

BQA NCQF QUALIFICATION TEMPLATE

SECTION A: QUALIFICATION DETAILS													
QUALIFICATION DEVELOPER (S)			Boitekanelo College										
TITLE		Bachelors of Science in Audiology							NCQF LEVEL		8		
STRANDS (where applicable)		N/A											
FIELD		Health and Social Services		SUB-FIELD			Health Science		CREDIT VALUE			528	
New Qualification				✓		Legacy Qualification							
SUB-FRAMEWORK		General Education				TVET			Higher Education		✓		
QUALIFICATION TYPE		Certificate	I	II	III	IV	V	Diploma	Bachelor	✓			
		Bachelor Honours		Post Graduate Certificate			Post Graduate Diploma						
		Masters					Doctorate/ PhD						
RATIONALE AND PURPOSE OF THE QUALIFICATION													
<p>RATIONALE:</p> <p>Audiology is the discipline that deals with prevention, identification, diagnosis and management of hearing, balance and other auditory disorders such as auditory processing disorder, tinnitus, and hyperacusis.</p> <p>The World Health Organization (WHO) estimates that more than 1.5 billion people will experience some decline in their hearing capacity during their life course. About 430 million of those will require intervention for hearing loss (WHO, 2021). Loss of hearing, if not identified and addressed, can have far-reaching consequences, adversely affecting language development, psychosocial well-being, quality of life, educational attainment and economic independence at various stages of life (WHO, 2021). In older individuals hearing loss can contribute to the risk of dementia and cognitive decline.</p>													

Audiologists work with populations across the lifespan. Hearing loss is the most frequently occurring birth defect in children, with congenital permanent early-onset hearing loss occurring in 4 per 1000 live births in developing countries (Sabbagh, et al. 2021). In Botswana, the magnitude of hearing impairment amongst children is not known. Given that at least two new-borns are born deaf for every 1000 live births in developing countries, (Banda et. al, 2018) and using Botswana's 2020 birth cohort of about 55,200 births at least 110 new-borns are expected to be born deaf each year in Botswana.

Audiology is an essential part of the healthcare system in any community and country, a healthcare profession that we are in acute shortage of in Botswana. Also, Botswana is one of the countries with the lowest number of Audiologists in Southern Africa, with a total of approximately 11 registered Audiologists and that leaves a huge gap in the healthcare system. As an essential part of the healthcare system there is an acute shortage of audiology. Audiologists provide services in health - for example clinics and hospitals, Community (Private practice, NGO), education (Preschools, Mainstream Schools, Special Schools), occupational (e.g. mines, construction, and manufacturing) and military settings. In these sectors they assess and manage patients across the age range from neonatal to geriatrics. Infants with hearing loss fail to develop speech, language and communication skills, which negatively impacts on academic performance, employability, quality of life, economic productivity.

In Botswana, rehabilitation services (audiology included) are an integral part of the primary health care system. However, the services are currently provided in tertiary and district hospitals and private practices and there is only a limited number of practitioners as opposed to the demand thereof. The National Development Plan 11 (NDP 11) document states that in order to facilitate and sustain better health outcomes, innovative and transformative solutions will need to be embraced and the introduction of an audiology qualification in Botswana is one of such solutions.

Additional evidence of demand is shown by the fact that Botswana is a developing country and does not have specialized health and educational services to provide for its population with hearing loss. Audiology is a specialized health and educational service that has its place in several sectors of economy. There is a need for Botswana to educate and train audiologists to provide such services. HRDC (2019), listed audiology among the top occupations in demand within the allied health discipline in Botswana.

PURPOSE: (itemise exit level outcomes)

The purpose of this qualification is to equip graduates with highly specialized knowledge, skills and competence to:

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1. Critically analyse and implement appropriate interventions to manage patients (and families) with auditory, hearing and balance difficulties across the life span in a range of settings.
2. Prevent, treat, rehabilitate auditory, hearing and balance impairments.
3. Communicate, collaborate, lead, and advocate for patients and their families.
4. Utilize, plan, conduct and disseminate research to inform evidence-based practice.

MINIMUM ENTRY REQUIREMENTS (including access and inclusion)

To be eligible for admissions for this qualification potential candidates must have:

1. Certificate IV, NCQF Level 4.
2. Applicants who did not meet the minimum entry requirements with NCQF level 4 will be considered for entry through Recognition of Prior Learning (RPL) and CAT (Credit Accumulation and Transfer) and as per institution RPL policy and CAT policy.

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SECTION B QUALIFICATION SPECIFICATION	
GRADUATE PROFILE (LEARNING OUTCOMES)	ASSESSMENT CRITERIA
1. Assess, diagnose and manage hearing, auditory and vestibular dysfunctions across all age groups.	1.1 Assess and diagnose auditory, hearing, and vestibular/balance function (including cerumen) 1.2 Manage auditory, hearing, and vestibular/balance function (including cerumen) 1.3 Educate and counsel patients, family members about the outcome of the assessment and intervention plans 1.4 Make appropriate referrals.
2. Design and implement appropriate rehabilitation programmes for hearing, auditory and vestibular related balance disorders	2.1 Develop culturally appropriate audiology management plan. 2.2 Select appropriate assistive devices to enhance rehabilitation 2.3 Provide auditory training, communication strategies, counselling for psychological adjustment.

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	2.4 Develop individualized education programmes for school-age children or individualized family service plan for children from birth to 36 months.
3. Assess the need for programmes aimed at preventing hearing loss and protection of hearing function (preventative programmes)	<p>3.1 Design, implement and coordinate occupational, school, and community hearing loss prevention and identification programmes.</p> <p>3.2 Participate in noise assessment and or noise measurements of the acoustic environment to improve acoustic accessibility and promote hearing wellness.</p> <p>3.3 Present primary prevention information to risk groups</p> <p>3.4 Provide early identification and early intervention services.</p> <p>3.5 Train screening staff to conduct reliable and valid screening.</p> <p>3.6 Monitor and evaluate audiology programs (EHDI, hearing loss prevention programs)</p>
4. Demonstrate key attributes of professionalism	<p>4.1 Obtain informed consent in an ongoing manner.</p> <p>4.2 Maintain confidentiality.</p> <p>4.3 Maintain record keeping in accordance with best professional practice/guidelines.</p> <p>4.4 Demonstrate the skills (self-directed learning, critical thinking, clinical reasoning) for lifelong learning.</p> <p>4.5 Plan and consult with other professional team members to provide optimal patient care.</p> <p>4.6 Practise and contribute to value shared decision making when working in teams.</p> <p>4.7 Demonstrate respect for the patient, their family/caregivers and members of the interprofessional team regardless of their age, sex, gender, sexual orientation, race, social class, culture, beliefs, language, religion, nationality etc</p>

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	4.8 Demonstrate empathy for the patient, their families/caregiver.
5. Plan, conduct, utilize and disseminate research to inform evidence-based practice	5.1 Apply evidence-based practices in the field of audiology. 5.2 Critically analyse research literature to identify problems and gaps in audiology practice. 5.3 Conduct, analyse and disseminate research findings to contribute to the body of knowledge in audiology.
6. Communicate effectively with patients, their families, members of the professional team, and the public	6.1 Effectively communicate verbally, and in writing with stakeholders. 6.2 Communicate in ways that are easily understood and allows patients and families to participate optimally in their own healthcare. 6.3 Communicate effectively within multidisciplinary teams to optimize patient care.

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SECTION C		QUALIFICATION STRUCTURE				
COMPONENT	TITLE	Credits Per Relevant NCQF Level				Total Credits
		Level [5]	Level [6]	Level [7]	Level [8]	
FUNDAMENTALS COMPONENT <i>Subjects/Courses/ Modules/Units</i>	Communication and Study Skills	10				10
	Basic Computer Applications	10				10
	Anatomy and Physiology and	12				12

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	Disorders of auditory system					
	Anatomy and physiology of the auditory and vestibular system		12			12
	Introduction to Psychology	10				10
	Linguistics and phonetics		10			10
	Sign Language	10				10
	Biostatistics		10			10
	Health Ethics and Law	10				10
	Entrepreneurship	10				10
CORE COMPONENT <i>Subjects/Courses/ Modules/Units</i>	<i>Paediatric Audiology</i>		10			10
	<i>Language Development</i>	12				12
	<i>Cognition and Neuroscience (psychology)</i>		12			12
	<i>Becoming a communication Therapist</i>		12			12
	Speech and Hearing Science	12				12
	Early Communication and Intervention		15			15

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	Paediatric Rehabilitative Audiology			12		12
	Diagnostic Audiology			15		15
	Diagnostic Audiology in Special Populations		15			15
	Clinical Audiology Placement		12	14	16	42
	Rehabilitation Technology			16		16
	Adult Rehabilitative Audiology		16			16
	Auditory Processing Disorder			12		12
	Tinnitus and Hyperacusis (and other sound tolerance disorders)				14	14
	Augmentative and alternative communication			15		15
	OAEs and Electrophysiology		15			15
	Vestibular Management		15			15
	Public Health Audiology			14		14
	Occupational Audiology			14		14

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	Research		14	16	30	60
	Seminars in Communication Sciences				10	10
	Audiology Internship				50	50
						512
STRANDS/ SPECIALIZATION	Subjects/ Courses/ Modules/Units	Credits Per Relevant NCQF Level				Total Credits
		Level [5]	Level [6]	Level [7]	Level [8]	
Electives	First Aid and CPR			8		8
	Leadership in Healthcare Management			8		8

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SUMMARY OF CREDIT DISTRIBUTION FOR EACH COMPONENT PER NCQF LEVEL

TOTAL CREDITS PER NCQF LEVEL

NCQF Level	Credit Value
Level 5	96
Level 6	168
Level 7	144
Level 8	120
TOTAL CREDITS	528

Rules of Combination:

(Please Indicate combinations for the different constituent components of the qualification)

Fundamental Components 144 Credits

Core Components: 358 Credits

Electives: 16 credits

Total Credits: 528 Credits

BOTSWANA
Qualifications Authority

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ASSESSMENT ARRANGEMENTS

This will be assessed using formative at 50% and summative at 50%.

MODERATION ARRANGEMENTS

The following shall apply for both internal and external moderation.

- Internal moderation requirements and external moderation shall be carried out in accordance with ETP moderation policy and BQA requirements.
- All assessors and moderators must be qualified in audiology or cognate field preferably with Masters degrees.

RECOGNITION OF PRIOR LEARNING

RPL policies will be applicable for award of credits towards this qualification.

CREDIT ACCUMULATION AND TRANSFER

CAT policies will be applicable for award of credits towards this qualification.

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

Learning Pathways

Horizontal Articulation

- Bachelor of Science in Speech and Language Pathology.

Vertical Articulation

Graduates may progress to higher level qualifications such as:

- Masters in Audiology
- Master of Public Health
- Master in Speech and Audiology Therapy

Employment

- Audiologists
- Otolaryngologist
- Educational Audiologist

- Managers in Rehabilitation Facilities
- CEO in Hearing Manufacturing Industry
- Audiologist Consultant
- Industrial Hearing Conservation and Forensic Audiologist

QUALIFICATION AWARD AND CERTIFICATION

Minimum standards of achievement for the award of the qualification:

For a candidate to be awarded a Bachelor of Science in Audiology they must have acquired a minimum of 528 credits. The Candidate should pass all the core, fundamental and electives modules in the program.

Qualification award

Bachelor of Science in Audiology.

Certification

Candidates meeting the award criteria will be issued with a certificate authenticating the award.

SUMMARY OF REGIONAL AND INTERNATIONAL COMPARABILITY

SIMILARITIES:

UNIVERSITY OF CAPE TOWN

- The developed qualification and the Bachelor of Science in Audiology at UCT are at NQF level 8 with the same learning duration of 4 years.
- The developed qualification and the Bachelor of Science in Audiology at UCT offer the same modules and some of which being Linguistics and phonetics, Speech Therapy, Sign Language, Otoacoustic Emissions (OAEs) and Electrophysiology.
- The learning outcomes have a similarity in that at the end of the qualification the learner should be able to work with both the client and their families for a diagnosis and a treatment plan.

University College of London-England

- Both this qualification and University College of London have similar exit outcomes in that upon completion of the study the learner should be able to diagnose, manage and treat auditory dysfunctions in all age groups.

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- This qualification and UCL has similar modules like Deafness, Cognition and Language and the clinical practices.

DIFFERENCES

UNIVERSITY OF CAPE TOWN

- The first difference is that this qualification has 528 credits whilst UCT has 480 credits.
- There are a few modules that are offered in the UCT but not in this qualification e.g, Cognition and Neuroscience and Phonological and Articulation Disorders.

UNIVERSITY COLLEGE OF LONDON

- The number of credits between this qualification and of University College of London differs, this qualification has 528 credits whilst UCL has 360 credits. This qualification is offered in 4 years whilst in UCL it is offered in 3 years.
- This qualification has a few modules that UCL does not have e.g. Psychology, Biostatistics, Speech and Hearing Science.

SUMMARY

Like the above noted qualifications, the proposed qualification will be designed to be more audiology focused . Having a more specialised qualification will enable graduates to be highly skilled in audiology but also be well prepared for common speech related pathologies and managements. This qualification will allow for ease of articulation into other regional and international programs of the same as well as articulation into some Master's degree qualifications.

REVIEW PERIOD

Every 5 years

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For Official Use Only:

CODE (ID)			
REGISTRATION STATUS	BQA DECISION NO.	REGISTRATION START DATE	REGISTRATION END DATE

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LAST DATE FOR ENROLMENT	LAST DATE FOR ACHIEVEMENT



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