

# University of Pretoria Yearbook 2017

## Radiography 383 (RAW 383)

**Qualification** Undergraduate

**Faculty** Faculty of Health Sciences

**Module content**

Cardiovascular system: Imaging equipment: laser imager and dry film imager, construction, operation and films. Digital subtraction and image manipulation, viewing, recording and storing of images. Principles and equipment considerations for cardioangiography and angiography. Selective angiography. Intervention techniques (vascular and non-vascular). Venography. Seldinger technique, contrast media, medication, catheters, guide wires and accessories. Quality assurance and quality control. Patient care. Medico-legal aspects. Research. Case presentations. Pattern recognition. Clinical experience and evaluation.

Clinical evaluation of an excretory urogram that was done theoretically in the 2nd year.

Mammography: Introduction. Principles of soft tissue radiography. Communication and health promotion. Medico-legal aspects. Management of breast disease, patient care and treatment options. Mammography equipment, radiation safety and technique factors. Image receptors. Processing requirements. Positioning principles and special procedures. Systematic evaluation of the images. Different modalities or equipment to demonstrate the breast. Quality assurance and quality control. Case presentation. Research. Pattern recognition. Clinical experience and evaluation.

Hysterosalpingography: Booking procedures, patient-radiographer relationship, procedural considerations and evaluation criteria. Pattern recognition.

Bone densitometry: Principles, bone biology and remodelling, osteoporosis, core competencies for radiographers, physical principles of dual X-ray absorptiometry and other bone densitometry techniques. Clinical experience.

Ultrasound: General principles. Clinical experience.

Computer Tomography: Imaging principles – conventional and spiral. Factors affecting image quality. Contrast media. Protocol for different examinations. Patient care. Case presentation. Research. Pattern recognition. Clinical experience and evaluation.

Magnetic resonance imaging: Imaging principles and image characteristics. Contrast media. Protocol for the different examinations. Patient care. Clinical experience.

Myelography.  
Research project.  
Clinical evaluation and film evaluation of examinations that were done theoretically in the first and second year.

**Module credits** 50.00

**Programmes** BRad Diagnostics

**Prerequisites** FSG 251, FSG 252, FSG 262, GNK 286, RAN 280, RAW 281, RAW 286, RAW 283, RBG 281, RFI 210

**Contact time** 1 seminar per week, 1 lecture per week, 4 discussion classes per week



---

**Language of tuition** Afrikaans and English is used in one class

**Academic organisation** Radiography

**Period of presentation** Year

---

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of each student to familiarise himself or herself well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.