

REPORT

ACCREDITATION/MONITORING VISIT TO

XXXXX UNIVERSITY

IN TERMS OF SECTION 33 AND SECTION 34 OF THE PHARMACY ACT (ACT NO 53 OF 1974)

DD - DD MONTH 202X

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PREAMBLE:

Free text.

Part I: Accreditation/monitoring visit cover sheet

University Name			
U-number			
School			
Name			
Address			
Please provide additional ad	dress if delivered at more than	one campus	
Tick where appropriate			
	Bachelor of Pharmacy	Yes	
Programme(s) (select relevant	Higher Certificate:		
cell(s)	Advanced Certificate:		
	Supplementary training course		
Name			
Title			
P-number (where applicable)			
Telephone number			
Email address			
Alternate contact (optional)	Programme coordinator conta	act details (where a	pplicable)
Name of programme			
Designation			
Name			
Title			
P-number (where applicable)			
Telephone Email			
Address (if different from above)		
(,		
Date of submission			
Date of last accreditation/mo	nitoring visit		
Date of current accreditation	/monitoring visit		
Institution Registered with	the Department of Higher	YES	Χ
Education and Training (DHE		NO	
If the answer is NO explain	•		
The programme(s) is part of the institution's programme		YES	X
and qualifications mix (PQM)		NO	
If the answer is NO explain	oelow		

Upload a copy of the DHET registration.
Upload proof that the programme is included in your PQM where applicable

Part II: Background and overview

Free text. Part III: Presentation of the report

The report is presented in a table format comprising the following:

1. Minimum standards

The good pharmacy education standards with which the provider should comply.

2. Questions under the minimum standards

Assessment of the provider's degree of compliance with each standard.

3. Response

The delegation's observations and evaluation of compliance with the standards.

4. Category of the deficiency

Deficiencies, if existent, are categorised into minor, major or critical.

4.1 Minor: to be addressed by the next visit, and may be taken on review based on the

consequences of the deficiency on educational outcomes

4.2 Major: to be addressed in line with the recommended timeframes linked to the

consequences of the deficiency on educational outcomes

4.3 Critical: to be addressed immediately, linked to the consequences of the

deficiency on educational outcomes

5. General comments from the delegation

The delegation's comments on compliance with the standards

6. Recommendations from the delegation

The delegation's recommendations to Council

The final part of the report is a conclusion which sums up the observations and

recommendations from the delegation.

Part IV: Enrollment data and student statistics

Part V: Minimum Standards

Minimum Standards	Questions under the standards	Response (Yes, No, Not applicable or √)	Category of the deficiency	Panel Members Observations (Free text)
1. Minimum standards for vision, mission and planning. The purpose of these standards is to ensure that a School has a clearly articulated vision and mission and that a strategic planning and evaluation process is used to measure the achievement of relevant objectives.	1.1 Minimum standards for vision and mission 1.1.1. Did the School provide the policies that the Institution has with regards to the minimum standards for vision, mission and planning? List the policies that the institutions have with regards to the minimum standards for vision and mission (1.1 a) 1.1.2 Does the School follow the policies that the Institution has with regards to the minimum standards for vision, mission and planning? Only for panel members 1.1.3 Does the School have a vision and mission? If yes, provide evidence/ if no provide an explanation (1.1 a) 1.2 Minimum standards for		Major	
	systematic planning			

	1.2.1 Has the School described their approach to planning?			
	their approach to planning?		1	
	I and the second			
	Describe the school's approach			
	to (strategic and operational)			
	planning (1.2 a on the old tool)			
	1.2.2 Does the School			
	undertake continuous planning?			
	Does the school undertake			
	continuous planning?			
	If Yes provide evidence / If No			
	provide an explanation (1.2 b			
	on the old tool)			
	1.2.3 How often is planning	Tick where appropriate		
	undertaken?			
	How often is planning			
	undertaken? (1.2 c on the old			
	tool)			
	1.2.3.1 quarterly,			
	, , , , ,			
	1.2.3.2 six monthly			
	1.2.3.3 annually			
			_	
	1.2.3.4 bi-annually			
	1.2.2.5 Other (Drevide Details)		-	
	1.2.3.5 Other (Provide Details)			
Consend Comments from the con-	Monthly			
General Comments from the pan	ei			
Free text				
Recommendation(s):				
Free text.				

Minimum Standard	Questions under the standards	Response (Yes, No, Not applicable or $\sqrt{\ }$	Category of the deficiency	Panel Members Observations (Free text)
Minimum standards for organisation and administration	2.1 Minimum standards for school and organisation Relationships		Major	
The purpose of these standards is to ensure that a School's organisation and support within the institutional structure, its relationships with other organisation and external practice and research entities, and its internal organisation, leadership, and governance, are developed and function in a manner that fosters the School's mission and goals.	2.1.1 Does the Institution have structures to support the School in development of relationships with internal stakeholders? Does the institution have structures to support the development of relationships with internal stakeholders? If Yes provide evidence / If No provide an explanation (maximum 150 words).(2.1f on the old tool)		Major	
	2.1.2 Does the Institution have structures to support the School in development of relationships with external stakeholders? Does the institution have structures to support the school in development of relationships with external stakeholders? If Yes provide evidence / If No provide an explanation		Major	

(maximum 150 words). (2.1g on		
the old tool)	NA-i	
2.1.3 Did the School Provide	Major	
evidence of agreements		
between the school and service		
departments		
Provide evidence of agreements		
between the school and service		
departments (2.4 a on the old		
tool)		
2.2 Minimum standards for		
school organisation and		
Administration		
2.2.1Did the School provide the	Major	
policies that the Institution have	Iviajoi	
with regards to the minimum		
standards for organisation and administration		
administration		
Dravida a policy related to the		
Provide a policy related to the		
Minimum standards for		
organisation and administration		
(2.1a on the old tool)		
2.2.2 Does the School follow the	Major	
policies that the Institution have		
with regards to the minimum		
standards for organisation and		
administration		
Panel members only		
2.2.3 Is it a-	Tick where appropriate Major	
The school a: Faculty of		
Pharmacy or School of		

Pharmacy or Department of		
Pharmacy or Programme in a		
Department or Other (specify)		
(2.1 b on the current tool)		
2.2.3.1 Faculty of pharmacy		
Panel members only		
2.2.3.2 School of pharmacy		
Panel members only		
2.2.3.3 Department of pharmacy		
Panel members only		
2.2.3.4 Programme in a department		
Panel members only		
2.2.3.5 Other (specify)		The comment is compulsory
Panel members only		
2.2.4 Did the School provide a	Major	
comprehensive organogram		
showing lines of responsibilities		
and accountability of the School		
within faculty and University?		
Provide a comprehensive		
organogram which clearly		
defines units and shows lines of		
responsibilities, accountability		
and communication (from the		
Vice Chancellor down to the		
school) of the school within the		

faculty and the university (2.1 c on the old tool)		
2.2.5 Does the School have authority/ autonomy to design, develop, deliver and evaluate the programme?	Major	
Does the school have the authority/autonomy to design, develop, deliver and evaluate the programme? If Yes provide evidence / If No provide an explanation (2.1 d on the old tool)		
2.2.6 Did the School provide a narrative or a flow diagram illustrating the curriculum approval process of their Institution?	Major	
Provide a narrative or a flow diagram illustrating the curriculum approval process in the school (maximum 600 words) (2.1 e on the old tool)		
2.2.7 Does the School have comprehensive organogram which clearly defines units and shows lines of responsibilities, accountability and communication within the School?	Major	

Provide a comprehensive		
organogram which clearly		
defines units and shows lines of		
responsibilities, accountability		
and communication within the		
school. (2.2 a on the old tool)		
2.2.8 Does the HoS have	Major	
representation at the level of	Major	
senate?		
Scriate:		
Does the head of the school		
have representation at the level		
of senate? If No provide an		
explanation (2.3 f on the old tool) 2.3 minimum standards for		
qualifications and		
Responsibilities of head of		
school		
2.3.1 Qualifications of the		
Head of School		
2.3.1.1 Is the Head of School a	Major	
Pharmacist		
Panal mambara anly		
Panel members only		
2.3.1.2 did the School provide a	Major	
structured Curriculum Vitae of	-	
the head of School.		
Drovide a structured Curriculum		
Provide a structured Curriculum		
Vitae of the head of school (2.3 a		
on the old tool)		
2.3.2 Functions and		
responsibilities of the Head of		
School		

2.3.2.1 Is the Head of School (HoS)	Tick where appropriate	Major	
2.3.2.1.1 the Chief administrator of the School?			
The head of the school is: the chief administrator of the school (2.3 b on the old tool)			
2.3.2.1.2 the Chief academic officer of the School?			
The head of the school is: the chief academic officer of the school (2.3 d on the old tool)			
2.3.2.1.3 responsible for ensuring that all accreditation requirements of Council are met?			
The head of the school is: responsible for ensuring that all Council accreditation requirements are met (2.3 c on the old tool)			
2.3.2.1.4 demonstrating progressive, constructive, academic and professional leadership to organisational/ management at the highest level? (yes/no)			

The head of the school is: demonstrating progressive, constructive, academic and professional leadership (2.3 e on the old tool)		
On the old tool)		

General Comments from the panel

Free text

Recommendation(s):

Free text

Minimum Standard	Questions under the standards	Response (Yes, No, Not applicable or √)	Category of the	Panel Members Observations (Free text)
Minimum standards for work-based learning	3.1 Minimum standards for work-based learning	Yes	deficiency Critical	
In pharmacy education, WBL must integrate, apply, reinforce	3.1.1 Work-Based Learning during training			
and advance the knowledge, skills, attitudes, and values developed through the other	3.1.1.1 Pharmacy Technicians			
components of the curriculum. The objectives for each WBL experience, and the responsibilities of the student, supervisor and site, must be defined. Student performance, nature and extent of patient and healthcare professional interactions, where	3.1.1.1.1 Did the School provide the policies that the Institution have with regards to the minimum standards for WBL List the policies that the institutions have with		Critical	
applicable, and the attainment of	regards to the minimum standards for work-based			

desired outcomes, must be documented and assessed. Supervisors at respective sites	learning (currently in the tool 3.1 a)		
will be held responsible by the provider for WBL processes. Where applicable, pharmacy WBL must include direct interaction with diverse populations in a variety of WBL settings.	3.1.1.1.2 Does the School follow the policies that the Institution have with regards to the minimum standards for WBL	Critical	
	Only for the panel members		
	3.1.1.1.3 Did the School describe how the professional indemnity for students is managed in line with the GPE requirements?	Critical	
	Describe how the school manages the professional indemnity for students in line with the GPE requirements? (currently in the tool 3.1 b)		
	3.1.1.1.4 Do all students have professional indemnity insurance?	Critical	
	Do all students have professional indemnity insurance. If yes provide evidence. If no provide an		

	planation (currently in e tool 3.1 c)		
und und pla Ce Su	dergraduate students dertake work-based acement for the Higher ertificate: Pharmacy pport (Where plicable?	Critical	
stu spe wo for Ph	o the undergraduate idents undertake the ecified 100 hours of ork-based placement the Higher Certificate: armacy Support? (rrently in the tool 3.1 f)		
und und pla Adi Phi	1.1.1.5.2 Do the dergraduate students dertake work-based acement for the vanced Certificate: armacy Technical pport?	Critical	
stu spe wo for	the undergraduate udents undertake the ecified 100 hours of ork-based placement the Advanced ertificate: Pharmacy		

Technical Support? (currently in the tool 3.1 f)		
3.1.1.1.6 Is work-based learning formally assessed against outcomes?	Critical	
Is work-based learning formally assessed against outcomes? If yes provide one set of completed assessments for each sector in which students are placed. If No provide an explanation. (currently in the tool 3.1 d)		
3.1.1.1.7 Did the School describe WBL for an individual student in each year of study.	Critical	
Table 5: Work-based learning placement information (Currently in the tool 3.1 g)		
3.1.1.2 Pharmacists		
3.1.1.2.1 Did the School provide the policies that the Institution have with regards to the minimum standards for WBL	Critical	

in re	ist the policies that the nstitutions have with egards to the minimum tandards for work-based earning (currently in the pol 3.1 a)		
S tr w m	.1.1.2.2 Does the School follow the policies nat the Institution have vith regards to the ninimum standards for VBL	Critical	
	Only for the panel nembers		
d p si lir	1.1.2.3 Did the School escribe how the rofessional indemnity for tudents is managed in ne with the GPE equirements?	Critical	
m p si G	Describe how the school nanages the rofessional indemnity for tudents in line with the GPE requirements? (urrently in the tool 3.1 b)		
h	.1.1.2.4 Do all students ave professional ndemnity insurance?	Critical	

Do all students have professional indemnity insurance. If yes provide evidence. If no provide an explanation (currently in the tool 3.1 c)		
3.1.1.2.5 Do the undergraduate students undertake the specified 400 hours of work-based placement for the Bachelor of Pharmacy? Do the undergraduate students undertake the specified 400 hours of work-based placement for the Bachelor of Pharmacy? (currently in the tool 3.1 f)	Critical	
3.1.1.2.6 Is work-based learning formally assessed against outcomes? Is work-based learning formally assessed against outcomes? If yes provide one set of completed assessments for each sector in which students are placed. If No provide an explanation. (currently in the tool 3.1 d)	Critical	

describ individu year of Table learning	5: Work-based	Critical	
3.2 Min for org admini relation the hi institut organi	nimum standards ganizational and strative nships between igher education ion and other sations/associat lthcare facilities		
provide agreem	Did the School written ents between the and WBL sites?	Critical	
written each se Note: E written be mad the accredi	e examples of agreements for ector of placement. Examples of other agreements must be available during tation/monitoring currently in the tool		

	3.2.2 Does formal relationships exist with healthcare providers, practitioners and services to facilitate access to appropriate experiential placements?		Critical	
	Does formal relationships exist with healthcare providers, practitioners and services to facilitate access to appropriate experiential placements. If yes provide evidence/ if No provide an explanation (currently in the tool 3.2 a)			
General Comments from the particle Free text	nel		1	,
Recommendation(s): Free text				
Minimum Standard	Questions under the standards	Response (Yes, No, Not applicable or √)	Category of the deficiency	Panel Members Observations (Free text)
4. Minimum standards for facilities, financial, human and physical resources.	4.1 Minimum standards for facilities, equipment and resources		Critical	

	4.1.1 Physical facilities and Equipment		
The purpose of these standards	4.1.1.1 Does the	Critical	
is to ensure that a school has	Institution provide the		
adequate and appropriate	School with adequate		
physical, library, educational,	facilities and resources?		
human and financial resources,			
and assessment and record-	4.1.1.1 Does the		
keeping systems in place to	institution provide the		
deliver high-quality programmes	school with adequate		
in pharmacy and meet its mission	facilities and resources?		
and goals and the accreditation	If Yes provide evidence.		
standards.	If No provide details of		
	educational facilities and		
	resources required		
	(maximum 600 words)		
	(4.1 c on the current tool)		
	4.1.1.1.2 Table 6:		
	Facilities and technical		
	support for the		
	programme. Complete		
	the facilities and		
	technical support table		
	(4.1 b on the current		
	tool)		
	4.1.1.2 Is the quality of	Critical	
	the facilities sufficient to		
	conduct the programme?		
	Is the quality of the		
	current facilities sufficient		
	to conduct the		
	programme? If No		
	provide an explanation		

(4.1 d on the current		
tool)		
4.1.1.3 Do the facilities	Critical	
meet the appropriate		
occupational health and		
safety requirements?		
Do the facilities meet the		
relevant occupational		
health and safety		
requirements? If Yes		
provide evidence.If No		
provide an explanation		
(maximum 600 words)		
(4.1 e on the current		
tool)		
4.1.1.4 Does the	Critical	
Institution provide the		
School with adequate		
equipment?		
Table 7: Complete the		
equipment table (4.1 f on		
the current tool)		
Does the institution		
provide the school with		
adequate equipment? If		
No provide details.		
(maximum 600 words)		
(4.1 g on the current		
tool)		
4.1.1.5 Does the School	Major	
have control of all		
<u> </u>		

aspects of the operation	g		
budget related to			
teaching of the			
programme?			
programme.			
Does the school have			
control of all aspects of			
the operating budget			
related to the teaching	of		
the programme? If no,	OI		
provide an explanation			
(Maximum 150 words)			
(4.2 g on the old tool)			
4.1.1.6 Does the School		Major	
have sufficient funds	0		
run the proggrame?			
Table 11 Complete the			
finance table (4.2 h on			
the old tool)			
4.1.1.7 Did the school			
provide safety related			
policies and procedure			
on the use of			
laboratories?			
iaboratorios:			
Provide the safety			
related policies and			
procedures on the use	of		
laboratories.	UI		
4.1.1.8 Does the Scho			
follow the safety relate			
policies and procedure	S		
on the use of			
laboratories?			

Elaborate and provide evidence on how the school follows the safety related policies and procedures on the use of laboratories? 4.1.1.9 Did the school		
provide evidence of training of the staff members and students on the use of the laboratories		
Provide evidence of training of the staff members and students on the use of the laboratories		
4.2 Minimum standards for staff/human resources		
4.2.1 Quantitative factors		
4.2.1.1 Does the School comply with the minimum staff to student ratio of 1:15?	Major	
Does the school comply with the minimum staff to student ratio of 1:15 ? If yes provide the current ratio.If no provide an		

explanation (4.2 a on the		
old tool)		
4.2.1.2 Does the	Major	
Institution provide the		
School with sufficient		
human resources?		
numan resources?		
Does the institution		
provide the school with		
sufficient human		
resources? If yes,		
provide evidence. If No		
provide details of		
additional human		
resources required		
(maximum 600		
words).(4.2 b on the old		
tool)		
4.2.1.3 Did the School	Major	
provide the quantitative	,	
staffing information?		
Staning information:		
Table 9 : Complete the		
tables below for		
quantitative staffing		
information.(4.2 c on the		
old tool)		
4.2.2 Staff responsible		
for and who		
participates in teaching		
and learning		

4.2.2.1 Did the School Submit the abbreviated CVs for all academic and technical staff members? Table 10: Submit the abbreviated CVs for all academic and technical staff members using the template provided. (4.2 d		Major	
on the old tool)			
4.2.3 Staff development			
4.2.3.1 Does the Institution make provision for staff training in respect of teaching and learning?		Major	
Does the institution make provision for staff training in respect of teaching and learning? If yes, provide evidence.If no, provide an explanation (4.2 e on the old tool)			
4.2.3.2 Does the Institution make provision for staff to undertake self-evaluation, peer-evaluations and reviews.		Major	
	Submit the abbreviated CVs for all academic and technical staff members? Table 10: Submit the abbreviated CVs for all academic and technical staff members using the template provided. (4.2 d on the old tool) 4.2.3 Staff development 4.2.3.1 Does the Institution make provision for staff training in respect of teaching and learning? Does the institution make provision for staff training in respect of teaching and learning? If yes, provide evidence.If no, provide an explanation (4.2 e on the old tool) 4.2.3.2 Does the Institution make provision for staff to undertake self-evaluation, peer-	Submit the abbreviated CVs for all academic and technical staff members? Table 10: Submit the abbreviated CVs for all academic and technical staff members using the template provided. (4.2 don the old tool) 4.2.3 Staff development 4.2.3.1 Does the Institution make provision for staff training in respect of teaching and learning? Does the institution make provision for staff training in respect of teaching and learning? If yes, provide evidence. If no, provide an explanation (4.2 e on the old tool) 4.2.3.2 Does the Institution make provision for staff to undertake selfevaluation, peer-	Submit the abbreviated CVs for all academic and technical staff members? Table 10: Submit the abbreviated CVs for all academic and technical staff members using the template provided. (4.2 d on the old tool) 4.2.3 Staff development 4.2.3.1 Does the Institution make provision for staff training in respect of teaching and learning? Does the institution make provision for staff training in respect of teaching and learning? If yes, provide evidence. If no, provide an explanation (4.2 e on the old tool) 4.2.3.2 Does the Institution make provision for staff to undertake selfevaluation, peer-

provision undertake evaluatio evaluatio If yes, pro no,	institution make for staff to e self- n, peer- ns and reviews. ovide evidence.If provide an on (4.2 f on the		
appointe voluntar service	ff who are ed to provide y/volunteer		
provide voluntary service of criteria for registration qualified voluntary service (A the GPE) Only for members	or the panel	Major	
4.3 Polic			
provide the Institution regards to	the School ne policies that ution have with to the minimum s for facilities	Critical	

	1. Academic Experts Reviews on th	, , , , , , , , , , , , , , , , , , ,		
Minimum Standard	Questions under the standards	Response (Yes, No, Not applicable or √)	Category of the deficiency	Panel Members Observations (Free text)
Recommendation(s): Free text				
Free text				
General Comments				
	Only for the panel			
	physical resources (4.1 a) 4.3.2 Does the School follow the policies that the Institution have with regards to the minimum standards for facilities and financial, human and physical resources.		Critical	
	List the policies that the institutions have with regards to the minimum standards for facilities, financial, human and			
	and financial, human and physical resources.			

5. Minimum standards for delivery of programmes.

The purpose of these standards is to ensure that the programmes presented by the School comply with the curricular requirements of the Council and are presented with appropriate delivery, assessment and certification methods.

Substantive changes to the content of the curriculum (50% or more) contemplated by the School must be addressed through its strategic planning process. Planning must take into consideration all resources (including human, technical, financial, and physical) required to implement the change and the impact of the change on the existing programmes. The School must notify Council at least one year in advance of the implementation of any substantive change, allowing sufficient time for evaluation of compliance with standards or the need for additional monitoring.

A substantive change that involves new initiatives for a programme (such as alternate programme pathways to qualification completion, including geographically dispersed campuses and distance-learning activities) must result from documented needs and be included in the strategic planning process, ensuring adequate lead time for development and proper notification of Council, per Council policies and procedures. Consultation with Council must occur at least six months before recruiting students into new pathways or programmes.

Report on Pharmacology			
Only for panel members			
Only for pariet members			
Report on Pharmaceutics			
Only for panel members			
B (B)			
Report on Pharmacy Practice			
Only for panel members			
Report on Pharmaceutical Chemistry			
Only for panel members			
Report on Problem Based Learning where applicable			
Only for panel members			
Answer the following with Yes/No/Not	applicable		
5.1. Curricular goals, content,		Critical	
design, development and delivery			
5.1.1 Curricular content			

5.1.1.1 Does the school adhere to the mapping documents provided to Council upon application for approval of the qualification? 5.1.1.1 Table 12 -Provide discipline expert reviews for the Programme Note: provide detailed module files at the time of the visit (5.1 b on the old tool)	Critical	
5.1.1.1.2 List the modules that are not directly linked to the ELOs listed in the qualification. (5.1 c on the old tool)		
5.1.1.3 Complete the technical information table. (5.1 d on the old tool)		
5.1.1.1.4 Complete the further technical information table (Table 15 a). (5.1 e on the old tool)		
5.1.1.1.5 Complete the further technical information table (Table 15 b). (5.1 f on the old tool)		
5.1.1.1.6 Provide all the module codes that cover the ELOs and specify the number of credits allocated to each ELO. Motivate if the number of credits per ELO deviates by more than 20% from the credits listed for the qualification (5.1 h on the old tool)		

5.1.1.1.7 Provide the module names and codes that constitute the programme and for each module specify the associated assessment criteria listed in the qualification.(5.2 a on the old tool) 5.1.1.1.8 Provide module codes where the critical cross-field outcomes as listed in the qualification are covered. (Table22) (5.2 b on the old tool)		
5.1.1.1.9 Assessment and moderation for the Programme. (Table 25) (5.2 g on the old tool)		
5.1.1.2 Did the provider complete the table on mapping of the learning activities to the notional learning hours? Learning activities and notional learning	Critical	
hours (Table 16) (5.1 g on the old tool) 5.1.2 Teaching and learning methods		
5.1.2.1 Did the School describe the teaching and learning strategy/strategies for each module or cluster of modules?	Major	
Describe the teaching and learning strategy/strategies for each module or cluster of modules for the programme. (Table 20) (5.1.2 a on the old tool)		

5.1.2.2 Does the School have formal agreements with relevant service departments? Does the school have formal agreements with relevant service departments? If yes Provide examples of such agreements/if No provide an explanation (5.2 c on the old tool)	Major
5.1.3 Education and information technology and communication resources	
5.1.3.1 Does the School have access to, information and communication technology (ICT), including educational technology (ET), based on relevant instructional and learning theory to provide an excellent learning experience?	Major
Does the school have access to, information and communication technology (ICT), including educational technology (ET), based on relevant instructional and learning theory to provide an excellent learning experience? If Yes provide evidence/ if No Provide an Explanation (5.1.3 a on the old tool)	
5.1.4 Curricular evaluation	
5.1.4.1 Did the School Provide a summary of curriculum review practices	Major

it followed to ensure continued	
improvement of course structure,	
content and presentation?	
Comon and processing	
Provide a summary of curriculum	
review practices in your school to	
ensure continued improvement of	
course structure, content and	
presentation. (5.1.4 b on the old tool)	
5.1.4.2 Did the School explain the	Minor
mechanisms used to measure the	Willion
performance of its graduates in the	
market place?	
5.1.4.2.1 How does the school view the	
position of its graduates in the market	
place? (5.1.4 c on the old tool)	
5.1.4.2.2 What formal/informal	
mechanisms does the school use to	
measure the performance of its	
graduates in the market place?	
(maximum 600 words) (5.1.4 d on the	
old tool)	
5.1.4.3 Did the School explain how	Minor
feed-back is utilised to improve the	
offering of the programme?	
5.1.4.3.1 Insert a table for pre-	
registration examination results from	
the date of the last visit (5.1.4 a on the	
old tool)	
olu tool)	
5.1.4.3.2 How does the school use	
feedback to improve the offering of the	

		1
programme? (maximum 600 words)		
(5.1.4 e on the old tool)		
5.2. Minimum standards for assessment		
5.2.1 Competency and outcome		
measurement and assessment systems and methods		
5.2.1.1 Did the School indicate how assessment methods are aligned with outcomes?	Cr	ritical
Only for panel members		
5.2.1.2 Did the School indicate how assessment methods are aligned to	M	lajor
outcomes, referring also to the mode of		
delivery, level and needs of students?		
Indicate how assessment methods are		
aligned to outcomes, referring also to		
the mode of delivery, level and needs of students (5.2 d on the old tool)		
Students (0.2 d on the old tool)		
5.2.1.2 Did the School complete the	M	lajor
Module Codes section on Annexure A		
(Bloom's taxonomy's template)		
Complete the Module Codes section on		
Annexure A (Bloom's taxonomy's		
template) (5.2 m on the old tool)		

external assessors/examiners/ moderators			
5.2.2.1 Did the School specify how moderation is performed?		Major	
5.2.2.1.1 specify how moderation is performed (5.2 e on the old tool)			
5.2.2.1.2 Complete the policy for appointment of external moderators table.(Table 26) (5.2 h on the old tool)			
5.2.2.2 Did the School stipulate the condition under which external moderation takes place?		Major	
Stipulate the condition under which external moderation takes place. (5.2 f on the old tool)			
5.2.3 Security of examination papers and scripts			
5.2.3.1 Does the School have policy in place to ensure the safety and security of examination papers and scripts?		Critical	
Is there a policy in place to ensure the safety and security of examination papers and scripts? If yes Provide a copy/if no provide an Explanation (5.2 i on the old tool)			
Er Er Section Section Section	5.2.2.1 Did the School specify how moderation is performed? 5.2.2.1.1 specify how moderation is performed (5.2 e on the old tool) 5.2.2.1.2 Complete the policy for appointment of external moderators able. (Table 26) (5.2 h on the old tool) 5.2.2.2 Did the School stipulate the condition under which external moderation takes place? Stipulate the condition under which external moderation takes place. (5.2 f on the old tool) 5.2.3 Security of examination papers and scripts 5.2.3.1 Does the School have policy in place to ensure the safety and security of examination papers and scripts? s there a policy in place to ensure the safety and security of examination papers and scripts? If yes Provide a copy/if no provide an Explanation (5.2 i	5.2.2.1 Did the School specify how moderation is performed? 5.2.2.1.1 specify how moderation is performed (5.2 e on the old tool) 5.2.2.1.2 Complete the policy for appointment of external moderators able. (Table 26) (5.2 h on the old tool) 5.2.2.2 Did the School stipulate the condition under which external moderation takes place? Stipulate the condition under which external moderation takes place. (5.2 f on the old tool) 5.2.3 Security of examination papers and scripts 5.2.3.1 Does the School have policy in place to ensure the safety and security of examination papers and scripts? s there a policy in place to ensure the safety and security of examination papers and scripts? If yes Provide a copy/if no provide an Explanation (5.2 i	Major moderation is performed? 5.2.2.1.1 specify how moderation is performed (5.2 e on the old tool) 5.2.2.1.2 Complete the policy for appointment of external moderators able.(Table 26) (5.2 h on the old tool) 5.2.2.2 Did the School stipulate the condition under which external moderation takes place? Stipulate the condition under which external moderation takes place. (5.2 f on the old tool) 5.2.3 Security of examination papers and scripts 5.2.3.1 Does the School have policy in place to ensure the safety and security of examination papers and scripts? s there a policy in place to ensure the safety and security of examination papers and scripts? If yes Provide a copy/if no provide an Explanation (5.2 i

5.3 Minimum standards for		
certification procedures		
5.3.1 Certification policies and procedures		
5.3.1.1 Did the School provide the policies that the Institution have with regards to the Minimum Standards for Certification Policies and Procedures Only for Panel member	Major	
5.3.1.2 Does the School follow the policies that the Institution have with regards to the minimum standards for Minimum Standards for Certification Policies and Procedures Only for Panel member	Major	
5.3.2 The certification processes		
5.3.2.1 Are the certification procedures undertaken in accordance with the GPE standards?	Major	
Are certification procedures undertaken in accordance with the GPE standards? If yes Provide the policy for certification procedures/ if no provide an Explanation (5.2 j on the old tool)		
5.3.3 Information required for certification of student achievements		
5.3.3.1 Is the infomation required for certification of students achievements in accordance with the GPE standards?	Major	

	T		
Only for Panel member			
5.3.4 Security and filing			
5.3.4.1 Is security and filing of data and student identity maitained in accordance with the minimum standards for Security and Filling? Only for Panel member		Major	
5.4 Minimum standards for record keeping			
5.4.1 Record keeping			
5.4.1.1 Is record keeping undertaken in accordance with the GPE standard?		Critical	
5.4.1.1.1 Is record keeping undertaken in accordance with the GPE? (5.2 k on the old tool)			
5.4.1.1.2 Who is responsible for record keeping in the school? Tick where appropriate (5.2 I on the old tool)			
5.5 Policies			
5.5.1 Did the School provide the policies that the Institution have with regards to the minimum standards for delivery of programmes		Major	
List the policies that the institutions have with regards to the minimum			

	standards for delivery of programmes			
	(5.1 a on the old tool)			
	5.5.2 Does the School follow the		Major	
	policies that the Institution have with		,	
	regards to the minimum standards for			
	the delivery of programmes			
	Only for Panel member			
General Comments from the pa	•	1	<u> </u>	
Free text				
Recommendation(s):				
Free text				
Minimum Standard	Questions under the standards	Response	Category	Panel Members
		(Yes, No, Not applicable	of the	Observations (Free text)
		or √)	deficiency	
6. Minimum standards for	6.1 Minimum standards for student			
student matters	admission criteria, policies and			
Student matters	procedures			
The purpose of these standards				
is to ensure that the School has	6.1.1 Are all students registered with		Critical	
adequate resources, fair and	Council?			
equitable policies, procedures				
and services to support student	Are all students registered with			
admission, progression, personal	Council? If no provide an explanation			
	(6.1 b on the old tool)			
and professional development.	6.1.2 Did the School provide students		Major	
	enrolment targets?		iviajoi	
	Cirolinent targets:			
	Complete the current pharmacy			
	students enrolment targets table (Table			
	· · · · · · · · · · · · · · · · · · ·			
	27). (6.1 c on the old tool)			

p	.1.3 Did the School provide the current rogramme admission and selection riteria	Major	
p ci	.1.3.1 Complete the current rogramme admission and selection riteria table (Table 28). (6.1 d on the ld tool)		
So	.1.3.2 Indicate how the academic point core (APS) is calculated (6.1 e on the ld tool)		
6	2.2 Minimum standards for student		
	ffairs and services		
st pi co	.2.1 Does the Institution provide tudent support services to provide and romote socialisation, mentoring, ounselling, healthcare and responsible exual conduct?	Major	
st pi	.2.1.1 Does the institution provide tudent support services to provide and romote socialisation, mentoring, ounselling, healthcare and responsible exual conduct? (6.2 e on the old tool)		
th at	.2.1.2 Does the institution have a unit nat specifically deals with student ffairs? Provide an explanation (6.2 b n the old tool)		
le pi	.2.1.3 Does the school provide eadership in the development and rovision of student services. Provide an xplanation (6.2 c on the old tool)		

	um standards for transfer		
of credits			
6.3.1 Does	the Institution have a policy	Major (refer	
	ccumulation and transfer	to GPE	
	redits between courses at the	6.3)	
		0.3)	
	ersity or between universities		
as well?			
Does the s	chool have a policy for Credit		
Accumulat	ion and Transfer (CAT) of		
credits bet	ween courses at the same		
	or between universities? If		
	le a copy of the policy. If no,		
	explanation. (6.3 a on the		
	explanation. (6.5 a on the		
old tool)			
	um standards for student		
information			
6.4.1 Does	the School provide its	Minor	
students w	rith information required in		
	e with the GPE?		
Is the follo	wing information provided to		
	accordance with the GPE?		
	ne old tool)		
	um standards for student		
represent			
	he School explain how it	Major	
provides a	n opportunity for students's		
voice to be	heard?		
Is there an	opportunity for the student		
	heard? Indicate how, where		
	(maximum 250 words). (6.2		
a on the ol	a tool)		

6.6 Minimum standards for student		
progression		
6.6.1 Does the School provide		Minor
students with the requirements for		(section
programme completion and duration?	G	SPE 6.4)
Are the requirements for programme		
completion and duration of study		
provided to students? Provide relevant		
excerpt from the		
prospectus/calendar/policy or a		
narrative (maximum 250 words). (6.3 c		
on the old tool)		
6.7 Minimum standards for student		
appeals and complaints procedures		
6.7.1 Appeals policy and procedure		
6.7.1.1 Does School have appeals		Major
policies and procedures?		,
, ,		
Does the school have appeals policies		
and procedures? Provide a copy of the		
policy (may include a university		
calendar). If no, provide an explanation		
(6.3 d on the old tool)		
6.7.2 Complaints procedure		
6.7.2.1 Does School have complaints	+	Major
procedure?		
procedure:	(re	efer to 6.7
Does the school have a complaints		GPE)
procedure? Provide relevant excerpt		
from the prospectus/calendar/policy. If		
No provide an explanation, (6.3 e on		
the old tool)		

	6.8 Policies		
	6.8.1 Did the School provide the policies that the Institution have with regards to the minimum standards for student matters?	Major	
	List the policies that the institutions have with regards to the minimum standards for student matters (6.1 a on the old tool)		
	6.8.2 Does the School follow the policies that the Institution have with regards to the minimum standards for students matters?	Major	
	6.9 Disciplinary procedures		
	6.9.1 Does the School have a disciplinary process for students?	Major	
	Does the school have a disciplinary process for students? Provide relevant excerpt from the prospectus/calendar/policy. If No provide an explanation (6.3 f on the old tool)		
	6.9.2 Does the School provide Council with information on disciplinary action against the student?	Major	
	Does the school submit information on the outcome of students disciplinary hearings to Council? If No provide an explanation. (6.3 g on the old tool)		
General Comments from the pa	inel	,	
Free text			

Recommendation(s): Free text				
Minimum Standard	Questions under the standards	Response (Yes, No, Not applicable or √)	Category of the deficiency	Panel Members Observations (Free text)
7. Minimum standards for quality assurance	7.1 Minimum standards for quality management of programmes			
The purpose of these standards is to ensure that ongoing and effective processes for quality assurance and improvement are in place and are subject to regular review.	7.1.1 Does the Institution have a quality assurance system in place? Does the institution have a quality assurance system in place? If No provide an explanation (7 c on the old tool)		Major	
	7.2 Minimum standards for policies and procedures		Major	
	7.2.1 Quality management system			
	7.2.1.1 Did the School provide the policies that the Institution have with regards to the minimum standards for quality assurance?		Major	
	List the policies that the institutions have with regards to the minimum standards for quality assurance (7 a on the old tool)			

7	'.2.1.2 Does the School follo	w			Major	
th	he policies that the Institution	n				
	nave with regards to the mini					
	standards for quality assuran					
	name and the quanty accounts.					
	Only for Panel member				Maiar	
	2.1.3 Does the School have	9		l,	Major	
	quality assurance procedures					
	which enable the School to					
I	mplement the defined policie	15?				
"	inplement the defined policie	.5:				
	Does the school have quality					
	issurance procedures which					
	enable the school to implement					
	he defined policies? If No pr					
	in explanation. (7 b on the o					
	•	u				
	ool)					
General Comments from the	ne panei					
Free text						
Recommendation(s):						
Free text						
Part VI: CONCLUSION	(ACCREDITATION O	DUTCOM	E):			
Accreditation Outcome	Provisional	V	Not Accredited		Accredited	
(tick the appropriate box)	Accreditation	X				
Evidence Collected (where the Ir	nstitution is not accredited)					

Annexures

Annexure A: Pharmacology Report Presentation

The pharmacology and clinical pharmacy component of the B. Pharmacy programme is presented across the four years of the programme as part of an integrated curriculum. Module contents are presented using a mixed methods approach comprising of didactic teaching (for fundamental components of the module) and problem-based learning (PBL) using scenarios. Pharmacology teaching utilizes the systems-based approach and content is spread out over the four years of the programme. Pharmacology/Clinical pharmacy is the main focus area in 10 modules in the B. Pharmacy curriculum and in these modules, a pharmacology staff member is mainly the sole convener of the module and presents the core subject material. Relevant content from pharmacy practice, pharmaceutical chemistry and pharmaceutics disciplines are integrated into the modules and may be presented by the relevant subject specialists. The clinical pharmacy component of the programme is embedded in the modules in the programme offered over the four years in case scenarios, and clinical rotations in the final year at Kalafong Tertiary Hospital. Clinical rotations are in two wards (internal medicine and a choice from paediatric, ICU or surgery). Feedback by students is done within the rotations, but students would prefer if elective cases are discussed with all students to help broaden their knowledge of conditions they would not have been exposed to. A good relationship exists between the department and the hospital. There is the potential for the Arts campus clinic to provide a learning site for students, but this site must first be accredited as a pharmacy by the South African Pharmacy Council. The pharmacology and Clinical pharmacy content are presented as the core content of the following modules: MMM145P; NAG145P; CAP246P; RSE246P; EAR347P; NSS347P; NPP448P; RIP448P; SPH448P; HPC448P.

The modules are designed in such a way as to maximise the benefits of integration, and this would be beneficial to students. However, there is still a limited integration of the fundamental aspects of the pharmaceutical sciences in the programme. The staff are commended for their commitment to presenting the programme, but there is a high degree of variation in the presentation of modules and in the application of the Department's and University's policies regarding student assessment, moderation, facilitation, and feedback on assessments. To better standardise the delivery of the pharmacology content, the staff should consider using one of the senior staff to coordinate student assessment, moderation, facilitation, and feedback on assessments.

Facilitators are a key part of the programme, and although an effort is made to use postgraduate students with a background in Pharmacy or pharmacology for this, there isn't a pipeline of Master's students currently available at the University to supply the need. The staff are encouraged to explore joint supervision of clinical pharmacy postgraduate students as a way to attract postgraduate students to the department that would have the requisite background knowledge to be effective facilitators. Scenarios are presented from a disease perspective, covering both pharmacological and non-pharmacological management of the disease, and modules include extensive group work, and it would be important to make sure that most a student's assessment marks come from individual assessments. The module outcomes are clearly defined and are mapped to the appropriate ELOs.

Assessment

Assessments are matched to the learning objectives of the modules and Bloom's taxonomy is used by the staff to ensure that questions are set at the appropriate level, however as modules are integrated, this becomes very difficult to achieve while ensuring that module contents are fully evaluated. Tests and quizzes include mostly True or False and short answer questions. True or False questions do limit the extent and depth to which a student's knowledge can be examined as the binary option could encourage guesswork. Although negative marking is used to discourage guesswork, MCQs would provide a greater depth and scope for assessing students and should be considered as an alternative for formative assessments. As the programme uses the modular approach to teach pharmacology, there is the danger that modules in the junior years may not test the student's knowledge of the subject matter at the higher levels of learning if the questions are set up strictly at the requisite NQF level. Assessments in the Hospital-Based Pharmaceutical Care module allow the evaluation of contents covered in the earlier years that could not be evaluated at the create level to be evaluated at the higher levels. It would be beneficial for the pharmacology staff to evaluate the assessments within the discipline from a holistic view to ensure that across the programme, the pharmacology content is assessed in such a way that it meets the requirements of the requisite ELOs.

Annexure B: Pharmaceutics

Tshwane University of Technology

Monitoring Visit 17 – 21 October 2022

Discipline Pharmaceutics - Professor RB Walker (PhD)

Preamble

At the outset I would like to thank the staff for their willingness to engage and discuss their programme. My report is structured in a general form covering *inter alia* delivery, assessment, staffing, infrastructure and equipment. In each section commendations, observations, concerns and recommendations are reported as part of the relevant section. A final section in which the recommendations have been extracted is included for ease of reference. Some of the recommendations may be specifically considered in respect of pharmaceutics but may also be applicable to the programme as a whole.

Introduction and context

This monitoring visit took place four years after the initial accreditation of TUT in 2018 after which one year of conventional delivery of the programme was followed by two years (2020-2021) of alternate delivery due to the COVID-19 pandemic and return to a "hybrid" approach to teaching, learning and assessment in 2022. Consequently, there is a need to take cognisance of challenges faced by staff and students to ensure that delivery of and participation in the programme was not compromised and did not adversely affect the quality of the programme.

The academic staff are to be congratulated in respect of their efforts to transform the work-based learning programme to an online one during the pandemic. During this period the academic staff managed to process with little facilitation which is a key component of programme. Formative assessments were conducted online with the use of the Invigilator App in some cases and summative assessment were conducted in person but online. There are concerns relating to the use of online assessment, which are not unique to pharmaceutics, all disciplines in this programme and the higher education sector as a whole.

Staffing

The academic staff are all appropriately qualified and are a cohesive and committed group of individuals who are passionate about the approach to teaching and delivery of the programme. It evident that the workload is quite substantive in terms of time dedicated to the programme and associated assessment. Some staff also contribute to other programmes in the Faculty of Science. Furthermore, due to class size and relative to the available laboratory space, staff deliver practicals in relevant modules more than once which is a challenge given the apparent high work load. What is of concern is that only one technician oversees the undergraduate teaching laboratories and on occasion are preparing and running up to three practicals at one time. This is a major risk and the provision of additional technical and support staff to the programme is necessary to ensure the practical components of the modules are not compromised.

Some of the staff teaching pharmaceutics, feel they need to be provided with opportunities for undertaking research post PhD, by freeing up some time from teaching and assessment activities. The staff welcomed the provision of opportunities for development which are provided and are well received.

The course relies heavily on facilitators who are drawn from the postgraduate cohort undertaking the Master in Pharmaceutical Sciences, in the Faculty of Science. The current facilitators are to be commended for their commitment and willingness to contribute to this unique programme. Of particular concern is that a number of the facilitators have little or no experience and/or exposure to the profession of pharmacy as they are graduates from other programmes without the necessary background knowledge, experience and exposure to the nuances of the relevant disciplinary components of pharmacy. Undertaking a postgraduate degree in pharmaceutical sciences does not ensure the requisite knowledge and expertise required for teaching a discipline such as pharmaceutics can be acquired at an approtiate level to ensure consistency of delivery of information and direction of student learning during the delivery of the scenarios in the programme. This may result in differences in learning outcome between groups. The growth of the postgraduate cohort in the pharmacy programme with pharmacy graduates may improve the situation and enhance learning in this approach to teaching.

Delivery and assessment

The academic year is 38 weeks long of which 6 weeks are used for all assessments. The programme is delivered as a series of modules from first to fourth year using a PBL approach based on scenarios, workshops, tutorials, assignments and practical components. The practical components are integrated into relevant modules. Of concern is that over the four years the programme is offered there are approximately 21 pharmaceutics based practicals only and some of the theoretical concepts and fundamental skills required to apply knowledge may not be adequately covered and additional practicals time should be allocated to reinforce the fundamental pharmaceutics concepts required, not only in the module taught, but elsewhere in the programme. It would be valuable to consider the introduction of some additional practicals as soon as possible, As the curriculum will require revision when the new pharmacy qualification recently approved by CHE, is implemented, the opportunity to expand the practical components of this degree further will be possible. Furthermore, it is unclear whether the scenarios are changed annually in order to ensure that the students do not share materials between years.

Pharmaceutics staff in the Department of Pharmaceutical Sciences and Somatology are involved in the coordination and co-coordination of modules in the first, second and third year of study. They also coordinate or co-coordinate and contribute to other modules in all years of study and some also teach on the Somatology programme and the department of Nursing and elsewhere in the Faculty of Science over and above their administrative and other commitments.

The modules coordinated or contributed to by staff in pharmaceutics in the different years are:

First Year

Coordinate

IBP145P Introduction to Biopharmaceutics, Pharmacokinetics and

Pharmacodynamics

MMM145P Microorganisms, Man and Medicines

Contribute to

ATM145P From Atoms to Molecules

NAG145P Nutrition and Gastroenterology

OPP145P Orientation and Introduction to the Practice of Pharmacy in South Africa

Second Year

Coordinate

IPL246P Industrial Pharmacy Work-Based Learning

IPP246P Industrial Pharmacy Practice

PPP246P Principles and Practice of Pharmaceutical Manufacturing: Medicines

Production on a Large Scale

Third Year

Coordinate

SPP347P Sterile Pharmaceutical Products

MTH347P Modern Technologies in Health Care

Staff contribute to other modules in a specialist capacity when required. Their contribution to these modules is relatively small and although the panel were provided with a spreadsheet to evaluate that contribution it appears as though there no person in pharmaceutics to oversee that the components relevant to pharmaceutics are included when staff in the discipline neither coordinate nor coordinate the modules. It may be useful to ensure there is a person responsible for this purpose to ensure the necessary material is covered and assessed adequately.

Of particular concern is the teaching of pharmacokinetics and biopharmaceutics in the first year. The concepts and requirements for application of pharmacokinetics specifically are difficult and dependent on mathematical understanding. Consideration should be given to introducing some of these concepts early in the course in order for students to cope with early modules and subsequently dealing with the more complex mathematics and application of pharmacokinetics later in the course.

Assessment is undertaken extensively throughout all modules and is intensive which contributes to the high work load of the staff. Some modules in the programme have as many as 21 assessment tasks. This is of concern as over assessment is as problematic as too few or no assessments. Students are currently assessed collectively as a group for workshop, assignment, practical and research reports, whereas for all other tasks such as scenario, progress and end of module tests, students are assessed individually.

Assessment tasks make use of MCQ, True/False, short and long answer questions. The use of True/False questions to assess knowledge is of concern. Formative assessment of group work accounts for 25% of the module mark, individual formative assessment 25% of the module mark and summative assessment 50 % of the module mark. Therefore, formative and summative assessment is equally weighted. Since all assessments are managed in house, it

could be argued that the entire programme is assessed using a continuous assessment approach.

Evaluation of module documents, some papers and assessment tasks reveal alignment to the relevant Bloom's taxonomic requirements for the NQF level under assessment at a macro level. The process of alignment may not be complete and should form part of ongoing curriculum development activities. However, at a micro level some of the assessment tasks are not appropriately aligned to the level required. This is of concern and should be addressed urgently with a curriculum expert who is well versed in PBL delivery, alignment and assessment.

During COVID-19 formative assessments were conducted online and all summative assessment tasks were held using online technologies but in person on campus to ensure the integrity if the assessment process. Some concerns were highlighted in respect of some of the online formative assessments during this period. The staff indicated that they had held additional tutorials, plenary sessions and workshops to ensure all groups received, in an equitable manner, the knowledge required to meet the outcomes of the module.

The need for such intensive assessment should be revisited and alternate forms of assessment to evaluate higher order thinking at the senior levels of the course, implemented. In this respect, some staff indicated they were relying more on online assessment which is of concern, particularly if the students are no able to type fast enough to answer questions in which higher order learning and applications are to be used. The use of online assessment at the lower levels of the course may be appropriate for some modules where lower order assessment is required to evaluate knowledge and content.

There is a heavy emphasis on use of facilitators for the delivery of scenarios in each of the modules. The staff indicated that during COVID-19 facilitation of the scenarios was not as comprehensive as it could have been and that students were not respectful of their facilitators. Students are required to undertake a substantial amount of self-directed study. The extent of self-directed learning should be managed carefully in the early years and increase in the later years.

Infrastructure and equipment

The programme has dedicated laboratories and a limited number of pieces of equipment for the delivery of the programme. The laboratory facilities are small, are outdated and require upgrading and expansion to comply with current Occupational Health and Safety requirements and the increasing numbers of students enrolling in the programme. Pharmaceutics and Pharmaceutical Chemistry practicals are conducted in the same laboratory and all laboratories are managed by a single technician. Each discipline has different requirements and it would be preferable to have separate facilities for practicals to be undertaken in an appropriate environment for that discipline. The aseptic teaching laboratory is currently not suitable for the adequate delivery of the programme and must be upgraded to accommodate more students and be fit for purpose.

Whilst there are sufficient pieces of equipment to deliver the programme at present the staff indicated that some of the instruments/ machines are outdated and that for some aspects of the course additional items of equipment would enhance the teaching process and therefore the learning outcomes for the programme by allowing students to have hands on access to these for longer periods of time. In some cases the programme has to make use of equipment from other departments in the Faculty, which may not be ideal.

Of particular concern is that the balances in the laboratory are used on a wooden table which is not an appropriate weighing bench. As the action of weighing is one of the most important aspects of all that is undertaken in pharmacy and therefore should be taught using the correct installation of the balances. The air handling system in the industrial teaching facility has been out of commission for a year, which has been a source of frustration for the staff using that facility for teaching and research. Furthermore, the cubicles in the manufacturing facility are small and where manufacturing equipment such as the tablet press area are housed may pose a safety risk when used.

Another concern is that procurement of equipment and materials was highlighted as a challenge due to delays and length of time taken with internal processes. Staff informed the delegation that it had taken over a year to procure a single piece of equipment and that the air-handling in the manufacturing suite had not been operational for at least a year. To date this has resulted in frustration however, due to staff commitment and innovation no part of the programme has been compromised. There is a need to work closely with the Faculty and University to resolve these issues in order to ensure that the equipment and facilities are fit for purpose.

Another concern raised by staff was that the computer laboratory that is used for teaching and learning, assessment and delivery of didactic material house only 60 students and requires expansion to accommodate the increasing class numbers.

Commendation

The staff teaching pharmaceutics courses in stand alone or integrated modules are to be commended for their commitment to ensuring the novel approach of using PBL to teach the Bachelor of Pharmacy degree pre, during and post COVID-19 has been sustained using appropriate approaches for the circumstances encountered. Their passion for the teaching approach and care for the students is evident. Their innovation in dealing with the challenges, current resources and leaning needs of students is admirable. The academic staff adapted and augmented learning as appropriate to ensure students were able to complete their studies during the pandemic.

Recommendations

The following recommendations should be considered in respect of pharmaceutics and the contribution to the programme as a whole:

- Facilitators employed for teaching the pharmaceutics-based scenarios must have the necessary background and expertise in the discipline for the equitable delivery of the scenario component of the modules.
- 2. Upgrading and expansion of the pharmaceutics, aseptic and computer teaching laboratories must be undertaken as a matter of urgency to ensure they are fit for purpose and in compliance with Occupational Health and Safety requirements.
- 3. Additional technical support should be considered to reduce the risk associated with having a single person to service all teaching laboratories.
- 4. Additional practicals should be introduced to reinforce fundamental concepts in pharmaceutics.
- 5. The pharmacokinetics and biopharmaceutics module should be taught later in the course.
- The approach to assessment in terms of extent and approach should be revisited in order to avoid over assessment and ensure assessment tasks are designed in such a way to achieve reliable and valid determination of student learning at the appropriate NQF level.

- 7. Increased use of online assessment should be avoided when evaluating higher order learning and application.
- The work load of academic staff should be evaluated by considering all roles such as coordinator, co-coordinator, guardian and service course teaching in order find an equitable model that will facilitate post PhD development and enhance research capacity.
- 9. There is a need to have a staff member to ensure that where the discipline is required to contribute to integrated modules for which they are not directly the coordinator or co-coordinator, that this is indeed happening and that the contribution is assessed. This person would oversee the contribution of the discipline across the entire PBL curriculum.

Annexure C: Pharmacy Practice Report [PPR]

The PBL program with regard to PPR, though very resource intense is delivered satisfactorily by Tshwane University of Technology. This component of the program viz –Pharmacy Practice adequately meets the learning objectives and the subsequent exit level outcomes thereby ensuring the production of competent pharmacists to serve the population of SA. The staff both academic and support go the extra mile to ensure the viability and the quality of the program, which is very commendable. The lecturers ensure that a detailed module guide is given to the students with topics, module- objectives, mark allocation, exit level outcomes, contact details of relevant staff members and any other relevant information.

The program has different components integrated into the modules, it is a challenge to state this module belongs to Pharmacy Practice only. Hence the reporting will be on modules as confirmed by the 'Pharmacy Practice' lecturers and a list of other modules that may contain pharmacy practice.

OPP145P [Orientation and Introduction to Pharmacy Practice in SA] –This module is done in the 1st year having a credit value of 21. It is an integrated module with PPR component having 10 credits. In this module the topics are: *Introduction to higher education and orientation to the University; Promotion of the holistic development of the student; Introduction to the B. Pharm program and PBL teaching and learning methodology.; Introduction to the pharmacy profession [communication skills in Pharmacy, Pharmaceuticals Management Cycle and Pharmacy organisations]; Chemistry and calculations for pharmacy. One of the objectives of this module is 'to help the students to obtain an overview of the nature and ethics of the pharmacy profession'. The module is delivered over 5 weeks. Consists of tutorials, workshops and scenarios. Assessments: Consists of Formative and Summative assessments.*

Module PHL245 P [Primary Healthcare WBL] is a 2nd year module with externships in Primary Health Care clinics. Unfortunately we were not able to visit these sites. Input from students is that they not always under the supervision of a pharmacist, as the pharmacist only visits the clinic once a month. Hence they are under the supervision of a post basic assistant if a lecturer is also not present. This is concerning as the scope of practice of a student in learning is that of a pharmacist irrespective of the year of study. Some of the suggestions is to increase B.Pharm facilitators to assist as preceptors, or to do this WBL in a Community Healthcare Centre [CHC]. In terms of the assessment they are required to fill in a workbook/sheet on certain aspects observed in the clinic. A register needs to completed as well. This worksheet is marked. An oral assessment is also conducted.

Module IPP246P and IPL246P [Industrial Pharmacy Practice and Industrial Pharmacy Work Based Learning] has 18 credits each and is delivered in the 2nd year. 14.4 credits and 16 credits respectively belong to PPR. This module prepares students for their externship in this sector--industry. Topics done as tutorials on the law relating to industry are presented under Pharmacy practice. Assessment: includes a variety of assessments such as Calculation assessment; OSPE [eg write a scenario for mock product launch] and a theory paper.

CPP347P: Community Pharmacy Practice: Community- Based Pharmaceutical Care. 30 Credits: PPR This module is done in the 3rd year having 30 credits. This module is done in preparation for the CPL 347P [[Community Pharmacy Work Based Learning]. The following are covered: Administration, management skills and the philosophy of PC. Counselling, provision of advice and drug therapy management and their effects on the patient. Immune status importance of prevention and nutrition and their effects on the family. Epidemiology, health education and drug information and their effects on the community. The following aspects of dispensing legal communication with the patient and other health care professionals, patient profiles, preparation of the prescription and record keeping. The role of the pharmacist as a tutor.

Assessments: Formative and Summative

Module CPL347P: Community Pharmacy Work Based Learning has 18 credits and is delivered in the 3rd year –WBL in community pharmacies. Practical experience in aspects of the dispensing process, pharmacist initiated care, communication with the patient and other health care workers, specialist areas of community pharmacy, legal and ethical requirements and important aspects of management are covered in this module. The placement is now done under the guidance of an academic, who places the student at the sites, [if a student works in a certain pharmacy he/she is then not allowed to do WBL in the same pharmacy.] The students are given a detailed manual pack to take to the pharmacy.

Assessments: Oral: At the beginning—they are given case studies. They have to evaluate and present this case study when back on campus. The preceptor also assesses the student.

In the 4th year modules linked to PPR. Modules HPL448P—[Hospital Pharmacy Work Based Learning] and SPH448P [Specialised Pharmacy and Hospital Pharmacy Practice] done under Pharmacology and Clinical Pharmacy has some links to PPR.

In <u>HPL448P [Hospital Pharmacy Work Based Learning]</u>; This module has 21 credits of which 20.8 credits are given to PPR activities. Students visit the hospital pharmacies where by rotation they are exposed and taught in the different areas of the pharmacy eg Inpatients, Outpatients, Stores and small scale manufacturing.

Assessments: 2 assessments---Preceptor assessment where students are assessed on their punctuality, interaction with patients and HCP etc.

They are also taught about CPD; They learn how to do CPD—upload evidence ---for SAPC assessment.

<u>SPH448P [Specialised Pharmacy and Hospital Pharmacy Practice]</u>: This is a 24 credit module with 14,5 credits to PPR.

In this module major managerial areas of pharmacy are covered eg logistics and financial management, including cold chain management, SOP, control of bulk compounding and preparation of sterile products, pharmacy and therapeutics committees, pharmaco-economics in drug selection are all relevant to PPR.

Assessments: Students have to do an Oral assessment by giving a brief overview on each section that is done in the hospital. They also submit a portfolio on activities done, this is marked according to a rubric and is moderated by an external moderator where 20% of the portfolio are assessmed by the external moderator.

Other Modules that have a small component of PPR:

First year:

MMM145P—Microorganisms Man and Medicines: In this module of 21 credits, 4 credits are given to PPR component: Themes are Rational medicine use, Antimicrobial stewardship; Adherence; Antiretroviral rational medicine use

NAG145P Nutrition and Gastroenterology which is a 21 credits module having 4 credits in PPR activity which includes Dispensing.

Second Year:

CAP246P Cardiovascular Pharmacy: of the 18 credits in this module, 1 credit is given to PPR—Role of pharmacist in management and prevention of CV conditions.

Fourth Year

HPC 448P Hospital Based Pharmaceutical Care: 21 credits with 3 credits to PPR activities. Calculation training is done in the HPC448P module---as well.

NPP448P Neurological and Psychiatric Pharmacy: 24 credits, 0.5 credit given to PPR.

Blooms Taxonomy and Assessments:

See attached filled template with comments. Only modules that have a fair percentage of PPR have been assessed. Challenge to assess the integrated modules as other lecturers doing the specific components should assess together.

Assessments:

There are too many True/False questions in the papers. 20-40% of the paper have T/F questions[marks 200-100]. This can lead to guess work and not an application of knowledge. To discourage guessing negative marking [1 mark] is done which students feel is an unfair way of assessing knowledge. Perhaps scenario type of questions with T/F questions would be more acceptable form of assessment. Reduce the number of T/F questions. If negative marking 0.25 –0.5 mark should be considered.

Work Based Learning Sites Visit

The delegation visited Kalafong hospital ---pharmacy and met with the responsible pharmacist who confirmed how the students gain their practical experience by rotation through the different sections: Viz Inpatients—Outpatients, Stores and small scale manufacturing. In this site there are always pharmacists to supervise these students.

Another site was visited that is found in the Art campus. The proposed pharmacy premises was shown to the delegation. Approval to have a pharmacy situated here has not been received. The directorate of the health and wellness centre together with the pharmacy lecturer was advised about purchasing drugs or doing any pharmacy related activity till a Y number was obtained from SAPC. The plan is for students to do WBL in these premises , whilst attending to sick staff and students.

Recommendation:

There should be a designated person (Head) for Pharmacy Practice [PPR] to oversee this division and especially to assist in Complying with Bloom's taxonomy as in an integrated module it is very difficult to give an overall fair assessment of compliance that relates to Blooms taxonomy. The designated person can work with the other division head/designated person to divide the levels of cognition as per year of study/NQF level for the different components found in the module. Eg if module requires 80% recall/remember and has 2 components of say 50% each, then the division head can ensure that 50% of 1 component has 40% of recall and remember questions and the other component the same 40%. Based on percentage in component division, Blooms can be calculated accordingly.

Ensure that pharmacist supervises the students at ALL WBL. Consideration to increase facilitators/preceptors with B.Pharm degrees. In addition all **lecturers**, **examiners and moderators** should be pharmacists in the PPR component.

Proposed Pharmacy at Art campus needs approval first from SAPC before being operational or used as WBL site.

In terms of assessments to convert the T/F to MCQ . Reduce T/F. If T/F is still required then the stem should be a scenario rather than just a word eg research/ sites/stability and then the statement to be assessed as T/F.

Annexure D: Pharmaceutical Chemistry

Annexure E: Problem Based Learning

Observations:

Overall, students are happy with the PBL delivery system and would not like to change the way of learning, however they are having challenges with some components of it as stated below. When there are limited facilitators the staff always ensure the groups have a facilitator so learning and facilitation can continue. The small rooms are well maintained with air conditioners and space. The library has all the recommended books and they are available for use. They also have e-books which they can use at all times. It was observed that the head of Department is not a pharmacist but works with the designated pharmacist who holds a BPharm degree.

Module running: Not all modules are standardized and this differs according to the module convener. Some modules have reflections and others don't (both module and test reflections). Test reflections are necessary as students learn from the challenges they faced in the assessments.

Small group dynamics:

Small group members are changed per semester except in the first year when the same students remain in the group for the entire year. Group dynamics are not attended to when reported and the students just carry on. Some students feel they have to work hard for the whole group and all students get the marks.

Workshops are conducted but at a minimal and this depends on the module convener. They are not standardized across modules to address student matters within the module. Hence consistency in the delivery of the programme is absent.

Scenarios

Work is too compacted and it is easier to miss on important things. The content differs per small group. In addition, the lecturers do not have a session with the class to clarify what objectives need to be covered per scenario to ensure the class is moving at one pace and further they do not convene as an entire class to get feedback on the DLO. In summary students may not get the same info from these scenarios.

Scenarios are a big component in PBL and this is where most learning is done. Facilitators in the program do not all have a BPharm background and this has impacted the level of scenarios and consistency of scenario report- backs depending on which facilitator the group has. There are only 3 out of the 14 facilitators with a BPharm qualification. All the pharmacy level groups expressed this with concern and as a pressing matter. It is very crucial to have a facilitator who has a BPharm background especially because this is an integrated program and all the disciplines have to be covered per scenario. Students expressed their concern with the

facilitators not knowing some of the content they need to cover and some even coming unprepared for the scenario.

Scenario stories need to be updated and content relevant to 2022.

Components: Students showed varying knowledge in identifying the different components per module e.g. pharmaceutics, pharmacy practice and pharmaceutical chemistry. They are not exposed fully to the components. Re-enforcement is necessary to help the students put these fundamentals well in practice and understand where the components fall within the PBL system.

This was noted by panel as there are no designated people to oversee these components to make sure they fall well into the modules. This could help in aligning the assessments correctly and according to blooms taxonomy looking at the year level of the students.

A great part of PBL is work based learning so students can be exposed to the different sectors of pharmacy. It was observed that there are some sites that do not have a pharmacist present to supervise the student when they go for practice and this goes against the GPP/GPE standards.

Student support systems are available in the institution however they are not easily accessible to the students as they do not receive readily available feedback and the services are based at TUT Main campus whilst the B.Pharm programme is offered at the Arcadia campus. Student support should be readily available and accessible as the PBL program can be challenging since it is integrated and with COVID-19 they need readily available help. Mentorship is crucial for PBL as it is a different method of delivery for the program. Therefore, it is important to have a strong relationship amongst the pharmacy students to help orientate the student well. It is crucial to have a pharmacist present at all the WBL sites as the scope of a pharmacy student is to learn from a pharmacist.

General comments: Running of modules differs per module convener. Small groups are not overseen and there are group dynamics. Workshops where the module convener comes to the whole class to clarify what needs to be covered per activity are not done throughout and is dependent on the module convener. There is no consistency in scenario facilitation as the facilitators do not all have a BPharm background and therefore their knowledge is not integrated. Some module conveners do not give the recommended books to the students which makes it tough to get the information. There is no direction on student support channels that will assist the student in mental health and referrals from the department. There is no emphasis on re-enforcing the fundamental components of the pharmacy curriculum.

Recommendations: We highly recommend that there be a standardization on how the modules are run. All facilitators need to have a BPharm degree to be able to properly channel and direct the students to integrate all their work for scenarios and the bulk of the work. The recommended books per module need to be clearly stipulated to help guide the students to get the relevant information. Workshops/feedback sessions after every scenario should be done for all modules by the lecturer concerned. There needs to be designated student support personnel within the program to help navigate the students to other health care services as required. This will also help to identify at-risk students on time since the program is run as a modular system and the modules are 7-8 weeks.