Goals and Objectives for Physics Didactic Class

Curriculum Components

Overall Educational Goals

• Learn the scientific basis and clinical applications of physics in radiation oncology.

Supervision

• All instructors in this course will be certified in their field of specialty by the appropriate certifying board (i.e., the American Board of Radiology, the American Board of Health Physics, etc.)

Teaching Methods

• Teaching will be via lecture format with the use of handouts, whiteboard, and power point presentations

Competency-Based Goals and Objectives

• Learn and appreciate the clinical significance of physics and dosimetry in the practice of radiation oncology.

• Take practice tests to prepare for in-service and other exams.

• Take and pass the Physics of Radiation Oncology section of the American Board of Radiology (ABR) certification examination in Radiation Oncology as well as the oral exam.

• Learn to ask appropriate questions of the physicist related to patient care and instill the desire to pursue lifelong learning in this field.

• Read appropriate books and journals related to physics and dosimetry as a lifelong goal.
Didactic Sessions

- The physics didactic class will meet weekly for 90 minutes from September through April.

Resident Responsibilities

- Arrive for class on time.
- Participate in classroom discussions.
- Submit all homework assignments when due.
- Take all classroom examinations.
- Read all assigned readings.
- Meet with physicist after class to discuss any questions not understood or addressed to the residents’ needs in class.
- Meet with physicist to discuss progress.

Required Texts


- Seminars in Radiation Oncology, special physics issues, as published.

- Other journal articles and relevant works as determined by the instructor.

Special Notes on Teaching All the Residents Simultaneously

- All PGY2, 3, and 4 residents are required to take this didactic physics class annually. It is taught at the level of what the residents need to know in order to pass the ABR Certification Examination. The information is understood at a different level with each succeeding year that the resident takes the class.

- Initially, the PGY2 residents absorb the material at the introductory level. By the time the resident is at the PGY4 level, the information is understood in depth, and is cemented into place during the four week long Physics Rotation. The residents take the ABR Certification Examination in Radiation Oncology Physics at the conclusion of their PGY4 year. Failure to pass this exam necessitates repeating the course during the PGY5 year.
• As the format of the class is lecture/discussion, all the residents are privy to questions asked by their fellow residents. The ensuing discussion is beneficial for all the residents.