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South African Pharmacy Council

Diploma: Pharmacy Technician

Qualification Title: Diploma: Pharmacy Technician

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QUALIFICATION SUMMARY

1. QUALIFICATION TITLE:

Diploma: Pharmacy Technician

2. ORIGINATOR:

South African Pharmacy Council (SAPC)

3. SUB-FRAMEWORK:

HEQF

4. FIELD:

09 Health Care and Health Sciences

5. SUB-FIELD:

CESM category?

6. NQF LEVEL:

6

7. CREDITS:

255

8. PURPOSE:

This Diploma: Pharmacy Technician is intended to equip the learner with the knowledge and skills required by Pharmacy Support Personnel (PSP) at the level of a Pharmacy Technician at NQF level 6. This qualification will provide an opportunity to those learners who wish to pursue the academic (CHE) Pharmacy Technician qualification. Successful completion of the qualification may enable the learner to register in the relevant PSP category with the South African Pharmacy Council.

Learners exiting with the Pharmacy Technician Diploma qualification will be able to assist with:

- medicine supply management
- manufacture of medicines
- dispensing (supplying) of medicine to patients
- providing patient care
- managing pharmacy resources
- applying health and safety regulations and relevant medical and pharmaceutical law and ethics in the performance of their pharmaceutical duties, and
- housekeeping and administration relative to pharmaceutical services.

A Pharmacy Technician is a generalist who can operate in the four categories of pharmacy (community, institutional (private or public), manufacturing and wholesale). While the Pharmacy Technician works under the direct personal supervision of a pharmacist in a pharmacy they may also work in a primary health care clinic or any other facility approved by Council under the indirect personal supervision of a pharmacist.

9. RATIONALE

The South African government through both the introduction of National Health Insurance (NHI) and Operation Phakisa has directed focus on the provision of health care at the primary health care (PHC) level. The re-engineering of the PHC platform is one of the key health reforms that is being implemented as part of the introduction of NHI in South Africa. This includes the optimisation of the delivery of pharmaceutical services at the PHC level. Delivery of pharmaceutical services at this level is provided by the Pharmacy Technician. Additionally, Operation Phakisa which was launched in 2014 also focuses on improving the quality of care provided in public sector clinics, through an intervention known as the 'Ideal Clinic Initiative'. One of the key components is effective medicines management and provision of pharmaceutical services by PSP at the clinic level. Thus, both the introduction of NHI and Operation Phakisa will, in shifting provision of health care to the PHC level, require an increased number of well-trained and effective Pharmacy Technicians.

Elsewhere in Southern Africa the PSP are at a level of Pharmacy Technician (PT) e.g. Namibia, Zimbabwe, Zambia, Botswana. In order to support NHI and Operation Phakisa it is important that in South Africa we have PSP who have qualified at an appropriate level. This qualification for the Pharmacy Technician at NQF level 6 will bring PSP in South Africa in line with the rest of Africa and strengthen our healthcare system.

Typical learners expected to enrol for the qualification will be school leavers and those working in various categories of pharmacy who have no qualification or wish to improve their qualifications as Pharmacy Support Personnel.

Currently there are two qualifications that address the needs of Pharmacy Support Personnel (PSP) and lead to two registration categories with the South African Pharmacy Council (SAPC). These are the Higher Certificate: Pharmacy Support (ID 90597) and the Advanced Certificate: Pharmacy Technical Support (ID 90596) which results in a person becoming a Pharmacy Technician.

The SAPC, after extensive consultation with the pharmacy sector, took a decision to develop the Diploma: Pharmacy Technician that will essentially replace both the above-mentioned qualifications.

It is anticipated that the Pharmacy Technician will be able gain access into the Pharmacy Qualification, provided that other institutional requirements are met. There is also the possibility of pursuing an appropriate qualification in the health sciences.

Learners will receive a high standard of training and education that is aligned to the scope of practice determined by the SAPC. Once qualified, learners will be able to further their education and will be able to obtain access to related higher qualification on the HEQSF.

Employers in the pharmacy sector will gain access to suitably qualified Pharmacy Technicians to produce high-quality work in accordance with the scope of practice for a Pharmacy Technician.

By creating career pathways in the sector, employees will be able to progress into pathways in the life sciences field. In addition, this qualification will create employment opportunities for the learners.

10. ENTRY REQUIREMENTS

An NQF Level 4 qualification with the following:

- Be in possession of a National Senior Certificate or recognised equivalent at NQF Level 4 granting access to diploma studies
- Mathematical Literacy or Mathematics at NQF Level 4 or recognised equivalent.
- Physical and/or Life Sciences at NQF Level 4 or recognised equivalent.

11. QUALIFICATION RULES OF COMBINATION:

Learning Area (LA)	Exit Level Outcomes	Notional Hours/ credits at L5	Notional Hour/ credits at L6	Total hours	Total Credits
Fundamental	1. Apply scientific knowledge to provide technical support in pharmaceutical services	230/23*	220/20	430	**43**
Core	2. Provide technical support for the compounding, manipulation and preparation of sterile and non-sterile medicines and scheduled substances (extemporaneous compounding) in compliance with standards as described in the cGMP and GPP	150/15	150/15	300	**30**
Core	3. Provide technical support to manufacture, package and re-package sterile and non-sterile medicines and Scheduled substances in compliance with GMP guidelines under the supervision of a Pharmacist	150/15	150/15	300	**30**
Core	4. Provide technical support to order, manage, despatch and dispose of medicines, Scheduled substances, medical supplies and devices in compliance with GWDP and legal requirements	160/16*	150/15	310	**31**
Core	5. Provide technical support to dispense prescriptions and to sell Schedule 0, 1 and 2 medicines in compliance with legal requirements, including GPP	220/22*	280/28	500	**50**
Core	6. Provide technical support in the management of resources	100/10* (house-keeping)	140/14	240	**24**
Core	7. Demonstrate an understanding of the principles of management of common communicable and non-communicable disease states and conditions	0	100	100	**10**
Core	8. Provide information to promote health and wellness as per STG and EML or any other approved protocols	100	0	100	**10**
Elective	9. Demonstrate an understanding principles of African traditional medicines.	0	100	100	**10**
Elective	10. Demonstrate an understanding principles of complementary medicines	0	100	100	**10**
Elective	11. Demonstrate understanding of the principles of nutraceuticals and functional foods	0	100	100	**10**

- **Indicates the incorporation of ICT credits to match the incorporation of ICT competencies in the different ELOs.**

Using the above information the following will appear in the 'Qualification Rules' section of the qualification document:

In order to be credited with this Qualification, the learner is required to achieve the following combination of credits:

Fundamental (compulsory): 43 Credits

- Scientific knowledge in pharmacy 43 credits

  Level 5 23 credits (This includes 3 credits for ICT)
  Level 6 20 credits

Core (compulsory): 185 credits

- Extemporaneous compounding 30 credits

  Level 5 15 credits
  Level 6 15 credits

- Manufacturing, packaging and re-packaging sterile and non-sterile medicines and scheduled substances 30 credits

  Level 5 15 credits
  Level 6 15 credits

- Ordering, managing, despatching and disposing of medicines, scheduled substances, medical supplies and devices 31 credits

  Level 5 16 credits (This includes 3 credits for ICT)
  Level 6 15 credits

- Dispensing 50 credits

  Level 5 22 credits (This includes 2 credits for ICT)
  Level 6 28 credits

- Management of resources in pharmacy 34 credits

  Level 5 10 credits for Housekeeping
  Level 6 14 credits for management of resources in a pharmacy

- Pharmacological and non-pharmacological management of communicable and non-communicable disease states and conditions 10 credits

  Level 6: 10 credits

- Health and wellness 10 credits

  Level 5: 10 credits

Electives

Learners are to choose **one** of the following elective course. These are all at Level 6.

- African traditional medicines 10 credits
- Complementary medicines 10 credits

- Nutraceuticals and functional foods 10 credits

The balance of 17 credits are to be allocated to any or all of the Exit Level Outcomes at the discretion of the provider and in agreement with the relevant ETQA.

12. EXIT LEVEL OUTCOMES (ELOS) AND ASSOCIATED ASSESSMENT CRITERIA

12.1 Apply scientific knowledge to provide technical support in delivering pharmaceutical services

12.1.1 Legislation related to the relevant scope of practice in delivering pharmaceutical services is explained in the South African context

12.1.2 Ethical and professional conduct related to the relevant scope of practice is demonstrated in the provision of pharmaceutical technical support services

12.1.3 Basic pharmaceutical terms and concepts are explained in relation to sterile and non-sterile drug delivery systems and their routes of administration

12.1.4 Basic scientific principles, as applied to sterile and non-sterile pharmaceutical preparation/product manufacture, are explained

12.1.5 Basic concepts of anatomy, physiology and patho-physiology are explained in the context of common communicable and non-communicable disease states and conditions

12.1.6 Basic principles and concepts of pharmacology and biopharmaceutics, as applied to common communicable and non-communicable disease states and conditions are explained

12.1.7 Relevant computer peripherals are installed, configured and operated in accordance with the specifications and instructions of the manufacturer.

12.1.8 Relevant computer software applications are installed, configured and operated in accordance with specifications and instructions of the manufacturer.

12.2 Provide technical support for the compounding, manipulation and preparation of sterile and non-sterile medicines and scheduled substances (extemporaneous compounding) in compliance with standards as described in the cGMP and GPP

12.2.1 The principles of cGMP and GPP are explained in relation to the manufacture, compounding, manipulation and preparation of sterile and non-sterile medicines

12.2.2 Sterile medicines are manipulated and prepared following relevant SOPs and process documentation using aseptic technique and the principles of cGMP and/or GPP to produce admixtures for specific patients.

12.2.3 Non-sterile medicines are compounded, manipulated, prepared and packed following relevant SOPs and process documentation in accordance with cGMP and/or GPP for specific patients

12.2.4 Records are generated for each of the preparations produced in accordance with legal requirements and organisational policies and procedures

12.3 Provide technical support for the manufacture, packaging and re-packaging of sterile and non-sterile medicines and scheduled substances in compliance with cGMP

12.3.1 Pharmaceutical and cGMP principles are explained and applied to the manufacture, packaging and/or re-packaging of sterile and non-sterile medicines and scheduled substances.

12.3.2 Resources, materials and equipment for the preparation of specific medicines are organised and prepared in accordance with relevant SOPs and process documentation

12.3.3 Line-clearance (Schedule 1 to 4) is performed according to cGMP, process documentation and relevant SOPS.

12.3.4 The manufacturing process is maintained and controlled in accordance with cGMP, process documentation and relevant SOPs.

12.3.5 Medicines and scheduled substances are re-packaged in accordance with cGMP, ethical principles, relevant legislation, process documentation and SOPs and authorised by a pharmacist.

12.3.5 All documents are completed and records maintained in accordance with cGMP guidelines.

12.4 Provide technical support for the ordering, managing, despatch and disposal of medicines, scheduled substances, medical supplies and devices in compliance with GWDP, GPP and cGMP and legal requirements

The principles of GWDP are explained in relation to the management of stock

12.4.1 Ordering and receipt of medicines, scheduled substances, medical supplies and devices are organised and managed in accordance with cGMP, GPP and GWDP

12.4.2 Stoc2k is organised, managed and secured in accordance with legal requirements, including cGMP, GPP and GWDP

12.4.3 Despatch of medicines, scheduled substances, medical supplies and devices are organised and managed in accordance with cGMP, GPP and GWDP

12.4.4 Disposal of expired and unwanted medicines, scheduled substances, medical supplies and devices is managed according to current relevant legislation and guidelines.

12.4.5 Documents are completed and records maintained in accordance with applicable legislation, process documentation and SOPs

12.4.6 Relevant inventory reports are produced in the required format according to software function and application.

12.4.7 Inventory projections and quantification are generated in the required format according to the software functions and applications.

12.4.8 Inventory expenditure is tracked and produced using the relevant software application.

12.5 Provide technical support to dispense prescriptions and to sell Schedule 0, 1 and 2 medicines in compliance with legal requirements, including GPP

12.5.1 Communication with patients/caregivers is conducted in a professional manner with sensitivity to patients' needs and diversity.

12.5.2 Prescriptions are dispensed in accordance with current legislation, GPP and organisational procedures.

12.5.3 In the case of Schedule 0, 1 and 2 medicines, relevant information and history are obtained and a suitable course of action is decided in consultation with a pharmacist.

12.5.4 Medicines and/or appropriate advice is/are provided according to GPP

12.5.5 Patient and/or prescription is/are referred to a pharmacist as needed

12.5.6 Relevant records are maintained in accordance with current legislative requirements, including GPP

12.5.7 Circumstances under which a patient is referred to another healthcare professional/facility are described as they relate to the information presented and the profile of the patient

Orders are generated in the required format using the relevant report application

12.6 Provide technical support in the management of resources

12.6.1 Resources are managed according to operational and legal requirements including GPP.

12.6.2 Principles of supervision are explained and applied in the context of pharmaceutical services

12.6.3 Principles of time management are explained and applied in the in the context of pharmaceutical services

12.6.4 Principles of team building are explained and applied in the practice of pharmacy

12.6.5 Effective lines of communication are established and maintained to facilitate supervision in the workplace.

12.6.6 General housekeeping procedures are applied and documented according to SOPs and process documentation, and in compliance with all relevant guidelines.

12.7 Demonstrate an understanding of the principles of management of common communicable and non-communicable disease states and conditions

12.7.1 Aetiology and epidemiology of common communicable and non-communicable disease states and conditions are explained in relation to the current National Health Strategic Plan
12.7.2 Screening tests are performed in accordance with GPP
12.7.3 Assistance pertaining to the management of common communicable and non-communicable disease states and conditions is rendered

12.8 Provide information to promote health and wellness related to STG and EML

12.8.1 The concepts of health and wellness are explained in terms of disease and disability.

12.8.2 Socio-economic factors that contribute to poor health and wellness are identified and described with the aid of relevant examples.

12.8.3 Preventative measures and lifestyle modification options are explained in relation to the identified condition.

12.9 Demonstrate an understanding of the principles of African traditional medicines.

12.9.1 The philosophies of African traditional medicines and principles of therapy are explained and applied in terms of how they complement allopathic medicine.

12.9.2 The sale of African traditional medicines are described in terms of the associated responsibilities, limitations, benefits and potential risks

12.9.3 The regulation and use of African traditional medicines are explained in terms of current legislation.

12.10 Demonstrate an understanding principles of complementary medicines

12.10.1 The philosophies of complementary medicines and principles of therapies are explained and applied in terms of how they complement those of allopathic medicine

12.10.2 The sale of complementary medicines is described in terms of the associated responsibilities, limitations, benefits and potential risks.

12.10.3 The regulation and use of complementary medicines are explained in terms of legislation.

12.11 Demonstrate an understanding of the principles of nutraceuticals and functional foods

12.11.1 The philosophies of nutraceuticals and functional foods and principles of therapies are explained and applied in terms of how they complement those of conventional medicine.

12.11.2 The sale of nutraceuticals and functional foods are described in terms of the associated responsibilities, limitations, benefits and potential risks.

12.11.3 The regulation and use of nutraceuticals and functional foods are explained in terms of legislation.

13. INTERNATIONAL COMPARABILITY

The aim of the international comparability study was to examine Pharmacy Technician qualifications of other countries and to benchmark the South African qualification against international best practice in this field. The comparability exercise focused on New Zealand, Ireland, Canada, the US, Botswana, Tanzania, Zimbabwe and Namibia.

New Zealand

The National Certificate in Pharmacy (Technician) (Level 5) with strands in Community, and Hospital includes the following unit standards:

- Apply legislation, codes, and standards to the supply of products and services as a pharmacy technician
- Compound non-aseptic pharmaceutical products under the supervision of a pharmacist
- Dispense prescriptions and pharmaceutical orders under supervision
- Apply procedures for handling hazardous substances as a pharmacy technician
- Provide advice on the use of dispensed medicines as a pharmacy technician
- Demonstrate knowledge of pharmaceutical dose forms and accessories
- Demonstrate knowledge of pathogens, infections, and anti-infective therapy
- Demonstrate knowledge, as a pharmacy technician, of drug dosing, action, adverse effects, and misuse and dependence
- Demonstrate knowledge of human nutrition and nutritional states as a pharmacy assistant or pharmacy technician
- Provide written and oral advice as a pharmacy technician
- Manage stock within a pharmacy as a pharmacy technician
- Demonstrate professionalism as a pharmacy assistant or pharmacy technician
- Make conversions and perform calculations for compounding and dispensing as a pharmacy technician
- Demonstrate knowledge of human nervous and endocrine systems and medicines used in their treatment
- Demonstrate knowledge of human cardiovascular and respiratory systems and medicines used in their treatment
- Demonstrate knowledge of human digestive, reproductive, and urinary systems and medicines used in their treatment
- Demonstrate knowledge of human musculoskeletal, integumentary systems, eye and ear and medicines used in their treatment
- Demonstrate knowledge of human immune system and malignant disease and medicines used in their treatment

Certificate in Pharmacy (Specialist Technician) (Level 6)

The purpose of this qualification is to provide the pharmacy sector with specialist pharmacy technicians who carry out a range of specialist pharmacy services. This qualification is for

people who are already employed as pharmacy technicians, and who are wishing to enter into a specialist pharmacy technician role with management/leadership responsibilities.

Programme structure: Students complete the following courses:

- Effective Communication
- Learning and Development
- Leadership and Management for Effective Teamwork
- Pharmacy Operational Management
- Pharmacy Law and Ethics
- Quality Assurance in Pharmacy Practice
- New Zealand Health Care System
- Specialist Project 1 Specialist Dispensing
- Specialist Topic – Patient and Medicine Management
- Specialist Topic – Operational

Ireland

The Irish Pharmacy Union (IPU) Pharmacy Technician Course (Level 3 Diploma in Pharmacy Services Skills) prepares pharmacy technicians to assist pharmacists in ensuring the delivery of a high quality pharmacy service in an efficient, safe and cost-effective manner.

Course Structure: Year 1
Underpinning Knowledge Modules covering: Introduction to working in a pharmacy and Stock Control; Pharmacy Practice and Procedure; Law and Ethics; Irish Medicines Schemes; Role of the Technician; Actions and Uses of Drugs – various BNF categories; Pharmaceutical Science and Dispensing and Product Formulation

Year 2

- Evidence collection to cover the 5 Assessments.

Institute of Technology – Carlow offers a Higher Certificate in Science - Pharmacy Technician Studies

This programme provides students with the administrative and clinical skills required to work in a retail or hospital environment. It offers a blend of academic knowledge, hands on experience and real-world training in a pharmacy environment. The programme addresses:

- Pharmaceutical chemistry and human physiology - the study of how the body functions.
- Drug actions and uses – understanding human diseases and the drugs used to treat these diseases.
- Formulation and compounding – understanding how drugs are made and the regulations surrounding safe dispensing.

Special features of the programme include weekly work experience throughout the programme.

- Six month-full-time work placement between first and second year at either a retail or hospital pharmacy. As part of the work placement module students may work abroad for eight weeks under the supervision of registered pharmacists.
- Participation in conferences, poster competitions and lectures by guest speakers from the pharmacy industry will ensure that students are well grounded in all areas of work available to pharmacy technicians

Subjects Year 1: Mandatory: Regulations and Dispensing; Human Physiology; Drug Actions and Uses 1; Pharm Chemistry, Form & Comp; Pharm Admin & Work Placement; Pharm Calculations & Computing; Over the Counter; Communication, Innovation and Teamwork

Year 2: Mandatory: Drug Actions and Uses 2; Pharmacy Practice; Aseptic Techniques; Work Placement

The details of many of these subjects clearly indicate the resonance of the South African qualification with this qualification.

Canada

Humber's Pharmacy Technician diploma program prepares graduates for various careers in pharmacy – including community, hospital and long-term care settings. Courses focus on legislation, physiology, pharmacotherapeutics, customer care, health-care ethics, hospital and retail software systems, inventory management, hospital practice, and infection control.

Semester 1	Semester 2
Community Pharmacy Management	Pharmacy Calculations 2
Pharmacy Calculations 1	Professionalism and Ethics
Pharmacy Dispensing Theory	Pharmacy Dispensing Lab 2
Pharmacy Dispensing Lab 1	Institutional Dispensing Lab 1
Pharmacotherapeutics 1	Hospital Practices and Pharmaceutics
College Reading and Writing Skills	Pharmacotherapeutics 2

Semester 3	Semester 4
Pharmacy Dispensing Lab 3	Professional Communication & Collaboration
Institutional Dispensing Lab 2	Pharmacy Technician Work Experience
Aseptic Compounding	Pharmacotherapeutics 4
Pharmacotherapeutics 3	
Professional Communications: Pharmacy Technician	

United States

The American Society of Health-System Pharmacists (ASHP) is the accrediting body for pharmacy technician programs. ASHP-certified programs are available at many community colleges and vocational schools. Coursework covers technical and practical training in the following areas:

- Pharmacy law
- Pharmacology
- Pharmacy ethics
- Anatomy
- Healthcare systems
- Physiology
- Medical terminology
- Pharmaceutical calculations

Most programs allow students to gain clinical experience during their training. Depending on state laws, students may also choose to gain on-the-job training without enrolling in a postsecondary education program. Clinical experience may take the form of a structured training program at a retail drugstore that has partnered with the school. Another option is to complete hands-on training at an approved pharmacy or medical centre.

A pharmacy technician diploma or certificate program can be completed in one year or less and provides the basic education and training needed to sit for the Certified Pharmacy Technician exam.

Botswana

Boitekanelo College offers the Higher National Diploma in Pharmacy Technology programme. A total of 98 credits are from the general and core courses plus six (6) credits from the two

optional courses for each student. The credits are distributed among 11 core courses, 3 general education courses and 2 optional courses. There will be one week registration period, one week for examinations, one reading week, one mid-semester break and 14 weeks of teaching, making a total of 18 weeks. Each student should register for all general and core courses plus any two optional courses during the entire period of training.

Tanzania

The Catholic University of Health and Allied Sciences and the Muhimbili University of Health and Allied Sciences offer the Diploma in Pharmaceutical Sciences. The former institution offers it over a period of 3 years. However, there is a paucity on the programme structure and course outlines.

Zimbabwe

The Pharmacy Technician course of the US-based Livingston Parish Literacy & Technology Center is taught by a Certified Pharmacy Technician at Harare Polytechnic. This program allows students to complete TOPS requirements and seek education in a four year college. A major emphasis of this course is the national exam. Students will be instructed in materials required on the national exam.

The student will take the national Pharmacy Technician Certification Board (PTCB) examination.

This course is designed to prepare the students for entry-level positions as a pharmacy technician. The course also introduces the student to other opportunities available in the pharmacy field. Emphasis is placed on skill development in assisting the pharmacist to record and maintain records, label medications, perform computer patient billing, perform stock inventory, and order supplies.

Additional emphasis is placed on interpersonal skill development, telephone skills, drug classification and interactions, and work ethics. Topics of study are mathematics specific to the pharmaceutical field. Appropriate work-based strategies are service learning, field trips, and job shadowing.

Namibia

The University of Namibia offers the Diploma in Pharmacy the duration of which is three years. Holders of this qualification are able to:

1. Undertake practice as a pharmaceutical technician within the legal requirements in a professional and ethical manner
2. Provide pharmaceutical care under the supervision of the pharmacist
3. Effectively manage medicines inventory in a pharmacy setting
4. Design and implement strategies to promote rational and safe use of medicines in healthcare
5. Use and maintain pharmaceutical equipment in an industrial setting
6. Promote good dispensing and pharmacy practices in a pharmacy setting
7. Effectively control the medicine supply system at the health facility
8. Design and conduct medicine use audits and research at the health facility
9. Assist the pharmacist in the provision of pharmaceutical information
10. Design and implement Standard Operating Procedures to control the quality of medicines and services
11. Implement the basic concepts of primary healthcare related to pharmacy
12. Organize and conduct activities in quality analysis and pharmaceutical sciences
13. Assist in the regulatory process of the registration of medicines
14. Competently administer and undertake management duties in a pharmacy under the supervision of a pharmacist
15. Competently contribute to therapeutic committee at a primary healthcare facility

Many, though not all of these competencies, correspond with the competencies of this qualification.

Conclusion
The qualifications from all the countries identified resonate substantially with the South African qualification. There is a paucity of information on the nature and structure of the programmes. The New Zealand qualification compares most favourably with this qualification.

14. INTEGRATED ASSESSMENT

The importance of integrated assessment is to confirm that the learner is able to demonstrate applied competence (practical, foundational and reflexive) and ensure that the purpose of this qualification is achieved. Both formative and summative assessment methods and strategies are used to ensure that the Exit Level Outcomes and the purpose of the qualification are achieved. Learning, teaching and assessment are inextricably linked.

Learning and assessment should be integrated and assessment practices must be fair, transparent, valid and reliable. A variety of assessment strategies and approaches must be used. This could include written tests, assignments, projects, demonstrations, portfolios, simulations and case studies and case presentations.

Formative assessment is an on-going process which is used to assess the efficacy of the teaching and learning process. It is used to plan appropriate learning experiences to meet the learner's needs. Formative assessments can include a mix of theoretical, simulated and practical instruments.

Summative assessment is concerned with the judgement of the learning in relation to the Exit Level Outcomes of the qualification. Such judgement must include integrated assessment(s) which test the learners' ability to integrate the larger body of knowledge, skills and attitudes, which are represented by the Exit Level Outcomes. Summative assessment can take the form of oral, written and practical means.

Integrated assessment must be designed to achieve the following:

- An integration of the achievement of the Exit Level Outcomes in a way that reflects a comprehensive approach to learning and shows that the purpose of the Qualification has been achieved.
- Judgement of learner performance to provide evidence of applied competence or capability.

15. RECOGNITION OF PRIOR LEARNING

This qualification may be achieved in part or in whole through the process of Recognition of Prior Learning on request from the learner and at the discretion of the University.

Alternatively, access may be granted through recognition of prior learning by the institution to individual applicants.

Assessors and moderators should make use of a range of formative and summative assessment methods. Assessors should assess and give credit for the evidence of learning that has already been acquired through formal, informal and non-formal learning and work experience.

16. ARTICULATION

Horizontal Articulation:

This qualification articulates horizontally with any Advanced Certificate or Diploma in the Health Sciences group, at NQF Level 6. Other institutional requirements may apply.

Vertical Articulation:

This qualification articulates vertically with any Health Sciences' Bachelor's Degree at NQF Level 7 or Professional Bachelor's Degree at NQF Level 8. Other institutional requirements may apply.

Notes

1. *The respective Assessment Criteria aim to test the achievement of the specific learning outcomes. As many of these criteria are practice-based, providers are required to include structured experiential learning periods in their curricula and should clearly identify such periods. It is anticipated that they will aggregate at least 170 hours in the overall learning programme.*