



Course Description

RAT2022 | Principles & Practice of Radiation Therapy 2 | 2.00 credits

This course is continuation of RAT 1021C. Students will be presented with an in-depth study of the principles of electron therapies, safety, quality assurance, and quality management in radiation oncology.

Course Competencies

Competency 1: The student will demonstrate knowledge of the principles of radiation therapy as it relates to the management of neoplastic disease by:

1. Discuss the role of radiation therapy in the management of all patient populations with benign and malignant diseases
2. Identify the treatment regimens and fractionalization schemes used in palliative disease management
3. Examine the role of surgical, radiation and medical oncology to include immunotherapy (biological therapy) and personalized medicine in the management of neoplastic disease

Competency 2: The student will demonstrate the skills, techniques and knowledge required for the clinical planning of patient treatment by:

1. Discuss the characteristics of the electron beam
2. Discuss electronic charting and image management in a radiation therapy department
3. Describe the clinical applications for moving beam techniques.

Competency 3: The student will demonstrate the skills, procedures and knowledge required for effective quality management by:

1. Discuss quality improvement in radiation oncology
2. Explain the purpose, procedure and frequency for all QA and QM procedures in a radiation therapy department
3. Describe the procedure for assuring accuracy of manual and electronic records

Learning Outcomes

- Solve problems using critical and creative thinking and scientific reasoning