



University of Pretoria Yearbook 2017

Radiation physics 211 (RFI 211)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module content	Radio-active decay: half-life, alfa decay, beta decay, gamma decay. Production of isotopes cyclotron, nuclear reactor, Van de Graaff accelerator. Absorption: nucleons, alfa particles, beta particles. Dosimetry: exposure, absorbed dose, equivalent dose, effective dose, dose limits. Radiation detectors: Geiger counter, scintillation counter, thermoluminescent detector, semi-conductor detectors. Radiopharmaceuticals. Biological effects: genetic and somatic effects.
Module credits	10.00
Programmes	BRad Diagnostics
Service modules	Faculty of Health Sciences
Prerequisites	RFI 110, RAW 180, RAN 100, FSG 161, FSG 162, RAW 182 and MTL 180
Contact time	4 lectures per week
Language of tuition	Module is presented in Afrikaans
Academic organisation	Physics
Period of presentation	Semester 2

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.