



## *Radiation Therapist Exam Outline*

This Exam Outline was developed to help you prepare for the knowledge exam.

This Exam Outline is not meant to cover all aspects of the knowledge exam, but to guide your preparation for questions that may occur in the knowledge exam

### Review:

- Components of dynamic wedge effect
- Techniques to applying boluses to treatment surface
- Isotopes used in permanent implants
- Techniques to ablate bone marrow and immune system
- Warm-up procedures and management
- Daily quality control checks
- Customized shielding blocks, materials, creation procedures
- Positioning techniques for specific radiation techniques and simulation procedures
- Infection prevention strategies
- Complete and legal documentation with error management techniques
- Photon beam: beam-shaping and modification devices
- Patient education topics
- Radiation exposure protection techniques
- The American Association of Physicists in Medicine (AAPM) quality control procedures and monthly checks
- Radiation beam angles
- The Association of Physicists in Medicine (AAPM) recommendations for medical accelerator checks
- Define:
  - Brachytherapy
  - Hyperfractionation
  - Intensity-modulated radiation therapy
  - Electronic portal imaging device
  - Orthogonal imaging
  - B-mode acquisition technology
  - Portal imaging
  - Individualized compensators
  - Optical distance indicator
  - 3D conformal radiation therapy
  - Stereotactic radiation therapy
  - Positron emission tomography
  - Source-film distance techniques and magnification factors
- Unique patient identifiers