



## **Fluoroscopic Seminar**

### **Course Description:**

This course is designed to provide participants basic fluoroscopic training, rule requirements, safety, and operator responsibilities.

**Course length: 3 hours**

**CE Credits (3): ASRT, Dental, and Veterinarian**

**Radiologic Education Center: Phone: 763-717-8349; Fax: 763-951-2750**  
[SMcClanahan@LearnAtREC.com](mailto:SMcClanahan@LearnAtREC.com)

### **Course Outline and objectives:**

When the participants have completed this class, they will recognize how to properly use the fluoroscopic equipment safely.

- I. Basic Fluoroscopic Parts**
  - a. Generator
  - b. Tube components tubes
  - c. Table components
  - d. Image intensifier components
  
- II. Basic Fluoroscopic Equipment**
  - a. Stationary Radiographic/fluoroscopic units
  - b. C-arm units
  - c. Single tube fluoroscopic units
  - d. Dose Area-Product Monitor (DAP)
  
- III. Radiation Safety and Protection in fluoroscopic use**
  - a. Nature of ionizing radiation
  - b. Biological effects of ionizing radiation
  - c. Units of measurement in radiation
  - d. Principles of reducing exposure to radiation
  - e. How does the ALARA concept fit in?
  - f. Monitoring personnel in a fluoroscopic unit
  
- III. Registrant's Responsibilities**
  - a. Registrant / RSO's knowledge of fluoroscopic use
  - b. Registrant /Staff's knowledge of fluoroscopic use
  - c. Documentation required for compliance

**IV. Operator qualifications**

- a. Qualifications to operate the equipment
- b. Who needs the **required** training?
- c. Who is prohibited from operating fluoroscopic equipment?

**V. Required fluoroscopic training for operators:**

- a. X-ray generation and control
- b. X-ray dosimetry
- c. Image formation
- d. Image acquisition
- e. Image processing and management
- f. Radiation effects
- g. Patient dose-management fundamentals
- h. Staff radiation safety
- i. Professional standards and regulatory requirements
- j. Type of equipment site-specific

**VI. Fluoroscopic Safety**

- a. Definition of safety
- b. ALARA Concept
- c. Principles of reducing exposure to radiation
- d. Ensuring fluoroscopic safety
- e. Individual monitoring in a fluoroscopic area following rule language
- f. FDA requirements for event reporting

**VI. Test and evaluation**