**  
TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)**

**DACUM RESEARCH CHART FOR FITNESS TRAINER LEVEL 4**

**COMMON UNITS**

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| **Duties** | Tasks | | | |
| **A**  **Apply foundations of exercise and sports science** | A1  Demonstrate knowledge of the history of exercise and sport science | A2  Demonstrate knowledge of different branches of exercise and sports science | A3  Demonstrate knowledge of interrelationship amongst branches of exercise and sports science | A4  Demonstrate knowledge of roles and responsibilities of branches of exercise and sports science |
| **B**  **Apply Scientific principles I** | B1  Demonstrate knowledge of the structure and functions of the Skeletal System | B2  Demonstrate knowledge of structure and functions of Muscular System | B3  Demonstrate knowledge of the structure and functions of the nervous system | B4  Demonstrate knowledge of structure and functions of cardiovascular System |
| B5  Demonstrate knowledge of the structure and functions of the Respiratory System | B6  Demonstrate knowledge of structure and functions of digestive System | B7  Demonstrate knowledge of structure and functions of renal and excretory System | B8  Demonstrate knowledge of structure and functions of immune System |
| B9  Demonstrate knowledge of the structure and functions of the endocrine System |  |  |  |
| **C**  **Apply Scientific principles II** | C1  Demonstrate immediate and long-term knowledge on adaptations of the skeletal system to exercise | C2  Demonstrate immediate and long-term knowledge on adaptations of the muscular system to exercise | C3  Demonstrate immediate and long-term knowledge on adaptations of the nervous system to exercise | C4  Demonstrate immediate and long-term knowledge on adaptations of the cardiovascular system to exercise |
|  | C5  Demonstrate immediate and long-term knowledge on adaptations of the respiratory system to exercise | C6  Demonstrate immediate and long-term knowledge on adaptations of digestive and excretory to exercise | C7  Demonstrate immediate and long-term knowledge on adaptations of renal system to exercise | C8  Demonstrate immediate and long-term knowledge on adaptations of the immune system to exercise |
|  | C9  Demonstrate immediate and long-term knowledge on adaptations of the endocrine system to exercise |  |  |  |
| **D**  **Sports nutrition** | D1  Demonstrate knowledge on nutrition and digestion | D2  Demonstrate knowledge of energy utilization and performance | D3  Demonstrate knowledge on hydration for health and sports performance | D4  Demonstrate knowledge of diet Planning for health and selected sport activities |
| **E**  **Apply knowledge in exercise and Sports injuries** | E1  Apply first aid skills | E3  Diagnose/Identify exercise and sports injuries | E4  Rehabilitate exercise and sports injuries | E5  Perform Injury prevention programs |
| **F**  **Apply education psychology.** | F1.  Demonstrate knowledge of the goals of educational psychology. | F2.  Demonstrate knowledge of human growth and development. | F3.  Demonstrate knowledge of personality development. | F4.  Demonstrate the knowledge of the principles and theories of learning. |
|  | F5.  Apply the theories of learning to a learning set up | F6  Demonstrate knowledge of Psychological & Sociological aspects in fitness and sports |  |  |
| **G**  **Apply measurements and evaluation.** | G1.  Demonstrate knowledge of types and the role of evaluation in the instructional process. | G2.  Demonstrate knowledge of planning a test. | G3.  Apply elementary statistics. | G4.  Manage an examination |
|  | G5 Demonstrate knowledge of sports specific tests, measurements and evaluations, |  |  |  |
| H  Apply education technology | H1.  Demonstrate knowledge of instructional communication. | H2.  Demonstrate knowledge of three-dimensional objects. | H3.  Demonstrate knowledge of the projection equipment. | H4.  Demonstrate knowledge of printed, electronic media and reprographic equipment. |
| I  Apply instruction law and ethics. | I 1  Demonstrate knowledge of the of Kenyan Law System | I 2  Demonstrate knowledge of **t**he Law of Contracts in fitness and Sports | I 3  Demonstrate knowledge of Arbitration of Sports Disputes in Kenya | I4  Demonstrate knowledge of anti-doping law |
|  | I 5  Demonstrate knowledge of Professional Ethics in fitness and sports | I 6  Demonstrate knowledge of Sports insurance |  |  |
| **J**  **Apply instruction methods.** | J1  Demonstrate knowledge of sources of types of sports and fitness instruction methods. | J2  Demonstrate knowledge of sources of instructional goals in sports and fitness | J3  Demonstrate knowledge of preparing seasonal/term sports and fitness plans. | J4  Demonstrate knowledge of preparing session (daily and weekly) theory and practical sports and fitness instruction plan. |
|  | J5  conduct a sports and fitness practical instruction session | J6  conduct a theory sports and fitness instruction session | J7  Conduct a sports and fitness practical skills evaluation and review session | J8  Demonstrate knowledge of improvisation of sports and fitness instruction aids |
|  | J9  Demonstrate knowledge of improvisation of sports and fitness instruction aids |  |  |  |

**CORE UNITS**

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| **Duties** | Tasks | | | |
| **F**  **Perform gym attendant duties** | F1  Perform front desk operations | F2  Perform facility and equipment maintenance | F3  Assemble and operate gym accessories and fixed facilities. | F4  Prepare gymnasium use schedules |
|  | F5 Set, assemble and use water aerobics equipment. | F6 Enforce gym policies and safety. | F7  Keep records. |  |
| **G1**  **Perform fitness related training** | G1  Conduct muscular strength training | G2  Conduct muscular endurance training | G3  Conduct cardiovascular endurance training | G4  Conduct body composition training |
|  | G5  Conduct flexibility training | G6  Conduct agility training | G7  Conduct balance training | G8  Conduct co-ordination training |
|  | G9  Conduct power training | G10  Conduct speed training |  |  |
| **H**  **Perform specialized training** | H1  Conduct pre-participation screening | H2  Set training objectives and programme design | H3    Perform the common workouts programs | H4  Perform general personal fitness related training |
|  | H5  Conduct fitness and sports training using technology | H6  Perform team building activities | H7  Considerations for people with disabilities and special population (Elderly, children, people with medical conditions). |  |

**General Knowledge and Skills**

**Skills**

* Communication
* Numeracy
* Delegation
* Planning
* Controlling
* Organizational
* Leadership
* Interpersonal
* Research
* Problem solving
* Decision making
* Critical thinking
* Mentorship
* Training
* Negotiation
* Team building
* Multitasking
* Analytical
* Motivational

**Knowledge**

* Sports anatomy
* Sport and exercise physiology
* Sports nutrition
* Sport analysis
* Practical team sport
* Health and lifestyle

**Behaviors**

* Assertive
* Trustworthy
* Reliable
* Patient
* Decisive
* Confident
* Responsible
* Creative
* Optimistic
* Honest
* Team player
* Positive attitude
* Keen to details
* Professional
* Intelligent
* Courteous
* Process oriented
* Accurate
* Knowledgeable
* Consistent
* Self-motivated
* Integrity
* Flexible
* Calm
* Composed

**Tools, Equipment, Supplies and Materials**

* Stationery (pens, photocopy papers, foolscaps, writing pads, etc.)
* Computers/laptop with internet
* Telephone sets
* Calculators
* Printer
* Sample datasets
* Projector
* First aid kit
* Sports equipment
* Sports uniforms
* All sports equipment’s
* All sport pitches
* Swimming pool
* Sport shoes
* Gymnasium
* Gym equipment

**Future Trends and Concerns**

* Lack of qualified personnel to train
* Inadequate facilities
* High cost of sports and gym equipment