



Australian Government
Australian Radiation Protection
and Nuclear Safety Agency



The ARPANSA Practical Reference Dosimetry Course

18–21 March 2024

ARPANSA is pleased to announce the **seventh Practical Reference Dosimetry Course** for external beam radiotherapy.

Running over four days, the course will cover the theory and provide hands-on experience in all areas of radiation dosimetry for external beams.

The course is aimed at experienced ROMP registrars and qualified medical physicists seeking a refresher course.

Concentrating on TRS-398 and TG-61, the course is hands-on as well as delving into the physics behind the protocols.

Topics include:

- quantities and units
- uncertainty calculations and reporting uncertainties
- dosimetry protocols for kV and MV photons and MeV electrons (TRS-398, TG-61)
- measuring beam quality index, output, and output factors
- primary standards
- legal metrology and regulatory framework
- understanding your equipment
- ion chamber theory
- small fields, protons and MR linacs.



The four day course consists of:

- lectures by ARPANSA staff and senior hospital physicists
- 6 practical sessions
- formal assessment at the end of each day
- certificate upon successful completion.

At the end of the course students will:

- have a good fundamental theoretical and practical understanding of all aspects of reference dosimetry for kV X-rays, high-energy photons and electrons
- be familiar with the Australian primary standards for air kerma and absorbed dose to water used in reference dosimetry, their units and uncertainties
- understand the ACPSEM-recommended codes of practice for kV X-rays, MV photons and electrons and their practical application to clinical beams
- understand correction factors and be able to calculate uncertainties in reference dosimetry.

Limited places available

10 to 16 participants only (fees apply). Approved for 40 CPD points.

Venue

ARPANSA Dosimetry Laboratories
619 Lower Plenty Road, Yallambie VIC 3085

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