

No. 877

22 August 2008

**SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)**

In accordance with Regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

Radiography and Clinical Technology

registered by Organising Field 09 – Health Sciences and Social Services, publishes the following Qualification for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the Qualification. The full Qualification can be accessed via the SAQA web-site at www.saqg.org.za. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, SAQA House, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the Qualification should reach SAQA at the address below and ***no later than 22 September 2008***. All correspondence should be marked **Standards Setting – Radiography and Clinical Technology** and addressed to

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SOUTH AFRICAN QUALIFICATIONS AUTHORITY

QUALIFICATION:
Bachelor of Radiography: Ultrasound

SAQA QUAL ID		QUALIFICATION TITLE	
63449		Bachelor of Radiography: Ultrasound	
ORIGINATOR		PROVIDER	
TT - Radiography and Clinical Technology			
QUALIFICATION TYPE	FIELD	SUBFIELD	
National First Degree	9 - Health Sciences and Social Services	Curative Health	
ABET BAND	MINIMUM CREDITS	NQF LEVEL	QUAL CLASS
Undefined	480	Level 7	Regular-ELOAC

This qualification does not replace any other qualification and is not replaced by another qualification.

PURPOSE AND RATIONALE OF THE QUALIFICATION

Purpose:

The purpose of the qualification is to develop a professional competent in the knowledge and skills required for the profession of Sonography, a professional who has gained experience in applying such knowledge and skills in the appropriate workplace context. Skills in management, problem solving and research will also be demonstrated allowing the holder of this qualification to work independently and in a supervisory capacity within the health care team.

Successful completion of this qualification will enable the learner to be registered by the relevant Statutory Health Council as a graduate in the field of Diagnostic Ultrasound. The outcomes achieved will allow the learner to practice his/her skills to the benefit of the community and to share their skills and knowledge with other learners and peers. Registration will be assurance to the community and society that the professional will practice at all times within the relevant scope as determined by the Statutory Health Council.

Rationale:

There is a national shortage of qualified sonographers to operate Ultrasound equipment in order to provide a safe and accessible service to the public. Many hospitals and clinics, especially in the Government sector, have ultrasound machines but lack operators with the necessary skills to provide a safe and meaningful service or are using personnel to operate these units who have not undergone formal training and assessment. The field of Medical Imaging is undergoing rapid advancement in both the technology and in the areas in which it can be applied. As more emphasis is placed on preventive rather than curative medicine, Ultrasound is a cost effective means of screening for, and determining a wide range of disorders at a relatively early stage, thus helping improve the treatment and prognosis. There is scope for use at all health care levels, especially in Primary Health Care, where it is particularly useful in the assessment of the pregnant patient and foetal well-being.

The qualification carries a minimum of 480 credits and, once registered with the relevant Professional Board, allows the holder to practise in both the public and private sectors and in private practice.

The Exit-Level Outcomes of this qualification describe the foundational, practical and reflexive competencies, which constitute the applied competencies required to provide a safe diagnostic sonographic service to the public. The holder of the Bachelors Degree may register for a Masters Degree and may then proceed to a Doctoral qualification. Horizontal articulation may be into a Bachelors degree in another radiographic discipline.

All learners for this qualification are required to be registered as learners by the relevant Statutory Health Council for the duration of the period of study in an accredited clinical training centre.

RECOGNIZE PREVIOUS LEARNING?

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LEARNING ASSUMED IN PLACE

This qualification is based on the specific knowledge from the Natural and Biomedical Sciences as well as Social Sciences. Knowledge of human anatomy, communication, information technology and sciences at NQF Level 4 is assumed. In order to enter this programme the learner should have the competencies of either:

- > Grade 12 certificate with exemption/National senior certificate for degree purposes.
- > Communication at NQF Level 4.
- > Life Sciences at NQF Level 4.
- > Physical Sciences at NQF Level 4.
- > Mathematics Literacy at NQF Level 4.
- > Life orientation at NQF Level 4.

RPL (e.g. a radiography qualification in another category) would be recognized on submission of a portfolio as evidence in accordance with the Institutions RPL policy.

Recognition of Prior Learning:

This qualification may be achieved in part through the recognition of relevant prior learning and/or through prior experience as a practitioner in another field of radiography. Providers are required to develop structured and accredited means of the assessment of learners against exit level outcomes of the qualification on an individual basis and in accordance with the institutions' accredited RPL policy. Such procedures and the assessment of individual cases are subject to moderation by independent assessors.

Access to the Qualification:

Access to this qualification is dependent on successful completion of a grade 12 education in line with the National Senior Certificate for degree purposes.

QUALIFICATION RULES

This qualification is competency based. Notional hours will include theory and clinical components in order to achieve competency.

The qualification has been structured as follows:

Fundamental (156):

- > Demonstrate knowledge of natural and life sciences and pathology at a level suitable for application in the clinical field (80).
- > Assess and perform patient care in a manner which ensures that the patient's welfare is maintained (60).

> Apply the principles of human rights, ethics and medical law which ensure the well-being of the patient (26).

Core (300):

> Foundations of Professional Practice:

> Apply the ultrasound specific measures which ensure that the health and safety of patients, self and colleagues is maintained (40).

> Plan, develop and apply total quality management appropriate to the sonographic context (40).

> Scientific knowledge:

> Demonstrate research skills and foster a research climate in Ultrasound imaging (40).

> Ultrasound practice:

> Perform the sonographic protocols and procedures to produce optimum quality images in the specified areas of diagnostic ultrasound (100).

> Critically assess the sonographic images and apply pattern recognition to determine aberrant appearances in keeping with pathology (80).

Electives (24 credits):

Electives offered are at the discretion of the provider. The student must select one or more of the electives according to the credits allocated to the specific elective.

> Possible electives:

> Advanced computer skills.

> Didactics/Education Principles.

> Obstetric management.

> Applied Psychology.

> Small and medium business enterprises.

EXIT LEVEL OUTCOMES

1. Demonstrate knowledge of natural and life sciences and pathology at a level suitable for application in the clinical field.

2. Assess and perform patient care in a manner which ensures that the patient's welfare is maintained.

3. Apply the principles of human rights, ethics and medical law which ensure the well-being of the patient.

4. Perform the sonographic protocols and procedures to produce optimum quality images in the specified areas of diagnostic ultrasound.

5. Critically assess the sonographic images and apply pattern recognition to determine aberrant appearances in keeping with pathology.

6. Apply the ultrasound specific measures which ensure that the health and safety of patients, self and colleagues is maintained.

7. Plan, develop and apply total quality management appropriate to the sonographic context.

8. Demonstrate research skills and foster a research climate in Ultrasound imaging.

Electives:

Electives offered are at the discretion of the provider. The student must select one or more of the electives according to the credits allocated to the specific elective.

Possible electives:

- > Advanced computer skills.
- > Didactics/Education Principles.
- > Obstetric management.
- > Applied Psychology.
- > Small and medium business enterprises.

The qualification promotes the critical cross-field outcomes in the following manner:

- > Identifying and solving problems in which the responses display that responsible decisions, are made within the health care context using creative and critical thinking will be evident in the way that the patient's welfare is maintained.
- > Information literacy which includes the resourcing, organising and critical evaluation of data with particular emphasis on health issues through the development, planning and application of quality management principles.
- > Working effectively with all levels of co-workers in the health care team and educational environment for the well being of the patients and the society.
- > Evaluating and implementing strategies for effective learning in the academic or clinical environment, through the utilisation of natural and life sciences as well as pathology necessary to provide quality ultrasound service.
- > Responsible self management and development for the provision of life long learning through research in the field of ultrasound and healthcare in general.
- > Effective communication through verbal, non-verbal and technological equipment to ensure a collaborative and effective healthcare service delivery for the benefit of patients.
- > Knowledge and use of advanced science and technology in the health care environment will contribute to effective communication among healthcare workers and ensure that ultrasound services can be provided to communities through the use of teleradiology and other technological advancements.
- > Identify health problems in the context of ultrasound, suggest and implement a solution or plan of action in order to solve the problem professionally will be promoted through effective and safe patient care practices in accordance with the patient's needs by taking into consideration ethical principles as well as human rights and medical law requirements.

ASSOCIATED ASSESSMENT CRITERIA

Associated Assessment Criteria for Exit Level Outcome 1:

- > Knowledge of natural and life sciences and pathology supports the range of routine and advanced techniques utilised in the clinical context.
- > Knowledge of natural sciences helps the learners build knowledge and skills necessary for the choice of equipment and manipulation of controls necessary for patient management and healthcare service delivery.

Associated Assessment Criteria for Exit Level Outcome 2:

- > Relevant patient care is identified and correctly applied before, during and after the examination in a manner which ensures that patient well-being and needs are met.
- > Procedures and requirements are communicated effectively to allow informed consent to be given either verbally or in writing as appropriate.
- > Decision-making and accountability demonstrates an understanding of the ethical requirements of a professional medical environment.

Associated Assessment Criteria for Exit Level Outcome 3: