

## **Course: RADIOLOGIC PROTECTION IN RADIO PHARMACY.**

### **SYLLABUS**

#### **1. RISKS OF THE IONIZING RADIATIONS**

- a. IONIZING RADIATIONS
- b. SCALES AND UNITS
- c. RISKS
- d. IR DESIGN
- e. PR RULES

#### **2. RADIO PHARMACY**

- a. Radio pharmacy.
- b. Radio medicines: Definition. Characteristics. Types: Radiation. Routes of administration. Obtaining: Cyclotron, generators, reactors.
- c. Detention: Gamma cameras, PET, RIA.

#### **3. RADIOLOGIC PROTECTION**

- a. PR GENERAL CRITERIA
- b. LEGAL AND ADMINISTRATIVE ASPECTS
- c. OPERATIONAL PR
- d. IR ORGANISATION
- e. IR OF THE UV

#### **4. CELL MARKING. APPLICATIONS.**

- a. Leukocytes
- b. Haemetics
- c. Platelets

#### **5. PET RADIO MEDICINES**

- a. Radio Nucleoids
- b. PET Radio Medicines
- c. Radio Medicines classification:  $^{18}\text{F}$ ,  $^{11}\text{C}$ ,  $^{13}\text{N}$ ,  $^{15}\text{O}$  and others.

#### **6. BIOLOGICAL EFFECTS OF IONIZING RADIATIONS**

- a. RADIO BIOLOGY
- b. MOLECULAR AND CELL EFFECTS
- c. EFFECTS OF THE RADIATION ON TISSUES
- d. CLASSIFICATION OF THE RADIO-INDUCTED BIOLOGICAL EFFECTS
- e. TOTAL ORGANIC RESPONSE
- f. PR EXPOSED EXPECTANT WORKING WOMEN

#### **7. COMMON RADIO MEDICINES**

- a. COMMON RADIO MEDICINES: DEFINITION. OBTAINING. QUALITY CONTROL. DETECTION. CLASSIFICATION: DIAGNOSES AND THERAPEUTIC
- b. EMITTING RADIO MEDICINES
- c. EMITTING RADIO MEDICINES
- d. EMITTING RADIO MEDICINES

#### **8. WHAT TO DO IN CASE OF CONTAMINATION AND IRRADIATION**

- a. RADIOACTIVE CONTAMINATION
- b. DECONTAMINATION
- c. ATTENTION TO IRRADIATED AND CONTAMINATED PEOPLE

#### **9. ANIMAL EXPERIMENTATION**

- a. PET b.TAC
- c. MICRO PET-TAC: applications and related studies



## CONTACT

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