance for each element.  ***Bold items are elaborated in the range****.* |
| 1. Perform front office operations | 1. Knowledge of keeping a register of client’s data as per the fitness facilities needs Knowledge of filing client’s data as per the fitness facilities needs 2. Communicate effectively with new and existing client and handle emerging issues as per the client’s needs 3. Effective use of computers and laptops as per the fitness facilities needs |
| 1. Perform facility and equipment cleaning and maintenance | 1. Knowledge of using cleaning equipment as per the fitness facilities needs 2. Knowledge of cleaning chemicals as per the fitness facilities needs 3. Knowledge of oiling, greasing and basic fixing of machines as per the fitness facilities needs 4. Knowledge of basic proper functioning and maintenance of gym equipment as the facilities needs |
| 1. Assemble and set gym accessories for a training session. | 1. Knowledge of setting air quality and lighting as per the facilities needs 2. Knowledge of set strength, agility and flexibility machines and put correct spacing as per the facilities needs 3. Knowledge of machines location and spacing as per the facilities needs 4. Knowledge of setting aerobics music and sound quality as per the facilities needs 5. Knowledge of locate general warm-up equipment areas as per the facilities needs 6. Knowledge of setting cardiovascular machines and speed monitors as per the facilities needs |
| 1. Prepare gymnasium user schedules. | 1. Knowledge of time tabling as per the fitness facilities needs 2. Knowledge of scheduling of all equipment in the gym as per the client’s needs 3. Knowledge of staff work schedules as per the clients and fitness facility needs 4. Effective time management skills as per the clients and fitness facility needs |
| 1. Assemble and Set water aerobics equipment. | 1. Perform *swimming pool maintenance activities* as per the set standards 2. Water aerobics activities as conducted as per the training objective 3. Knowledge of life saving is demonstrating as per the standard 4. Knowledge of swimming pool safety procedure is demonstrated as per the set standard |
| 1. Enforce gym policies and safety | 1. Safety rules are displayed in the gammacism as per the workplace procedure 2. Hygiene rules are displayed as per the workplace procedure 3. Firefighting equipment are maintained as per the standards 4. Emergency drills to be performed as per the fitness facility’s needs |
| 1. Keep records. | 1. Knowledge of assessment records demonstrated as per the workplace procedure 2. Knowledge of equipment Inventory is demonstrated as per the work place procedure 3. Manage client Progress report as per the workplace procedure 4. Knowledge of maintenance records and contractors contacts demonstrated as per the workplace procedure |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Swimming pool maintenance activities may include but not limited to: | * Water pH * Cleaning * Chlorination * Drainage and Pumps * Pool stairs and jump ladders * Floater * Swiss balls |

**Required Skills and knowledge:**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Communication
* Passion
* Motivation
* Planning
* Leadership
* Teamwork
* Participatory

**Required knowledge:**

The individual needs to demonstrate the following knowledge:

* Detergent use
* Fitness equipment and use
* Knowledge of circuit
* Music
* Inventory and record-keeping
* First aid
* Special needs fitness
* Gym Equipment
* Pool water treatment.

**EVIDENCE GUIDE**

This provides advice on assessment and must be read together with the performance criteria, required skills, knowledge and range

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate:   * 1. Performed front office operations   2. Performed facility and equipment cleaning and maintenance   3. Assembled and set gym accessories for a training.   4. Prepared gymnasium user schedule   5. Assembled and Set water aerobics equipment.   6. Enforced gym policies and safety   7. Kept records |
| 1. Resource implication | The following resources should be provided:   1. Well-equipped gymnasium 2. Swimming pool 3. Lifesaving equipment. 4. Sound and music system 5. Computer and internet. 6. Writing material 7. Inventory books 8. Telephone |
| 1. Methods of assessment | Competency may be assessed through:   1. Oral 2. Written 3. Observation 4. Third-party 5. Case study |
| 1. Context of assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment. | Holistic assessment with other units relevant to the industry sector, work place and job is recommended |

# PERFORM FITNESS RELATED TRAINING

**UNIT CODE:** ASC/OS/FI/CR/02/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a fitness Instructor in order to perform different fitness training components. It involves conducting: Muscular strength training, muscular endurance training, cardiovascular endurance training, body composition training, flexibility training, agility training, balance training, co-ordination training, power training and speed training.

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENTS**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Conduct muscular strength training | 1. Demonstrate knowledge in facilitating a muscular strength training program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a muscular strength training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a muscular strength training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a muscular strength training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a muscular strength training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional muscular strength training program as per the client’s needs |
| 1. Conduct muscular endurance training | 1. Demonstrate knowledge in facilitating a *muscular endurance* training program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a muscular endurance training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a muscular endurance training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a muscular endurance training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a *muscular endurance* training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional muscular endurance training program as per the client’s needs |
| 1. Conduct cardiovascular endurance training | 1. Demonstrate knowledge in facilitating a *cardiovascular enduranc*e training program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a cardiovascular endurance training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a cardiovascular endurance training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a cardiovascular endurance training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a cardiovascular endurance training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional cardiovascular endurance training program as per the client’s needs |
| 1. Conduct body composition training | 1. Demonstrate knowledge in facilitating a *body composition* training program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a body composition training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a body composition training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a body composition body composition training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a body composition training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional body composition training program as per the client’s needs |
| 1. Conduct flexibility training | 1. Demonstrate knowledge in facilitating a flexibility training program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a flexibility training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a flexibility training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a flexibility training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a *flexibility* training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional flexibility training program as per the client’s needs |
| 1. Conduct agility training | 1. Demonstrate knowledge in facilitating a *agility* training program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a agility training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a agility training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a agility training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a agility training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional agility training program as per the client’s needs |
| 1. Conduct balance training | 1. Demonstrate knowledge in facilitating a *balance* training program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a balance training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a balance training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a balance training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a balance training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional balance training program as per the client’s needs |
| 1. Conduct co-ordination training | 1. Demonstrate knowledge in facilitating a *co-ordination training* program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a co-ordination training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a co-ordination training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a co-ordination training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a co-ordination training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional co-ordination training program as per the client’s needs |
| 1. Conduct power training | 1. Demonstrate knowledge in facilitating a *power* training program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a power training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a power training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a power training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a power training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional power training program as per the client’s needs |
| 1. Conduct speed training | 1. Demonstrate knowledge in facilitating a *speed training* program of adequate frequency as per the client’s needs 2. Demonstrate knowledge in facilitating a speed training program of adequate intensity as per the client’s needs 3. Demonstrate knowledge in facilitating a speed training program of adequate duration as per the client’s needs 4. Demonstrate knowledge in facilitating a speed training program of adequate type (different forms of exercise) as per the client’s needs 5. Demonstrate knowledge in facilitating a speed training program of adequate progression as per the client’s needs 6. Demonstrate knowledge in preparing and facilitating a complete and functional speed training program as per the client’s needs |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **variables** | **Range** |
| 1. Muscular endurance may include but not limited to: | * Body weight training with many repetitions * Wall sits * Plank * Push ups for reps * Pull ups for reps * Body lifts |
| 1. Cardiovascular endurance may include but not limited to: | * Running * Swimming * cycling * Dance * Jumping * Circuit training * Games activities |
| 1. Body composition may include but not limited to: | * Diet control * Toning exercises * Light weight training * Body weight training |
| 1. Flexibility may include but not limited to: | * Toe touches * Knee touches * Bending backwards * Side bends * Hip flexion and extension |
| 1. Agility may include but not limited to: | * Multi-directional short runs * Change of direction drills * Time constraint exercises * Reactive movement drills |
| 1. Balance may include but not limited to: | * Planks * Bridge * Core stabilising * Wobble board training * Sit ups |
| 1. Co-ordination training may include but not limited to: | * Reaction ball training * Side jumps with a tap * Front jumps with a tap * Skipping rope * Catching and throwing * Dribbling |
| 1. Power may include but not limited to: | * Resisted sprints * Plyometric training * Box jumps * Jump squats |
| 1. Speed training may include but not limited to: | * Short sprints * Running against resistance * Acceleration drills * Hill sprints |
| 1. Reaction time may include but not limited to: | * Dodge ball * Ball drop drills * Reaction ball drills * Turning drills |
| 1. Rugged warrior may include but not limited to: | * Jumping over barriers * Going under hurdles * Obstacle races * Climbing ropes * Rope swings |

**REQUIRED SKILLS AND KNOWLEDGE.**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Communication
* Motivation
* Planning
* Leadership
* Participation
* Teamwork

**Required knowledge**

The individual needs to demonstrate the following knowledge:

* FIIT principles
* Principles of progressive overload
* Principles of specificity
* Different forms of exercises
* Principle if individualization
* Principles of reversibility

**EVIDENCE GUIDE**

This provides advice on assessment and must be read together with performance criteria, required skills, knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate:   * 1. Conducted muscular strength training   2. Conducted muscular endurance training   3. Conducted cardiovascular endurance training   4. Conducted body composition training   5. Conducted flexibility training   6. Conducted agility training   7. Conducted balance training   8. Conducted co-ordination training   9. Conducted power training   10. Conducted speed training |
| 1. Resource implication | The following resources should be provided:   1. Well-equipped gymnasium 2. Swimming pool 3. Lifesaving equipment. 4. Sound and music system 5. Computer and internet. 6. Writing material 7. Inventory books 8. Telephone |
| 1. Methods of assessment | Competency may be assessed through:   1. Oral 2. Written 3. Observation 4. Third-party 5. Case study |
| 1. Context of assessment | Competency may be assessed   1. On the job 2. Off the job 3. During industrial attachment |
| 1. Guidance information for assessment. | Holistic assessment with other units relevant to the industry sector, work place and job is recommended. |

# PERFORM SPECIALIZED FITNESS TRAINING

**UNIT CODE:** ASC/OS/FI/CR/03/4/A

**UNIT DESCRIPTION:**

This unit describes the competencies required by a sports fitness trainer to perform specialised fitness training. It involves: conducting pre-participation screening and fitness tests, setting training objectives and program design ,performing the common workouts programs ,performing general personalised fitness related training ,conducting fitness and sports training using technology, performing team building activities and considerations for people with disabilities and special population (elderly, children, people with medical conditions).

**ELEMENTS AND PERFORMANCE CRITERIA**

|  |  |
| --- | --- |
| **ELEMENTS**  These describe the key outcomes which make up workplace function. | **PERFORMANCE CRITERIA**  These are assessable statements which specify the required level of performance for each of the elements.  ***Bold and italicized terms are elaborated in the range.*** |
| 1. Conduct pre-participation screening and fitness tests | Pre-test procedures:   1. Demonstrate knowledge in *common medical conditions* as per the screening protocols 2. Administer physical activity readiness questionnaire as per the clients 3. Administer a basic pre participation health screening as per the testing protocol 4. Perform dynamometer grip strength test as per age group strength rating 5. Perform multistage cardiovascular endurance test as per sporting activity 6. Perform a sit and reach flexibility test as per body type 7. Perform a 30-metre sprint speed test as per sport activity 8. Perform *coordination and reaction* time test as per the type of training |
| 1. Set training objectives and program design | 1. Knowledge of the different training objectives and modes as per the sport or the client 2. Knowledge of the different phases of training (from warm up to the cool down) 3. Design different training programs as per the client’s needs and ability 4. Knowledge in program evaluation (formative and summative) and revision as per the clients or sport’s needs. |
| 1. Perform the common workouts programs | 1. Conduct circuit training as per the clients’ needs 2. Conduct Aerobics training 3. Conduct Pilates as per the clients’ needs 4. Conduct Zumba as per the clients’ needs 5. Conduct Yoga as per the clients’ needs 6. Conduct plyometric training as per the clients’ needs 7. Conduct Fartlek and *other specialised running training* as per the clients 8. Conduct Tai-bo, boxing and kick boxing as per the clients’ needs 9. Conduct boot camps as per the clients’ needs  Conduct power plate training as per client’s needs |
| 1. Perform general personalised fitness related training | 1. Knowledge in conducting personal training as per the client’s needs 2. Identify particular and specialised exercises to perform as per the client’s needs 3. Knowledge on specific exercises to perform on individuals with health concerns |
| 1. Conduct fitness and sports training using technology | 1. Knowledge in the use of heart rate monitors as per the training needs 2. Knowledge in the use of GPS devices as per the training needs 3. Knowledge in the use of smart watches as per the training needs 4. Knowledge in the use of sleep monitoring devices as per the training needs 5. Knowledge in the use of mobile applications as per the training needs |
| 1. Perform team building activities | 1. Knowledge in *rugged warrior* protocols as per the client’s needs 2. Knowledge on *team building gam*es as per the client’s needs 3. Effectively conduct group activities as per the client’s needs |
| 1. Considerations for people with disabilities and special population (Elderly, children, people with medical conditions). | 1. Knowledge on fitness consideration and program design in the different types of disabilities 2. Knowledge on fitness considerations and program design for children 3. Knowledge on fitness considerations and program design for elderly 4. Knowledge on common medical condition and considerations for fitness training and program |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Common health conditions may include but not limited to: | * Obesity * Diabetes * High Blood pressure * Osteoporosis * Poor body co-ordination due to injury |
| 1. Co-ordination training may include but not limited to: | * Reaction ball training * Side jumps with a tap * Front jumps with a tap * Skipping rope * Catching and throwing * Dribbling |
| 1. Reaction time may include but not limited to: | * Dodge ball * Ball drop drills * Reaction ball drills * Turning drills |
| 1. Rugged warrior may include but not limited to: | * Jumping over barriers * Going under hurdles * Obstacle races * Climbing ropes * Rope swings |
| 1. Team building games may include but not limited to: | * Running with an egg on a spoon * Sack race * Running holding someone on your back * Wheelbarrow races |

**REQUIRED SKILLS AND KNOWLEDGE.**

This section describes the skills and knowledge required for this unit of competency.

**Required skills**

The individual needs to demonstrate the following skills:

* Communication
* Motivation
* Planning
* Leadership
* Participation
* Teamwork

**Required knowledge**

The individual needs to demonstrate the following knowledge:

* Pre-participation screening and fitness tests
* Setting training objectives and program design
* Physical/health related fitness training
* Sports related fitness training
* Common workouts programs
* Personalized fitness related training
* Team building activities

**EVIDENCE GUIDE**

This provides advice on assessment and must be read together with performance criteria, required skills, knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate:   * 1. Conducted pre-participation screening and fitness tests   2. Set training objectives and program design   3. Performed the common workouts programs   4. Performed general personalised fitness related training   5. Conducted fitness and sports training using technology   6. Performed team building activities |
| 1. Resource implication | The following resources should be provided:   1. Well-equipped gymnasium 2. Swimming pool 3. Lifesaving equipment. 4. Sound and music system 5. Computer and internet. 6. Writing material 7. Inventory books 8. Telephone |
| 1. Methods of assessment | Competency may be assessed through:   1. Oral 2. Written 3. Observation 4. Third-party 5. Case study |
| 1. Context of assessment | Competency may be assessed on the job, off the job or a combination of both |
| 1. Guidance information for assessment. | Holistic assessment with other units relevant to the industry sector, work place and job is recommended |