South African Pharmacy Council

STANDARDS RELATING TO THE DISTANCE LEARNING MODE OF DELIVERY FOR THE PHARMACY TECHNICAL ASSISTANTS AND PHARMACY TECHNICIANS PROGRAMMES

1. INTRODUCTION

The South African Pharmacy Council (Council) approved two new qualifications for, Pharmacy Technical Assistants (PTAs) and Pharmacy Technicians (PTs). Each is a one year qualification at NQF Levels 5 and 6 respectively.

This standard is intended to provide an alternative mode of delivery other than full-time study. This will accommodate those students who may not be able to do full time study and those pharmacy support personnel who are not able to leave employment for full time study.

"Distance education" refer to provision in which students spend 30% or less of the stated Notional Learning now's in undergraduate courses at NQF level 5 and 6, and 25% or less in courses at NQF level 7 and initial post-graduate courses at NQF 8, in staff-led, face-to-face, campus-based structured learning activities.

2. PURPOSE

(a) To set the minimum standards for providers to comply with, in delivering PTA and PT distance learning programmes.

(b) To use the standard in accrediting/approving the distance learning programme for PTAs and PTs.

3. PRINCIPLES

(a) This standard should not deviate from the existing qualification, curriculum outline and Good Pharmacy Education Standards as approved by Council.

(b) Use of this standard should promote the application of the principles of good governance in the process of the evaluation of curricula submitted to Council for approval.

(c) These standards should be in line with Education and Training related legislation.

(d) Providers are responsible for workplace / experiential site learning.

(e) Students must come out with the same competencies as full time students.

(f) Students must get adequate support.

(g) Students must display professionalism and ethics.

(h) Students are expected to have, face-to-face contact time with the provider and any other form of contact as it may be deemed fit by Council.

4. GENERAL

4.1 PROGRAMME ADMINISTRATION

(a) The provider must be registered with the Department of Higher Education and Training (DHET) as a Higher Education and Training (HET) provider before applying for accreditation/approval.

(b) PTA and PT training programmes must be delivered by provider in collaboration with the experiential sites in community, institutional, wholesale and manufacturing pharmacy categories.

(c) The accredited/approved provider and experiential site must have a written agreement.

(d) The accredited/approved provider must take responsibility for experiential site rotation of students in community, institutional, wholesale and manufacturing pharmacies.

(e) The students must be supervised by pharmacists in the experiential site and the provider must have written agreements with supervisors who are accountable to the provider.

(f) The supervising pharmacist to student ratio at the experiential site must not exceed 1:13.

(g) The provider must have study areas, reference libraries and laboratory facilities in accordance to the Good Pharmacy Education (GPE) to deliver the outcomes and these facilities must be readily accessible to students.

(h) The accredited/approved provider must appoint a programme co-ordinator who is a pharmacist to direct all aspects of the PTA/PT training programme and must report to the Designated Pharmacist if it is a different person.

(i) Programme co-ordinators must coordinate and organise activities at the experiential sites, including assessing their suitability, liaising with supervisors of students at the experiential sites, visiting students while they are involved in the experiential sites, arranging for assessment processes, and generally overseeing and supporting students in the experiential sites.

(j) Programme co-ordinators must integrate, as appropriate, a range of student support mechanisms provided by the provider as well as those provided by the experiential sites.

(k) The provider must have policies and standard operating procedures (SOPS) in accordance to the GPE. The following policies and SOPS must be in place-

(i) Human Resources (HR) Policy

(ii) Student Policy

(iii) Financial Policy in line with International Financial Reporting Standards (IFRS)

(iv) Administration Policy

(v) Assessment policy

(vi) Certification Policy

(vii) Progression policy

(viii) Appeals policy

(ix) Occupational Health and Safety (OHS) Act certificate

(l) The experiential site must be a grade-A pharmacy.

(m) Students must be supported to acquire the necessary skills and experience within the determined duration of training through induction, effective supervision, appropriate and realistic workload, personal support and time to learn.

(n) The provider must have a plan in place to ensure that students are not disadvantaged in case of closure or other reasons.

4.2 Human resources

(a) The academic staff to student ratio at the provider site must not exceed 1:25.

(b) The provider must provide adequate support staff to handle student correspondence, appointments, travel arrangements and records.

4.3 Physical resources

The provider must provide physical resources as prescribed under Minimum Standards for Facilities and Resources: Higher Education and Training in the GPE.

4.4 Institutional learning support systems

The provider must make available to students the university's learning support systems, information and communication technology services, counselling services and other ancillary supports while they are on experiential placement, as an integral part of the curriculum design.

4.5 Pedagogical approaches through work integrated learning (WIL)

(a) The PTA / PT learning programmes must have all three learning approaches listed in the table below and must ensure that the programmes are accessible.

(b) The communication media used for the learning approaches must be appropriate for the content to be delivered and must be easily accessible to students.

(c) If online resources are used for any of the learning approaches, the provider must ensure that all students have access to internet and the required devices e.g. computers, tablets, phablets etc.

Learning approach	Activities	Physical resources
Work-directed theoretical learning (WDTL)	Demonstration Group learning Tutorials Practicals Experiential Formal lectures	Lecture halls Laboratories Discussion rooms
Problem based learning (PBL)	Guidance from the facilitator	Physical or online discussion room
Workplace learning (WPL)	Produce a guidance document Information on recording their progress as well as what to do when they have problems	Experiential sites

4.6 Assessments

(a) Assessments by the provider must comply with the following WIL principles-

(i) Appropriate

(ii) Fair

(iii) Transparent

(iv) Valid

(v) Authentic

(vi) Consistent

(vii) Formative as well as summative

(b) Summative assessments must be subject to external moderation.

(c) The provider must use assessors registered with Council to conduct all assessments (formative and summative).

5. DELIVERY OF THE PTA PROGRAMME

5.1 Curriculum and assessment (Annexure A)

(a) The objectives and the requirements of the learning programme must be clearly defined to the student.

(b) The provider must develop the learning programme in consultation with the representatives from the experiential site so that the programme appropriately integrates theoretical knowledge and practice through workplace activities.

(c) The programme must follow the curriculum outline determined by Council and must provide modules that appropriately address all exit level outcomes.

(d) The design of the learning material must be appropriate for the delivery method.

(e) Assessments for the learning programme must –

(i) be appropriate for the Higher Education Quality Framework (HEQF) level;

(ii) be integrated and should include simulated workplace models where relevant;

(iii) include formative and summative methods to demonstrate competence prior to registration as qualified PTAs;

(iv) provide students with the assessment criteria and, where possible, rubrics; and

(v) be done by an assessor registered by Council–

(aa) with a minimum qualification of a B. Pharm degree and registered with Council as a practising pharmacist;

(bb) with a minimum of two (2) years' experience in a relevant practice area; and

(cc) employed by the provider.

(f) Moderation of the PTA programme must –

(i) provide for internal and external moderations;

(ii) be carried out by moderators registered by Council –

(aa) who must have a minimum qualification of a B. Pharm degree and registration with Council as practising pharmacists;

(bb) with a minimum of three (3) years' experience in pharmacy education and training; and

(cc) who must not be assessors of assessment(s) that they are moderating.

(g) The duration / length of the learning programme must allow self-paced learning by students and –

(i) must be a minimum of two (2) years, up to a maximum of four years;

(ii) must provide the maximum period of study as determined by the progression rules of the provider; and

(iii) the provider must provide a carefully planned teaching and experiential site schedule well in advance to allow students to plan ahead.

6. DELIVERY OF THE PT PROGRAMME

6.1 Curriculum and assessment (Annexure B)

(a) The objectives and the requirements of the learning programme must be clearly defined to the student.

(b) The provider must develop the learning programme in consultation with the representatives from the experiential site so that the programme appropriately integrates theoretical knowledge and practice through workplace activities.

(c) The programme must follow the curriculum outline determined by Council and must provide modules that appropriately address all exit level outcomes.

(d) The design of the learning material must be appropriate for the delivery method.

(e) Assessments for the learning programme must –

(i) be appropriate for the HEQF level;

(ii) be integrated and simulate workplace models where appropriate;

(iii) include formative and summative methods to demonstrate competence prior to registration as qualified PTs;

(iv) provide students with the assessment criteria and, where possible, rubrics; and

(v) be done by an assessor registered by Council–

(aa) with a minimum qualification of a B. Pharm degree and registered with Council as a practising pharmacist;
(bb) with a minimum of two (2) years' experience in a relevant practice area; and
(cc) employed by the provider.

(f) Moderation of the PT programme must –

(i) provide for internal and external moderations;

(ii) be carried out by moderators registered by Council –

(aa) who must have a minimum qualification of a B. Pharm degree and registration with Council as practising pharmacists;
(bb) with a minimum of three (3) years' experience in pharmacy education and training; and
(cc) who must not be assessors of assessment(s) that they are moderating.

(g) The duration / length of the learning programme must allow self-paced learning by students and –

(i) must be a minimum of two (2) years, up to a maximum of four years;

(ii) must provide the maximum period of study as determined by the progression rules of the provider; and

(iii) the provider must provide a carefully planned teaching and experiential site schedule well in advance to allow students to plan ahead.

7. CERTIFICATION

7.1 Certificates for learning achievement

(a) Council has delegated the responsibility of issuing certificates for learning achievements to its accredited/approved providers.

(b) Providers need to ascertain that students have completed their training before they issue certificates to students.

(c) Providers of the PTA/PT programmes must provide certification according to the specifications prescribed by the Higher Education Quality Committee (HEQC) of the Council on Higher Education (CHE).

7.2 Provider Approval/Accreditation

(a) Only providers registered with Department of Higher Education and Training (DHET) who comply with the minimum criteria for the accreditation/approval of providers as determined and published by Council, shall be entitled to offer pharmacy education and training for purposes of conferring a qualification in pharmacy or a certificate of qualification.

(b) Public providers' PQMS and enrolment plans must be approved by the DHET prior to submission of an application to Council.

(c) A provider that complies with the minimum criteria for the accreditation/approval of providers of pharmacy education and training shall be issued a certificate, subject to any conditions determined by Council, upon receipt of the following:

(i) a duly completed application form as approved and provided by Council;

(ii) relevant supportive documentation;

(iii) payment of the applicable fees as determined by Council;

(iv) a plan that indicates appropriate investment for the programme;

(v) a plan that shows allocation of appropriate learning resources to support more independent learning;

(vi) evidence that staff has been developed to enable effective teaching and learning through distance provision;

(vii) communication strategy and support systems for remote and widely distributed students;

(viii) a decentralised assessment strategy with a strong emphasis on formative feedback to encourage active engagement and retention;

(ix) information on a tracking system that identifies at-risk students and monitor throughput of such student; and

(x) Where a partnership exists, an agreement where delegated duties/functions of each partner are clearly defined.

(d) The institution that awards the qualification must take full responsibility for the quality of the learning programme leading to the qualification.

(e) Upon accreditation, the provider should submit yearly review reports which include graduate output and success rate.

(f) A provider will be de-accredited when one or more of the following happen/s:

(i) a success rate of less than 60% at the level of modules/courses within a three-year period;

(ii) a cohort throughput rate of less than 25% within a three- year period;

(iii) any change in the accreditation conditions without prior approval by Council; and

(iv) a change in the mode of delivery from distance learning to contact learning is implemented without approval by Council.

7.3 PTA/PT programme coordinator

(a) The PTA/PT programme coordinator must be registered by Council as a Designated Pharmacist and shall be issued a certificate upon registration with Council and must comply with GPE.

(b) For registration with Council, the applicant must comply with the following to the satisfaction of Council:

(i) submit a duly completed application form approved and provided by Council;

(ii) must have been registered as a pharmacist for a period of not less than five years and five years' experience in education, simultaneously;

(iii) must be actively participating in continuing professional development (CPD) activities;

(c) Pay the applicable fee as determined by Council

7.4 Assessors and Moderators

(a) Assessors and moderators are required to be registered with Council for the purpose of assessing/moderating outcomes of pharmacy education and training.

(b) An assessor or moderator shall be issued a certificate upon registration with Council.

(c) Registration and issuing of a certificate occur when the applicant has submitted evidence of the following to the satisfaction of Council:

(i) a duly completed application form as approved and provided by Council;

(ii) payment of the applicable fees as determined by Council;

(iii) proof of registration as a pharmacist with Council; and

(iv) a certificate of competence indicating that the applicant is competent against the unit standards for assessors or moderators registered on the National Qualifications Framework issued by a training institution recognised by the relevant Quality Council.

7.5 PTA/PT Student

(a) Any person registered with a provider of a PTA/PT qualification must register with Council as a PTA/PT student at the commencement of the first year of study.

(b) Such student will receive a certificate upon registration with Council.

(c) Registration and issuing of a certificate occur when the applicant has submitted evidence of the following to the satisfaction of Council-

(i) a duly completed application on a form approved and provided by Council;

(ii) a certified copy of his or her identity document or passport;

(iii) acceptable documentary evidence from the provider concerned that he or she has been admitted to the first or subsequent year of study for a qualification in pharmacy; and

(iv) payment of the applicable fees as determined by Council.

8. ACRONYMS AND DEFINITIONS

'Accreditation' refers to the certification, usually for a particular period of time of a person, a body or an institution as having the capacity to fulfil a particular function in the quality assurance system set up by the South African Pharmacy Council. Council shall accredit primary focus providers.

'Approval' refers to the certification, usually for a particular period of time of a person, a body or an institution as having the capacity, in terms of the criteria determined and published by Council, to deliver a learning programme which culminates in pharmacy-related registered NQF standards or qualifications.

'Council' refers to The South African Pharmacy Council

'Experiential sites' refers to work environments for the purposes of learning

'Provider' refers to a provider accredited or approved by Council to deliver learning programmes which may lead to pharmacy-related standards or qualifications, and which manages the assessment thereof.

'Moderator' refers to a moderator registered with the Council to moderate the assessment process against specified pharmacy-related standards and qualifications

'National Qualifications Framework (NQF)' as outlined in the NQF Act No 67 of 2008 refers to a system that records levels of learning achievements to ensure that the skills and knowledge that have been learned are recognised throughout the country.

'Problem-based learning (PBL)' refers to learning through structured exploitation of a research or practice-based problem.

'Programme co-ordinator' refers to a person employed by the provider to prepare, facilitate, monitor, evaluate and document training activities related to the training programme.

'Qualification' refers to a formal recognition of the learning that has been achieved.

'Work-directed theoretical learning (WDTL)' refers to attempts to ensure that theoretical forms of knowledge are introduced and sequenced in ways that meet both academic criteria and are applicable and relevant to the career-specific components.

'Work-integrated Learning (WIL)' refers to an education approach that aligns academic and workplace practices for the mutual benefit of students and workplaces.

'Workplace learning (WPL)' refers to placing of students in work environments for the purposes of learning.

9. NATIONAL AND INTERNATIONAL BENCHMARKING

Nigeria:

The duration of Pharmacy Technicians training in Nigeria is three years. It comprise of first one and half years in classroom, next six months in Hospital for a practical experience and the last one year in class and laboratory.

United States of America (US):

The way Pharmacy Technicians training is delivered in the US depends on the laws of each state and therefore follow different methods such as online based training and campus based or live training**.** Available from http://pharmacy-technicianschools.com/pharmacy-technician-training-programs/

England:

The Pharmacy Technicians training in England usually takes two years to complete and involves a combination of study either at a college or by open learning, plus practical work experience. The General Pharmaceutical Council sets the amount of relevant work experience required for registration. Available from http://www.nhscareers.nhs.uk/explore-by-career/pharmacy/pharmacy-technician/entry-requirements-and-training/

10. REFERENCES

Council on Higher Education: Work-Integrated Learning: Good Practice Guide, HE Monitor No. 12, August 2011.

Policy for the Provision of Distance Education in South African Universities in the Context of an Integrated Post-School System.

ANNEXURE A

Curriculum Outline
Higher Certificate: Pharmacy: Support, Level 5

Learning Area	Exit Level Outcome	Notional Hours
Fundamental	1. Apply scientific knowledge in the provision of basic pharmaceutical support services.	200
Core	2. Provide functional support to compound, manipulate and prepare medicines (non-sterile Schedule 1 to Schedule 5) for specific patients in compliance with Standard Operating Procedures (SOPs) under the supervision of a Pharmacist.	250
Core	3. Provide functional support in the manufacture, package and/or re-package of non-sterile and scheduled substances/medicines (Schedule 1 to Schedule 5) in compliance with Good Manufacturing Practice (GMP) guidelines under the supervision of a pharmacist.	250
Core	4. Provide functional support in the management of medicine stock, scheduled substances, medical supplies and devices in compliance with Good Wholesale and Distribution Practice (GWDP) and legal requirements under the supervision of a pharmacist.	200

Core	5. Provide functional support in Phase 2 of dispensing of Schedule 1 to Schedule 5 medicines under the supervision of a pharmacist.	200
Core	6. Perform general housekeeping and administrative tasks in a pharmacy and/or dispensary.	100
Elective	7.V Provide information to promote health and wellness related to STG & EML	100
Elective	8. Demonstrate the use of Information and Communication Technology (ICT) in the management of inventory in a manufacturing, wholesale, community or institutional pharmacy/dispensary (either the public or the private sector).	100
		1300

EXIT LEVEL OUTCOME 1: 200 Notional hours

Apply scientific knowledge in the provision of basic pharmaceutical support services. **(Range of basic pharmaceutical support services include, but are not limited to: weighing of active ingredients, mixing, packing, labelling etc. and excluding any functions related to interpretation, evaluation, validation and Quality Assurance.)**				
ASSESSMENT CRITERIA	**CONTENT**		**THEORY/ PRACTICAL**	***CCFO**
1.1 Legislation related to the relevant scope of practice in pharmaceutical support services is described in the South African context. (Range of current legislation includes, but is not limited to: Medicines Act, Pharmacy Act and related regulations and rules etc.).	Introduction to law- Papers (white etc) Context of Health care – set the scene Medicines and related substances Act 101 of 1965, Sections 1, 2, 13,18 (a), 22(a) Regulations: 1. Definitions, 8. Labelling, 9. Packaging inserts, 10. Patient info leaflets, 11. Prescription book, 27. Destruction of medicines Pharmacy Act 53 of 1974, Sections 1, 2, 3, 4, 5,13, 23, 35 A (a) Regulations: Scope of Practice/GPP, Regulations: CPD, GPP Consumer Protection Act		Theory	6/8/9
1.2 Ethical and professional conduct related to the relevant scope of practice is demonstrated in the provision of pharmaceutical support services. (Range of aspects related to professional conduct includes, but is not limited to: values, practices, attitudes and confidentiality etc.).	Professional ethos-part of the health care theme, Code of conduct and ethical rules published by SAPC: Honour and dignity of the profession, Confidentiality, CPD, Professional independence, Professional appearance and nature of pharmacy (facility and personnel)		Theory/Practical	2/3/4/ 8/9
1.3 Basic pharmaceutical terms and concepts are explained in relation to different dosage forms and their route of administration	Including but not limited to: Types of packaging/containers: Routes of administration • oral	Dosage Forms • tablets/capsules • creams/ointments • suppositories • pessaries	Theory	6/7/9

	• transdermal • nasal • vaginal • rectal • aural • intra respiratory	• powders • Inhalers • liquids • gases		
1.4 Basic scientific principles are explained as applied to non-sterile pharmaceutical preparations.	non-sterile pharmaceutical preparations: Basic Pharmaceutical calculations: metric system for diff dosage forms, Conversions Physical& Chemical properties: raw materials & preparations Storage conditions & Packaging		Theory	5/6/7/ 8/9
1.5 Introduction to Basic principles/ concepts of pharmacology are explained in terms of the treatment of conditions identified in the Primary Health Care Standard Treatment Guidelines (STG) and EML.	Overview: Introduction to STG and EML Acute and Chronic conditions in relation to STGs: Medications: Interactions, Contraindications, side effects		Theory	6/7/8/9

EXIT LEVEL OUTCOME 2: 250 Notional hours

Provide functional support to compound, manipulate and prepare medicines (non-sterile Schedule 1 to Schedule 5) for specific patients in compliance with Standard Operating Procedures (SOPs) under the supervision of a Pharmacist.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
2.1 The different dosage forms and their route of administration are explained in terms of extemporaneous preparation.	1.3 & 1.4 Process of compounding, manipulation, preparation and packaging for routes of admin	Theory	5/6/7/ 9
2.2 The principles of GPP are explained in relation to compounding, manipulating and preparing of non-sterile medicines.	GPP – Chapter 2 (2.18) preparation of non-sterile medicines	Theory	5/6/7/ 9

2.3 Non-sterile medicines are compounded in accordance with SOPs, ethical principles and relevant legislation.	GPP- Chapter 2 (2.18) SOPs, Ethics, Legislation for compounding non-sterile medicines	Theory/Practical	4/5/6/ 7/9
2.4 Non-sterile medicines are manipulated in accordance with SOPs, ethical principles and relevant legislation.	GPP – Chapter 2(2.18) SOPs, Ethics, Legislation for manipulating non-sterile medicines	Theory/Practical	4/5/6/ 7/9
2.5 Non-sterile medicines are prepared and packed in accordance with SOPs authorised by a pharmacist	GPP – Chapter 2 (2.18) SOPs, authorised preparation & pack non-sterile medicines	Theory/Practical	4/5/6/ 7/9
2.6 Records are compiled and filed for medicines prepared for specific patients in accordance with legal requirements and organisational policies and procedures.	GPP – Chapter 2 (2.7.1.3) Legislation, Policies & Procedures to compile records	Theory/Practical	6/8/9

EXIT LEVEL OUTCOME 3: 250 Notional hours

Provide functional support in the manufacture, package and/or re-package of non-sterile and scheduled substances/medicines (Schedule 1 to Schedule 5) in compliance with Good Manufacturing Practice (GMP) guidelines under the supervision of a pharmacist.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
3.1 The principles of GMP are explained in relation to the manufacturing, packaging and re-packaging of non-sterile medicines and scheduled substances.	GMP, Legislation, SOPs, ethics – manufacture Regulation 8: labelling of medicine Chapter 3 in GPP on standards for manufacturing and quality assurance	Theory	6, 7, 8, 9
3.2 Non-sterile medicines and scheduled substances are manufactured and packaged in accordance with GMP, SOPs, ethical principles and relevant legislation.	GMP, Legislation, SOPs, ethics - package	Theory/Practical	1, 2, 3, 4, 5, 6, 7, 8, 9

3.3 Non-sterile medicines and scheduled substances are re-packaged in accordance with GMP, ethical principles, relevant legislation and SOPs authorised by a pharmacist.	GPP, GMP, Legislation, SOPs, ethics, authorisation – re-package	Theory/Practical	1, 4, 6, 7, 8, 9
3.4 Line opening and closing is performed, after line clearance, according to GMP.	Delete from qualification		
3.5 Relevant documentation for manufactured, packaged and re-packaged medicines and scheduled substances is completed in accordance with legal requirements and organisational policies and procedures.	GMP, Legislation, Policies & Procedures to complete admin	Theory/Practical	3, 4, 7, 8, 9

EXIT LEVEL OUTCOME 4

Provide functional support in the management of medicine stock, scheduled substances, medical supplies and devices in compliance with Good Wholesale and Distribution Practice (GWDP) and legal requirements under the supervision of a pharmacist.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
4.1 The principles of GWDP are explained in relation to the management of stock. (Range of principles include, but is not limited to: FIFO and FEFO, storage and shrinkage, where shrinkage refers to loss, theft, damage, expired and obsolete medicines).	GWDP-stock management Basic introduction to Drug supply management Chapter 2 of GPP standards for procurement, storage and distribution	Theory	5, 6, 7, 8, 9
4.2 Orders for medicines (Schedule 1 to Schedule 4) are assembled according to GWDP and SOPs. (Range of activities for order assembly include: picking, packing and checking).	GWDP-assemble orders GPP	Theory/Practical	1, 2, 4, 5, 6, 7, 8, 9

4.3 Orders for medicines (Schedule 1 to Schedule 4) are dispatched according to GWDP and SOPs.	GWDP, SOPs-dispatch orders GPP	Theory/Practical	1, 2, 4, 6, 7, 8, 9
4.4 Procedures for stock count (cyclic, monthly, quarterly and annually), stock rotation, storage and shrinkage are explained according to GWDP.	GWDP-stock count GPP	Theory	5, 6, 7, 8, 9
4.5 Expired, obsolete and damaged medicines, scheduled substances, medical supplies and devices are identified and disposed of according to GWDP, SOPs, current relevant legislation and guidelines.	GWDP, legislation, SOPs, guidelines-stock disposal GPP-Minimum standards for disposal and destruction of medicines 3.3.6 of GPP Section B: Re-use of medicines	Theory/Practical	1, 4, 6, 7, 8, 9
4.6 All relevant documents and records for management of stock are filed in accordance with relevant legislation, guidelines and SOPs.	Legislation, SOPs, guidelines-stock management admin	Theory/Practical	3, 4, 7, 8, 9

EXIT LEVEL OUTCOME 5: 200 Notional hours

Provide functional support in Phase 2 of dispensing of Schedule 1 to Schedule 5 **medicines under the supervision of a pharmacist.**			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
5.1 All phases of the dispensing process are explained in accordance with legal requirements, including GPP.	GPP 2.7, Legislation-dispensing process Chapter 3 subsection 3.1	Theory	3, 6, 8, 9
5.2 Phase 2 of the dispensing process is demonstrated in accordance with legal requirements, including GPP.	GPP 2.7, Legislation-dispensing phase 2	Theory/Practical	1, 2, 3, 4, 6, 7, 8, 9
5.3 Medicines are packed in an appropriate container and labelled in accordance with legal requirements, including GPP.	GPP 2.7, Legislation- pack medicines Chapter 3, GPP safety in dispensing procedures including 3.3.2/3.3.3/3.3.4/3.3.5/3.3.6..3.3.7/3.3.9/3.3.13/.	Theory/Practical	4, 6, 7, 8, 9

5.4 Mechanisms to avoid and identify errors are explained in relation to Phase 2 of the dispensing process.	Error avoidance steps-dispensing phase 2	Theory/Practical	1, 4, 6, 7, 8, 9
5.5 Records of selecting, preparing and labelling of prescribed medicines are completed according to SOPs.	SOPs for dispensing, GPP	Theory/Practical	3, 4, 7, 8, 9

EXIT LEVEL OUTCOME 6: 100 Notional hours

Perform general housekeeping and administrative tasks in a pharmacy and/or dispensary.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
6.1 Administrative tasks are performed according to SOP	Introduction to management SOP's-admin	Theory/Practical	4, 6, 8, 9
6.2 General housekeeping procedures are applied and documented according to SOP and in compliance with all relevant guidelines.	SOP, guidelines-housekeeping, GPP	Theory/Practical	4, 6, 8, 9
6.3 Application of the principles of time management is explained in relation to the scope of work.	Time management concepts/principles	Theory/Practical	4, 6, 8, 9
6.4 Effective lines of communication are established and maintained to facilitate team work in the workplace.	Communication, team building with other pharmacy environment	Theory/Practical	2, 3, 4

EXIT LEVEL OUTCOME 7: 100 Notional hours

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

ASSESSMENT CRITERIA	CONTENT	THEORY/ PRACTICAL	*CCFO
7.1 The concepts of health and wellness are explained in terms of disease and disability.	Health & Wellness- disease & disability	Theory	3, 6, 8, 9
7.2 Socio-economic factors that contribute to health and wellness dysfunction are identified with examples.	Socio-economic factors-dysfunction	Theory	3, 6, 8, 9
7.3 Preventative measures and lifestyle modification options are explained in relation to the identified condition.	Prevention per condition	Theory	1, 3, 6, 8, 9

EXIT LEVEL OUTCOME 8: 100 Notional hours

Demonstrate the use of Information and Communication Technology (ICT) in the management of inventory in a manufacturing, wholesale, community or institutional pharmacy/dispensary (either the public or the private sector).			
ASSESSMENT CRITERIA	**ESSENTIAL EMBEDDED KNOWLEDGE**	**THEORY/ PRACTICAL**	***CCFO**
8.1 Relevant computer peripherals are installed, configured and operated in accordance with manufacturer's specifications and instructions.	ICT Concepts, Internet, e-mail, Install peripherals	Theory/Practical	1, 4, 6, 7, 9
8.2 Relevant computer software applications are installed, configured and operated in accordance with manufacturer's specifications and instructions.	Install software	Theory/Practical	1, 4, 6, 7, 9
8.3 Relevant inventory reports are produced in the required format according to the software functions and applications.	Produce inventory reports	Theory/Practical	1, 4, 6, 7, 9

8.4 Inventory projections and quantification is generated in the required format according to the software functions and applications.	Produce inventory projections	Theory/Practical	1, 4, 6, 7, 9
8.5 Orders are generated in the required format using the relevant report application.	Generate orders	Theory/Practical	1, 4, 6, 7, 9
8.6 Inventory expenditure is tracked and produced using the relevant software application.	Produce inventory expenditure	Theory/Practical	1, 4, 6, 7, 9

***CRITICAL CROSS-FIELD OUTCOMES (CCFO)**

1. Identify and solve problems
2. Work effectively with others
3. Communicate effectively, noting cultural sensitivity and diversity
4. Organise and manage myself and my activities
5. Use mathematics
6. Collect, analyse, organise and critically evaluate information
7. Use science and technology effectively and critically
8. Demonstrate an understanding of the world as a set of related systems
9. Learner and societal development

130 credits =1300 notional hours
80 hours practicals (minimum)
3 months workplace experience

ANNEXURE B

Curriculum Outline
Advanced Certificate: Pharmacy: Technical Support, Level 6

Learning Area	Exit Level Outcome	Notional Hours
Fundamental	1. Apply scientific knowledge to provide technical support in pharmaceutical services.	200
Core	2. Provide technical support to compound, manipulate and prepare sterile and non-sterile medicines and Scheduled substances in compliance with standards as described in Good Pharmacy Practice (GPP) rules and Good Manufacturing Practice (GMP) guidelines under the supervision of a pharmacist.	150
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
Core	4. Provide technical support to order, manage, despatch and dispose of medicines, Scheduled substances, medical supplies and devices in compliance with Good Wholesale and Distribution Practice (GWDP) and legal requirements.	150
Core	5. Provide technical support to dispense prescriptions for patients in compliance with applicable legislation, including GPP.	250
Core	6. Provide Schedule 0 and 1 medicines in accordance in accordance with legal requirements, including GPP.	200
Core	7. Manage the dispensary in a Primary Health Care Clinic under the indirect supervision of a pharmacist.	200
Elective	8. Demonstrate an understanding of the principles of management of common chronic conditions	100
Elective	9. Demonstrate an understanding of principles of traditional African medicines	100
Elective	10. Demonstrate an understanding of principles of complementary medicines	100
Elective	11. Demonstrate an understanding of principles of nutraceuticals and functional foods	100
		1400

EXIT LEVEL OUTCOME 1: 200 Notional hours

Apply scientific knowledge to provide technical support in pharmaceutical services.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
1.1 Legislation related to the relevant scope of practice in pharmaceutical services is explained in the South African context. (Range of legislation includes, but is not limited to: Medicines and Related Substance Act, Pharmacy Act and related regulations and rules etc.).	Medicines and related substances Act 101 of 1965, Sections 20, 21, 22(f) (h), 23, 26, 35 Regulations: 2. therapeutic equivalents, 18. licence to compound & dispense 28. prescription particulars, 29. Returns of schedules 5, 6,7 medicines 30. keeping of Registers, 33. Repacking of medicine 36. Control of medicines in hospital, 45. Advertising Pharmacy Act 53 of 1974, Sections 35 A, rules of GPP Regulations: Scope of Practice Consumer Protection Act Health and Safety Act-Universal precautions	Theory	6/8/9
1.2 Ethical and professional conduct related to the relevant scope of practice is demonstrated in the provision of pharmaceutical technical support services. (Range of aspects related to professional conduct includes, but is not limited to: values, practices, attitudes and confidentiality.	Pharmacy code of conduct and ethical rules: • Wellbeing of the patient • Co-operation with health care professionals • Advertising • Control over medicines	Theory/Practical	2/3/4/ 8/9
1.3 Basic Pharmaceutical terms and concepts are explained in relation to sterile drug delivery systems.	Pharmaceutical terms & concepts related to sterile drug delivery systems: IV & IM, Ophthalmic, TPN	Theory	6/7/9
1.4 Basic scientific principles are applied to sterile pharmaceutical preparations.	sterile pharmaceutical preparations: Basic scientific principles	Theory	5/6/7/8/9

1.5 Pharmacology and Biopharmaceutics principles that are used in the treatment of common chronic conditions are explained in relation to the current National Health Strategic Plan. (Range of chronic conditions includes, but is not limited to: TB, HIV and AIDS, hypertension, diabetes, asthma, arthritis, epilepsy, mental disorders etc.)	Pharmacological classifications of medications used in the treatment of conditions: Introduction to principles of Pharmacokinetics and Pharmacodynamics To include but not limited to: TB, HIV and AIDS, hypertension, diabetes, asthma, arthritis, epilepsy, mental disorders	Theory	6/7/8/9
1.6 Screening tests are performed in accordance with GPP.	GPP 1.2.13.4 and 2.13	Theory/Practical	3/4/6/7/9

EXIT LEVEL OUTCOME 2: 150 Notional hours

Provide technical support to compound, manipulate and prepare sterile and non-sterile medicines and Scheduled substances in compliance with standards as described in Good Pharmacy Practice (GPP) rules and Good Manufacturing Practice (GMP) guidelines under the supervision of a pharmacist.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
2.1 The principles of GPP are explained in relation to compounding, manipulating and preparing of sterile medicines.	Process of sterile medicine prep: GPP: 2.2	Theory	6, 7, 9
2.2 Sterile admixtures are compounded, manipulated and prepared according to SOPs in accordance with aseptic techniques and principles of GMP and/or GPP for specific patients.	Sterile admixtures: GPP (2.17), GMP GNR. 7659 of 2 May 2003	Theory/Practical	4, 6, 7, 9
2.3 Records are generated for each of the preparations produced in accordance with legal requirements and organisational policies and procedures.	GPP – chapter 2 (2.7.1.2) Legislation, policies, procedures for records	Theory/Practical	4, 6, 7, 8, 9

EXIT LEVEL OUTCOME 3: 150 Notional hours

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.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
3.1 Pharmaceutical and GMP principles are explained in relation to the manufacturing, packaging and re-packaging of sterile medicines and scheduled substances.	Manufacture of sterile med & scheduled substances: GMP	Theory	6, 7, 9
3.2 Resources, materials and equipment for preparation of specific medicines are organised and prepared in accordance with process documentation.	Prepare for manufacture	Practical	4, 6, 7, 8, 9
3.3 Line-clearance (Schedule 1 to 4) is performed according to GMP and process documentation.	GMP-line opening & closing Clear line: docs (including sterile and non-sterile)	Practical	1, 4, 6, 7, 9
3.4 The manufacturing process is maintained and controlled in accordance with GMP and relevant SOPs.	Maintain manufacture: GMP, SOPs	Practical	1, 2, 4, 6, 7, 9
3.5 Related documents are completed and records maintained in accordance with GMP.	Complete docs: GMP	Practical	4, 6, 8, 9

EXIT LEVEL OUTCOME 4: 150 Notional hours

Provide technical support to order, manage, despatch and dispose of medicines, Scheduled substances, medical supplies and devices in compliance with Good Wholesale and Distribution Practice (GWDP) and legal requirements.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**

4.1 (a) In a primary care clinic, ordering and receipt of Schedule 1 to 6 medicines, Scheduled substances, medical supplies and devices are organised and managed in accordance with GMP, GPP and GWDP 4.1 (b)Under direct supervision, ordering and receipt of Schedule 1 to 5 medicines, Scheduled substances, medical supplies and devices are organised and managed in accordance with GMP, GPP and GWDP.	GMP, GPP 2.4 to 2.6, GWDP: stock order & receipt, Drug supply management	Theory/Practical	1, 2, 3, 4, 6, 7, 8, 9
4.2 (a) In a primary care clinic, stock of Schedule 1 to 6 medicines is organised, managed and secured in accordance with legal requirements, including GMP, GPP and GWDP. 4.2 (b) Under direct supervision, stock of Schedule 1 to 5 medicines is organised, managed and secured in accordance with legal requirements, including GMP, GPP and GWDP.	GMP, GPP, GWDP, Legislation: stock management	Theory/Practical	1, 2, 3, 4, 6, 7, 8, 9
4.3 Despatch of medicines, Scheduled substances, medical supplies and devices are organised and managed in accordance with GMP, GPP and GWDP.	GMP, GPP 2.3.1 to 2.3.7, GWDP: despatch stock	Theory/Practical	1, 2, 3, 4, 6, 7, 8, 9
4.4 Disposal of expired and unwanted medicines, scheduled substances, medical supplies and devices is managed according to current relevant legislation and guidelines.	GPP, Legislation, Guidelines: stock disposal Regulation 27 of the Medicines and Related Substances Act 101	Theory/Practical	1, 2, 3, 4, 6, 7, 9
4.5 Documents are completed and records maintained in accordance with applicable legislation and SOPs.	Legislation, SOPs: complete admin	Theory/Practical	4, 6, 8, 9

EXIT LEVEL OUTCOME 5: 250 Notional hours

Provide technical support to dispense prescriptions for patients in compliance with applicable legislation, including GPP.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
5.1 Communication with patients/caregivers is conducted in a professional manner in terms of sensitivity to patients' needs and diversity.	Communication – according to scope of practice, History taking tools, GPP – chapters on scheduled substances 2.8.1.4; 2.8.1.5; 2.8.1.13; 2.8.1.14	Theory/Practical	1, 2, 3, 4, 6, 9
5.2 Prescriptions are screened for compliance with the Primary Health Care Standard Treatment Guidelines and Essential Medicines List (EML) and other approved protocol/s.	Screen prescriptions for compliance, SOPs for practice under indirect supervision, Medical abbreviations, GPP, STG and EML	Theory/Practical	4, 6, 7 9
5.3 Prescriptions are dispensed according to organisational procedures and in accordance with current legislation and GPP provided that the pharmacist interprets and evaluates the prescription.	Dispense medicines, legislation, GPP, Role of the PT in Phase 1,2 & 3 of dispensing, according to the scope of practice, SOPs	Theory/Practical	3, 4, 6, 7, 8, 9
5.4 Patient and/or prescription is/are referred to a pharmacist for further management as needed or in relation to problems relating to medicine use.	Referral guidelines -according to scope of practice, SOPs, STG and EML	Theory/Practical	1, 3, 4, 6, 7, 8, 9
5.5 Relevant records are maintained in accordance with the current legislative requirements, including GPP.	Admin-according to scope of practice, legislation, GPP	Theory/Practical	4, 6, 8, 9

EXIT LEVEL OUTCOME 6: 200 Notional hours

Provide Schedule 0, 1 and 2 medicines in accordance in accordance with legal requirements, including GPP.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/**	***CCFO**

		PRACTICAL	
6.1 Communication with patients/caregivers is conducted and relevant information and history is obtained in a professional manner in terms of sensitivity to patients' needs and diversity.	Communication, History taking tool; 2.8.1.5; 2.8.1.10; 2.8.11; 2,8.1.13	Theory/Practical	2, 3, 4, 6, 9
6.2 A suitable course of action is decided in consultation with a pharmacist in terms of the presented information, including the history.	Determine course of action, SOPs; basic pharmacology and pathophysiology related to schedule 0 and 1	Theory/Practical	1, 2, 3, 4, 6, 9
6.3 Medicines and/or appropriate advice is/are provided according to GPP and principles of pharmaceutical care.	Provide medicines/advice, STGs and EML and MIMS classification, Knowledge of illness, GPP	Theory/Practical	2, 3, 4, 6, 9
6.4 Patient is referred to a pharmacist for further management as needed or in relation to problems relating to medicine use.	Referral tools, SOPs, Scope of Practice	Theory/Practical	1, 3, 4, 6, 7, 9
6.5 Appropriate records are completed and filed in accordance with GPP.	GPP, Admin, SOPs	Theory/Practical	4, 6, 8,9

EXIT LEVEL OUTCOME 7: 200 Notional hours

Manage the dispensary in a Primary Health Care Clinic under the indirect supervision of a pharmacist.			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
7.1 Resources are managed according to operational and legal requirements (including GPP). (Range of resources include, but is not limited to: equipment, infrastructure, personnel, stock and funds). (Range of legal requirements include, but is not limited to: relevant provisions of PFMA, Labour	Manage resources, GPP, SOPs, LRA, PFMA, Drug supply management, including procurement, distribution and use principles, Manage human resources, NDP and EML	Theory/Practical	1, 2, 3, 4, 6, 7, 8, 9

Relations Act and Basic Conditions of Employment Act).			
7.2 Application of the principles of supervision is explained in pharmaceutical practice.	Application of supervisory principles (up and down), Leadership, mentorship,	Theory/Practical	2, 3, 4, 6, 7. 9
7.3 Application of the principles of time management is explained in pharmaceutical practice.	Introduction to time management principles	Theory/Practical	4, 6, 7, 8. 9
7.4 Application of the principles of team building is explained in pharmaceutical practice.	Overview and structure of health care system, Team building principles, roles and responsibilities in a multi-disciplinary health care team and community	Theory/Practical	2, 4, 6, 8, 9
7.5 Effective lines of communication are established and maintained to facilitate supervision in the workplace.	Communication with all role-players within the health care team and community	Theory/Practical	2, 3, 4, 6, 9

EXIT LEVEL OUTCOME 8: 100 Notional hours

Demonstrate an understanding of the principles of management of common chronic conditions			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
8.1 Aetiology and Epidemiology of the common chronic conditions are explained in relation to the current National Health Strategic Plan. (Range of chronic condition includes: TB, HIV and AIDS, hypertension, diabetes, asthma, arthritis, Epilepsy and mental disorders.)	Topics such as: Principles of evidence-based medicine and formulary development, Introduction to the principles of research methodology, Aetiology, Epidemiology: Common chronic conditions, Pharmacology on drugs on EML, Use of drug delivery systems e.g. how to use an metered dose inhaler/nebulizer	Theory/Practical	6, 7, 9
8.2 Preventative measures and lifestyle modification options are explained in relation to common chronic conditions.	Prevention: Common chronic conditions	Theory/Practical	1, 4, 6, 8, 9

8.3 Circumstances under which a patient with a chronic condition is referred to another Health Care Provider/facility are described as it relates to the information presented and the profile of the patient.	Conditions for referral	Theory/Practical	4, 6, 8. 9

EXIT LEVEL OUTCOME 9: 100 Notional hours

Demonstrate an understanding of principles of traditional African medicines			
ASSESSMENT CRITERIA	**CONTENT**		***CCFO**
9.1 The philosophies of traditional African medicines and principles of therapies are explained in terms of how they complement those of conventional medicine.	Introduction to research methodology, Difference between complementary and alternative medicines, Definition of TAM, Philosophy, therapies of TAM	Theory	6, 8, 9
9.2 The sale of traditional African medicines are described in terms of the associated responsibilities, limitations, benefits and potential risks	responsibilities, limitations, benefits and potential risks: sale of TAM, common remedies	Theory/Practical	6, 8, 9
9.3 The regulation and use of traditional African medicines are explained in terms of legislation.	Legislation: TAM	Theory	6, 8, 9

EXIT LEVEL OUTCOME 10: 100 Notional hours

Demonstrate an understanding of principles of complementary medicines			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**

10.1 The philosophies of complementary medicines and principles of therapies are explained in terms of how they complement those of conventional medicine	Introduction to research methodology, Difference between complementary and alternative medicines, Definition, Philosophy, therapies of CM	Theory	6, 8, 9
10.2 The sale of complementary medicines is described in terms of the associated responsibilities, limitations, benefits and potential risks.	responsibilities, limitations, benefits and potential risks: sale of CM, common therapies	Theory/Practical	6, 8, 9
10.3 The regulation and use of complementary medicines are explained in terms of legislation.	Legislation: CM	Theory	6, 8, 9

EXIT LEVEL OUTCOME 11: 100 Notional hours

Demonstrate an understanding of principles of nutraceuticals and functional foods			
ASSESSMENT CRITERIA	**CONTENT**	**THEORY/ PRACTICAL**	***CCFO**
11.1 The philosophies of nutraceuticals and functional foods and principles of therapies are explained in terms of how they complement those of conventional medicine.	Introduction to research methodology, Difference between complementary and alternative medicines, Definition, Philosophy, therapies of Nutraceuticals & functional foods	Theory/	6, 8, 9
11.2 The sale of nutraceuticals and functional foods are described in terms of the associated responsibilities, limitations, benefits and potential risks.	responsibilities, limitations, benefits and potential risks: sale of Nutraceuticals & functional foods, common Nutraceuticals & functional foods	Theory/Practical	6, 8, 9
11.3 The regulation and use of nutraceuticals and functional foods are explained in terms of legislation.	Legislation: Nutraceuticals & functional foods	Theory/	6, 8, 9

***Critical Cross Field Outcomes (CCFO)**

1. Identify and solve problems
2. Work effectively with others
3. Communicate effectively-cultural sensitivity and diversity
4. Organise and manage myself and my activities
5. Use mathematics
6. Collect, analyse, organise and critically evaluate information
7. Use science and technology effectively and critically
8. Demonstrate an understanding of the world as a set of related systems
9. Learner and societal development

140 credits =1400 notional hours =466 notional hours/10 weeks per term (3)
80 hours practicals (minimum)
3 months workplace experience
200 hours self-study