

University of Pretoria Yearbook 2019

Radiographic imaging 182 (RAW 182)

Qualification Undergraduate

Faculty [Faculty of Health Sciences](#)

Module credits 20.00

Prerequisites No prerequisites.

Contact time 1 lecture per week, 1 discussion class 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.

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