X-RAY TECHNOLOGY/2 (480 Hours)

Course No.: 76-45-86

COMPETENCY CHECKLIST

Student Name _____

Teacher Name _____ School Site _____

Start Date _____ Completion Date _____ Certificate Date_____

Teacher Signature_____ Student Signature _____

(Signature verifies completion of course competencies)

A. ANATOMY AND PHYSIOLOGY II (Theory: 30 hrs)

_____ 1. Review listed definitions
_____ 2. Skeletal system functions/composition
_____ 3. Identify/discuss listed organs/systems
_____ 4. Discuss/demo labeling listed anatomy items
_____ 5. Functions/structures of respiratory items
_____ 6. Discus/understand functions of items
_____ 7. Discuss/demo tasks using diagram

B. RADIOLOGIC PHYSICS (Theory: 30 hrs)

_____ 1. Define listed terms related to topic
_____ 2. Identify basics of radiologic physics
_____ 3. Demo drawing structure of matter/atoms
_____ 4. Identify parts/functions of x-ray equipment
_____ 5. Demo safe changing of table positions/tube
_____ 6. Define terms related to radiation
_____ 7. Discuss topics related to radiologic physics
_____ 8. Drawing/labeling basic x-ray tube diagram
_____ 9. Unrectified wave, half/full wave rectification
____ 10. Demo listed techniques related to topic

C. RADIOBIOLOGY AND RADIATION SAFETY
(Theory: 50 hrs/Lab: 20 hrs)

_____ 1. Define listed terms related to topic
_____ 2. Identify/discuss radiation exposure/safety
_____ 3. Demo calculation using a dose graph & x-ray
_____ 4. Define additional radiation/exposure terms
_____ 5. Discuss effects of radiation
_____ 6. Define dosimetry reports and filtration
_____ 7. Discuss filtration/patient dosage/shields
_____ 8. Placement of gonadal shield/precautions
_____ 9. Radiation units of measurements.
____ 10. Define half value layer
____ 11. Identify precautions/acceptable exposure
____ 12. Legal/ethical protections/responsibilities

D. RADIOGRAPHIC POSTIONING II (Theory: 20 hrs)

_____ 1.Positioning/anatomic position/body planes
_____ 2. General positioning principles/considerations
_____ 3. Demo patient preparation techniques
_____ 4. Basic and special positioning
_____ 5. List/identify listed positioning
_____ 6. Factors to produce an acceptable radiograph
_____ 7. Instructions for basic and special projections
_____ 8. Demo listed positioning/identifying/evaluating

E. FILM CRITIQUE II (Theory: 15 hrs)

_____ 1. Review definitions related to topic
_____ 2. Review principles listed in topic
_____ 3. Demo listed procedures/techniques
_____ 4. Criteria for evaluating radiographs
_____ 5. Analyzing/recommending improvements

F. PRINCIPLES OF EXPOSURE & IMAGE QUALITY II
(Theory: 15 hrs/Lab: 5 hrs)

_____ 1. Review factors of exposure/reciprocity law
_____ 2. Review/demo calculating exposures
_____ 3. Review effects of kVp and primary beam
_____ 4. Demo listed calculations/applications
_____ 5. Review listed principles of exposure
_____ 6. Demo methods improved image quality
_____ 7. Define listed terms related to topic
_____ 8. Identify listed items related to topic
_____ 9. Construction of grid items/analyze

G. CLINICAL ASSISTANT PROCEDURES II
(Theory: 15 hrs)

_____ 1. Review basic clinical procedures
_____ 2. Demo listed clinical procedures/techniques

H. CLINICAL EXPERIENCE (Clinical: 280 hrs)

_____ 1. Review/demo listed procedures/knowledge
_____ 2. Care for patient with muscoskeletal disorder
_____ 3. Care for patient with cardiovascular disorder
_____ 4. Demo radiographic standards for the chest
_____ 5. Demo imaging procedures for listed exams