



University of Pretoria Yearbook 2019

Radiation physics and instrumentation for nuclear medicine 700 (SFI 700)

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| Qualification | Postgraduate |
| Faculty | Faculty of Health Sciences |
| Module credits | 15.00 |
| Programmes | BRadHons Nuclear Medicine |
| Prerequisites | No prerequisites. |
| Contact time | 2 lectures per week |
| Language of tuition | Module is presented in English |
| Department | Radiography |
| Period of presentation | Year |

Module content

Basic concepts of radiation physics, radioactive decay, radionuclide production, interaction with matter, radiation detectors and counting systems. Problems in radiation detection. The gamma camera: performance, image quality, quality control. Digital computers in nuclear medicine. SPECT principles, cameras, quality. PET principles, cameras, quality. Radiation dosimetry and biology. Radiation protection and safety.

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