

Coordinator: Mehenna Arib, PhD **Workshop Faculty:** Hesham Alhamdan

Time : 15:40 – 18:00

Target Audience:

Radiation safety officers, Health and medical physicists, Nuclear medicine and medical imaging professionals and Radiologic technologists and radiologists

Workshop Description:

Participants in this workshop will gain practical experience in the shielding calculation for gamma irradiation facilities and Diagnostic radiology rooms. In addition, they will learn how to perform shielding verification of medical facilities using a radioactive source and a sensitive detector

- Basics of shielding calculation
- Example of shielding calculation of nuclear medicine facility
- Example of shielding calculation using the Gamma Dose Constant
- Presentation of the shielding verification procedure used by the KFSHRC staff
- Example of shielding verification of a Hot Lab
- Establishment of Excel worksheet
- Shielding verification report

Learning Objectives:

- Acquire the knowledge on basic concepts and principles of shielding calculation
- Gain a clear understanding, skills and methodologies for shielding verification using a radioactive source and a radiation detector