

BQA NCQF Qualification Template

DNCQF.FDMD.GD04

Issue No.: 01

QUALIFICATION SPECIFICATION								SECTION A	
QUALIFICATION DEVELOPER		Ramatea Vocational School							
TITLE		DIPLOMA IN OCCUPATIONAL HEALTH AND SAFETY					NCQF LEVEL		6
FIELD		HEALTH & SOCIAL SERVICES		SUB-FIELD		OCCUPATIONAL HEALTH AND SAFETY			
New qualification		√		Review of existing qualification					
SUB-FRAMEWORK		General Education			TVET		√	Higher Education	
QUALIFICATION TYPE		Certificate			Diploma		√	Bachelor	
		Bachelor Honours			Master			Doctor	
CREDIT VALUE								242 credits	
RATIONALE AND PURPOSE OF THE QUALIFICATION									
<p><u>Rationale</u></p> <p>Providing a qualification in Occupational Health & Safety is supported in many national and international policies. The Government of Botswana has increased its commitment by aligning OHS Development with policies such as the Education and Training Sector Strategic Plan (ETSSP2015- 2020), National Development Plan 11, Vision 2036, National Human Resource Development Strategy (2009 -2022), and the Sustainable Development Goals (2016-2030). All these policies recognise Occupational Health & Safety development and education as the foundation for all learning and development of the human capital. Employers are not willing to take Occupational Health and Safety certificate holders because they felt they would not have covered enough content to assume positions and work independently. Having been offering Certificate in OHS for five years, it was high time to introduce Diploma level in order to upgrade the many Certificate holders. Furthermore, the developer has entered into a Memorandum of Understanding with Borolong District Council to facilitate for workplace-based curriculum that will meet the Environmental, Health and Safety needs required by municipalities in the country with Borolong being a starting point for exchange of information and ideas. Consultation meetings have also been held with other stake holders for the Southern District Council including councillors, the District Commissioner's office, the Kanye Administrative Authority, Members of Parliament to raise the awareness of the program to the community</p>									

and the nation at large.

This would enable many SHE assistants with Certificates to advance themselves. The developer's decision to develop the qualification was also in response to the **Human Resource Development Council (HRDC)** call for occupations and skills in demand. Occupational Health and Specialists and Occupational Hygienists are amongst the list. The qualification will prepare candidates for higher studies into these occupations. We are also empowering Batswana who work in the Occupational Health and Safety positions but without long term training, some have been trained through workshops. Some of the Certificate graduates have indicated interest for progression into the Diploma qualification to enhance their knowledge of the discipline. There is continuity from the content covered during training.

This Diploma is in response to the increasing demand of quality Occupational Health & Safety at a higher level. Having been offering Certificate in OHS for five years, it was high time to introduce Diploma level in order to upgrade the many Certificate holders. This would enable many SHE assistants with Certificates to advance themselves.

Purpose

The Diploma in Occupational Health and Safety qualification serves as an instrument for advanced knowledge impartation by equipping learners with the necessary skills for critical thinking, creativity and implementation of contemporary Health and Safety facets suited for the 21st century markets. It equips individuals determine their level of interest in the Health and Safety sphere and prepare trainees for undertaking activity participation in Botswana's Occupational Health and Safety state of affairs. The qualification consists of a sequence of modules that prepare trainees with the knowledge and skills needed to gain employment as Safety, Health, Environmental and Quality Management Officer.

It equips individuals to determine their level of interest in the Health and Safety sphere and prepare trainees for undertaking activity participation in Botswana's Occupational Health and Safety state of affairs. The qualification consists of a sequence of modules that prepare trainees with the knowledge and skills needed to gain employment as Safety, Health, Environmental and Quality Management Officer. The developer decided to develop a Diploma in Occupational Health and Safety qualification in response to the increasing demand of quality Occupational Health & Safety qualification at a higher level by both certificate graduates and employers

ENTRY REQUIREMENTS (including access and inclusion)

Candidates must have at least four (4) credits at NCQF level 4 or its equivalent, including Maths and

English, with at least a pass in Science.

OR

Candidates must have a certificate in Occupational Health and Safety (NCQF Level 5) from a BQA registered and accredited awarding body or its equivalent.

OR

Candidates who do not meet the minimum requirements (academic qualification) state above but have a minimum of two (2) relevant work experience will be considered through a Recognition of Prior Learning (RPF) process as governed by the institutional policy.

OR

1. NCQF level 4 for OVC applicants with a minimum Grade (D) in the above stated subjects.

Inclusion Arrangements

- The developer combats discrimination throughout and uses influence and its position, wherever possible to help overcome discriminatory barriers.
- The developer is strongly against discrimination to any person(s) on the basis of race, colour, disability, ethnicity, health or economic status nor political affiliation.
- All learners or applicants shall be treated equally and fairly
- Entrances to all facilities have been modified to cater for learners using wheel chairs and other disabled persons
- Eliminate any conditions, procedures and individual behavior that can lead to discrimination with particular regard to: race, gender, disability, sexuality, age, religion and belief and employment issues

QUALIFICATION SECTION B		SPECIFICATION
GRADUATE PROFILE (LEARNING OUTCOMES)		ASSESSMENT CRITERIA
<ul style="list-style-type: none"> • Prove knowledge and understanding of concepts of Occupational Health and Safety 		<ul style="list-style-type: none"> • Demonstrate understanding of the principles and background of OHS • Outline the essential of OHS • Discuss the integration of management systems used in OHS
<ul style="list-style-type: none"> • Conduct hazards identification risk 		

assessment	<ul style="list-style-type: none"> Identify hazards in the organization. Evaluate the risk(s) and come up with effective measures
<ul style="list-style-type: none"> Conduct Incident/accident investigation 	<ul style="list-style-type: none"> Develop an incident/accident investigation guide. Collects evidence of the incident/accident scene to conduct incidents/accident investigation Report on the incident/accident prevention scene Plan incident/accident prevention strategies and measures
<ul style="list-style-type: none"> Provide leadership and training support to the organization and other practitioners to promote a health and safety culture 	<ul style="list-style-type: none"> Develop a health and safety policy for the organization Organize health and safety awareness actives and days Train employees on health and safety matters Design promotional and developmental health and safety awareness materials and strategies.
<ul style="list-style-type: none"> Contribute to the advancement of the OHS profession. 	<ul style="list-style-type: none"> Identify a problem(s) using a given case study Analyze the situation presented by the case study Make promotional and developmental health and safety awareness material and strategies.

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QUALIFICATION STRUCTURE: SECTION C			
FUNDAMENTAL COMPONENT Subjects / Units / Modules /Courses	Title	Level	Credits
	Communication & Study Skills	5	10
	Information Technology	5	10
CORE COMPONENTS Subjects/Units/ Modules/Courses	Occupational Health & Safety Management Practice I	6	12
	Occupational Health & Safety Legislation	6	12
	Industrial Ergonomics	6	12
	Biostatistics & Research	6	12
	Environmental Management	6	12
	Organizational Behaviour & Ethics	6	12
	Occupational Health & Safety Management Practice II	6	12
	Safety Principles & Practice I	6	12
	Risk Management	6	12
	Emergency and Disaster management	6	12
	Occupational Hygiene	6	12
	Accident Investigation and Prevention	6	12
	Safety Principles & Practice II	6	12
	Toxicology	6	12
	Epidemiology	6	12
	Industrial Attachment and Report	6	30
ELECTIVE COMPONENT Subjects / Units / Modules /Courses	Choose 1		
	Building Maintenance	7	12
	Labour Law	7	12
Rules of combinations, Credit distribution (where applicable):			
<p>Credits Distribution</p> <p>Level 5 consists of 20 credits Level 6 consists of 210 credits Level 7 consists of 12 credits</p> <p>Total Credits: 242 Credits</p> <p>The credits combination for this qualification is from 20 of fundamental components, 210 core components and the remaining 12 is from the elective components where candidates would choose one (1) module.</p>			

MODERATION ARRANGEMENTS

Key Assessments Methods for the Diploma in Occupational Health & Safety

- i) Individual assignments
- ii) Tests
- iii) Group Presentations
- iv) Examinations
- v) Industrial Attachment (Semester 4 only)

A range of assessment tasks will be utilized that relate to the diverse individual and team-based conceptual and problem-solving tasks typically encountered in the occupational health and safety environment.

Learners shall sit for examinations at the end of each semester. Candidates who fail any module will be allowed one supplementary examination. After which, the candidate is expected to retake the module. Furthermore, only students who have successfully completed all the twenty (20) modules will be allowed to undertake the Industrial Attachment on the final semester.

Final assessment (Semester 4) shall be by individual presentation of Industrial Attachment, industrial attachment report and industrial attachment log book grading by the supervisor the learner was liable to:

- i) Industrial Attachment Log Book shall constitute 15% of the final mark.
- ii) Presentation shall constitute 15% the final mark.
- iii) Industrial Attachment Report 70% of the final mark.

The Diploma in Occupational Health and Safety will be awarded to candidates who successfully complete all the twenty (20) modules of the course with 80% attendance per module plus industrial attachment.

Continuous assessment shall be constituted by:

- i) Individual assignments 15%
- ii) Tests 25%
- iii) Group presentations 10%
- iv) End of Semester Examinations 50%

- The learning program content and objectives were designed and reviewed at the planning stage by a group of expert peers (comprised of leads who have been appointed by the Training Coordinator) on specific learning programs.
- In-depth program reviews will be conducted on an “as needs” basis when there is evidence that a program review is required as a result of:
 - Program or market data highlight a change in demand or consistent decline in performance.
 - An impending major change in the external or internal environment e.g. BQA policy or government policy that is likely to directly impact on a program or to provide significant development opportunity.
 - A recent alignment with an industry, government, education or professional partner.

- The fact that a key international relationship has commenced or is due to finish.
- Professional accreditation review processes have not addressed core program professional issues.
- Educational methods are appropriate and tailored to the specific learning outcomes and anticipated learners' needs: the mix could include small group work, practical training, simulation, experimental learning, lecture presentations etc.
- Trainers and learners are given an opportunity to comment on whether the learning objectives identified were appropriate and whether they have been met. This will be fed back to the Academic Committee and used for future improvement
- Quality Assessors, appropriately trained with current knowledge/ experience of the content, drawn from Academic Committee will be present at some lectures and workshops and will evaluate the quality of the learning experience.
- The trainer's performance will be reviewed through evaluation in the form of feedback from learners and peer review.
- Feedback is communicated to individual trainers to enable them to review their sessions and for purpose of appraisal.
- A database to hold feedback received on each individual lecture or workshop is maintained and used in evaluating past and planning future educational activities.
- staff offering academic support to learners are fully supported, trained and developed by the institution, and rewarded and recognized for their contribution.
- learners' progress is monitored throughout their program, and that academic support staff proactively provide advice and guidance to help learners' development towards their chosen goals.
- learners and academic staff receive clear accessible, up to date information about academic support provision at appropriate times in an appropriate format.
- Annually the Academic Committee conducts a quality audit/review and self-assessment/appraisal exercise to identify areas for improvement.
- Once a year the Academic Committee reviews the education needs of different interest groups and considers whether new education activities should be developed to meet these needs.

Assessment Procedures

- Learners have contact hours for each selected unit(s)/topic(s) and then exercises or tests are given at the end of the unit.
- Learners are given time to work on and produce assignments/projects in the form of reports, designing an object or carrying out a task and produce a product. These are based on knowledge competencies covered. The assignments/projects are meant to check if the learner's practical

competence matches with the knowledge competencies, to identify the shortfalls and to show the learner's initiative. Such assignments include time at their workplaces or visits to different organizations to gather evidence and analyze facts. Some may be produced by simulation.

- Trainers devise assessment plans for **practical competences** and the plan is communicated to learners so that they are aware of what is required of them. The plan is developed considering the learning program requirements.
- The assignments/projects are assessed by the trainer in accordance with the qualification requirements i.e. observation of performance or appraisal of product. The trainer will judge the evidence and make assessment decisions against the required standards.
- Where the learning program requires the learner to produce portfolios, it is produced according to the learning program requirement. The trainers also assess according to the examination board's requirements i.e. the tools or guidelines provided.
- Trainers give prompt, accurate and constructive feedback from the assessment. Copies of accurate records of learners' achievement are given to the respective learner and a copy kept in the learner's file.
- The trainer has to agree on new assessment plans with trainee(s) where further evidence is required.
- Trainees sit for mid semester examinations in preparation of the final assessment. These are set and marked by the respective trainers. Summary of performance is given to learner/guardian and copies kept in their files.
- The assessments are conducted like final assessments. Trainers set papers for their respective modules that are checked by the Academic Committee and production of these papers and packaging is the responsibility of the Academic Committee
- These papers are stored in the strong room and given out as the examinations are written. The College Examinations Committee prepares the schedule.
- Learners who perform below standard are taken for re-medial by the respective trainers after one-on-one discussion to find out their opinion. They are also encouraged to see professional Counselor if it is necessary.
- Learners have to sit for the final assessment, set and marked by the examination board. These are meant to test the knowledge requirements. They may be written or computer-based tests. The examination board will award the relevant certificates or diplomas.
- The College ensures that there is an active Internal Assessment Committee consisting of the Heads of Departments and/or different subject specialist.

- The College Internal Assessment Committee is responsible for quality assurance. This is carried out through direct observation of assessor's practice and review of the learner's product, paper or computer-based evidence and records assignments and/or portfolios.
- The purpose of quality assurance is to check if there are any weaknesses which may require attention such as:
 - extra support and guidance for an individual trainer;
 - a standardization workshop if a number of trainers are making inappropriate/inconsistent decisions;
 - further guidance from the examination board if the problem arises from uncertainty about interpretation or requirements for a new qualification.
- The Internal Assessment Committee informs the Academics Committee of the quality assurance report and meet with the External Assessors/Verifiers to discuss/review delivery of qualification and prepare and issue action plan for implementation.

Moderation

- The College has a team of moderators for a two-year term subject to re-nomination. Qualification to be a moderator should be Degree/Masters/PhD holders in Occupational Health and Safety, at least two years teaching experience in the same vocation and BQA accredited.
- Both Internal and External Moderators ensure that questions set for each module fall within the program prescribed for the course. In this sense, due regard should be given to reliability and validity.
- Internal moderators undertake a post-examination audit including monitoring of marking, monitoring of the examination results and review of assessment methodologies. The moderators shall ensure that marks allocated are fair and that the paper is of good standard.
- All comments by the Internal and External Moderators are noted on paper for discussion with the Assessor.
- Where the moderators consider it necessary that certain questions(s) be altered or replaced for the purpose of achieving good standard, this is discussed with the assessor who will effect the changes after agreement has been reached.
- In the event that there is no agreement the matter is referred to the Curriculum Committee for resolution.
- The Internal Moderators moderate the scripts during the marking period, ensuring that all answers submitted by candidates are marked in accordance with the marking scheme, checks the marked scripts for consistency of marking, and the arithmetic accuracy of total marks. Moderators monitor procedures for the marking of scripts to ensure that a reduction/increase of marks can be implemented if necessary.

- The Moderation report and the final mark sheets of each examination module are passed on to the External Moderation panel at the University of Botswana for second moderation.
- Internal and external moderation is also implemented on pre-examination papers to ensure fair allocation of marks, clear questioning techniques, content coverage and accuracy of marking keys.
- The External Moderation report and the final mark sheets of each examination are delivered to the College Academic Committee for approval.
- After approval, the mark sheets and reports are passed on to the College Director then Academic Director and finally, the Board for endorsement.

RECOGNITION OF PRIOR LEARNING (if applicable)

RAVOS recognizes knowledge and skills acquired through formal, non-formal and informal learning contexts.

- Formal learning is learning certified by a recognized awarding or professional body.
- Non-formal learning includes learning such as employer's in-house training which may or may not be assessed and/or certificated
- Informal learning is learning based on experience from a variety of environments which is not formally assessed.
- The evidence to support prior learning assessment decisions must be valid, reliable and equal to the standard assessment of the Module concerned. This means that the evidence should broadly match the evidence requirements specified in the Module and reflect the developer's level and credit value attached to the Module.
- The recognition of prior learning may be used to assess complete or partial modules. Where evidence of prior learning partially meets the evidence requirements of a module, other methods of assessment should be used to complete the outstanding requirements. The minimum level of awarding and certification will be a complete module
- Previously attained qualifications may be used as evidence of prior learning as long as they have been awarded by a recognized awarding body or professional body. A qualification certificate on its own is unlikely to be sufficient evidence for assessment and verification purposes. This should be supported by module descriptors or equivalent which provides information on the level, demand, content and assessment of the previously attained qualification.
- The assessment of prior learning should be subject to the same internal verification by centers as other methods of assessment. The developer will also adopt the same approach to quality assurance as any other method of assessment.
- The recognition of prior learning may not be used as method of assessing in certain types of assessment instruments where:
 - the standard may be compromised by not using the same assessment methods outlined in the module;
 - there is an existing requirement for a license to practice,
 - there are specific health and safety requirements or

- there are regulatory, professional or other statutory requirements.
- Candidates need to apply for credit transfer before they register for the program at least 4 weeks before the registration closing date. The developer needs to know what the candidate studied, where and when and evidence of the previous study must be provided.

Guidelines on Credit Accumulative Transfer

- The ETP enrolls learners who may have not completed a course but have completed part of the program.
- Modules and credits acquired will be based on content covered
- The ETP will confirm with the institution concerned before enrolling the learners to be certain of the content.
- The ETP will make an agreement with Colleges offering similar programs to ensure that learners are able to continue in another institution should they wish to transfer.

PROGRESSION PATHWAYS (LEARNING AND EMPLOYMENT)

The course cuts across major industries wherever people are engaged in work and the work poses harm to all working in that organization. The course is designed to enable safe working conditions in all atmospheres to preserve life and instil safety in all work being performed. Any individual can do the course, especially to encourage safe working conditions that eliminate harm to people.

Candidates may progress to a degree in Occupational Health and Safety at any recognized University.

LEARNING PATHWAYS

Vertical Articulation

- Bachelor of Science in Occupational Health and Safety Management
- Bachelor of Science in Environment Health Management

Horizontal Articulation

- Diploma in Occupational
- Diploma in Environmental Health
- Diploma in Environmental Management

Employment Pathways

- Occupational Health and Safety Management Consultant
- Safety, Health and Environmental Officer
- Risk Control Officer
- Loss Control Officer
- Health and Safety auditor

QUALIFICATION AWARD AND CERTIFICATION

- To be awarded with a Diploma in Occupational Health and Safety a candidates are required to achieve the stipulated 242 total credits inclusive of the fundamental, core and elective components (if any) to be awarded the qualification.
- Candidates meeting prescribed requirements will be awarded the qualification in accordance with standards prescribed for the award of the qualification and applicable policies. Learners must pass all modules prescribed in the qualification and fulfill all the requirements of the qualification to be awarded a Diploma in Occupational Health and Safety.

REGIONAL AND INTERNATIONAL COMPARABILITY

This qualification compares with the following:

- **Southern Institute of Technology (New Zealand)** offers a level 6, diploma in Occupational Health and Safety worth 120 credits which generally emphasize the development of competences on behaviour based safety under occupational health and safety systems and practices, identification and management of hazards and systems in the workplace, development of safety programmes, monitoring and evaluation, auditing and assessment of health and safety in the respective occupations
- **Eswatini Institute of Development Management offers a two year NCQF Level 6 Diploma in occupational Health and Safety** introduce students to OHS laws and risk management. The qualification equips students with skills to interpret OHS legislation, develop loss control programs as well as conduct audits and inspections of existing OHS and environmental programs and eventually design and deliver effective OHS training programs for employees.
- **British Columbia Institute of Technology school of Health Sciences** offers a two year full time level 6 Occupational Health and Safety Diploma qualification worth 148 credits which is the most comprehensive training of its Kind in Canada. Students learn the skills they need to start a great career in health and safety, in any industrial and workplace. The learns are equipped with skills on the operations of health and safety and the business side, including human resources, communication, decision making and leadership. The students also exposed to field work and an industry practicum which give them hands on experience.
- Diploma in Health and Safety Qualification was benchmarked with similar qualifications, International Diploma in Occupational Safety and Health offered by British Safety Council (UK) and similar qualification Occupational Health and Safety offered by ATA International Holding (SA). The content covered and the duration of the qualification is easily comparable with other similar qualifications. Similar qualification is offered at an international institution such as British Safety Council (UK) to certificate Level V and A-Level students with the duration of 2 years.

It's is essential to note that occupational health and safety is offered by several countries internally, however most of the Universities offering this course were from South Africa making comparability at regional level a challenge. It is important to note that though qualification titles may differ, modules covered are significantly comparable and similar. Although the qualifications examined generally follow similar structures and standards, there are differences, though not significant in that they concentrate on understanding human behaviour as a key factor in preventing occupational risk factors. They all equipped learns with knowledge and experience need for managing hazards identified and promoting safety at workplace.

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This qualification generally compares with all the qualification studied since the exit outcomes cover similar scope and depth and is aligned to exit level descriptors typical of this level and type of qualification as done within the region and beyond. However, what sets it apart from the ones highlighted above is the fact that it combines and integrates human occupational and environmental risk factors into one interdisciplinary qualification.

REVIEW PERIOD

The learning program shall be reviewed after 5 years of implementation or in cases of unexpected changes with the national education system

Other information

Additionally the Occupational Health and Safety Department has benchmarked its learning program basing on the Occupational Hygiene Training Association (OHTA) which outlines the standards most adapted to in the United States of America. Also the College paid particular attention to detail to balance the learning outcomes to meet the market needs thus its benchmarking from the Occupational Hygiene and Health Research Institute (OHHRI) South Africa. Boitekanelo College and Gaborone University College of Law (GUC) academic framework was also used in the selection of modules for the programme in order to enable learners intending to further their studies to be able to advance to this institution and its South African partnership institutions.