

## University of Pretoria Yearbook 2023

# Radiographic imaging 182 (RAW 182)

**Qualification** Undergraduate

Faculty of Health Sciences

Module credits 20.00

NQF Level 05

**Prerequisites** No prerequisites.

**Contact time** 1 discussion class per week, 1 lecture per week, 1 seminar per week

**Language of tuition** Module is presented in English

**Department** Radiography

Period of presentation Year

#### **Module content**

Introduction: Discovery of X-rays, processing principles, handling of X-ray equipment. X-beam: production of X-rays, attenuation.

Properties of the radiographic image: visibility and geometric properties.

Image formation: interaction between X-rays and the human body and subject contrast.

Primary exposure factors: mAs, kVp and SID. AEC. Principles of technique charts. Image recording: darkrooms, cassettes, intensifying screens, efficiency of rare earth intensifying screens and X-ray film construction.

Control of scatter radiation: production of scatter, effect of scattered radiation on the image, beam restriction devices, grids and grid efficiency.

Geometry: focal spot size, SID, OID, X-ray beam/body part/film alignment, influence of distances and other variables on the geometric properties of the image. Introduction to digital radiography.

#### **Regulations and rules**

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The General Academic Regulations (G Regulations) and General Student Rules apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of



the aforementioned regulations.

### University of Pretoria Programme Qualification Mix (PQM) verification project

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.