

Introduction to Computed Radiology

Course Outline

1. **Introduction**
 1. Terminology
 2. Digital imaging technology
 3. CR Systems and procedure overview
2. **CR Subsystems (Image plates, Laser scanner, Workstation)**
 1. IP composition
 2. IP characteristics
 3. IP care and maintenance
 4. Laser scanner operation
 5. Laser scanner specifics
 6. Laser scanner maintenance
 7. Workstation environment
 8. Monitor specifics
 9. Image processing functions
3. **Operational requirements**
 1. Applicable ASTM specifications, standards, guides and practices
 2. Customer or prime specifics
 3. System performance measurements-the CR phantom
 4. System capability
 5. System qualification-image quality
 6. CR technique parameters
4. **Practical session**
 1. CR phantom: system performance gauging
 2. IP protocol: erasure, registrations, damage study
 3. CR enhancement: use of filtration and masking, exposure considerations, control of scatter