

Students will describe the history of X-rays and the basics of the x-ray tube

Students will define the role of the radiologic technologist in healthcare and describe the qualifications of the personnel who work in the radiology field

Students will list and define the professional organizations for radiology.

Students will define and describe the importance and applications of ethics and professionalism in the clinical setting as well as the classroom setting.

Describe important name and dates relevant to the discovery of X-rays

Define the basic parts of the X-ray tube

Define the basics of X-ray production

Describe the typical organizational structure of a hospital radiology department and the function.

List the departments within the scope of radiology and briefly explain the function of each.

Identify personnel likely to be employed in a hospital radiology department including education level and work responsibilities

Differentiate between three general classifications of organizations

Define governing bodies for accreditation

Define governing bodies for certification

Define professional organizations

Define ethics and professionalism

Compare and contrast professional and ethically acceptable behavior.

Discuss the Code of Ethics followed by members of the ARRT

Explain the importance of being ethical and professional in the workplace

Define function, impact and/or medical legal issues concerning concerning:

- o Informed Consent

- o Confidentiality

- o Patient's Bill of Rights

- o HIPPA

Students will define course and program expectations

Students will describe equipment and exams performed in each of the clinical rotations.

Students will define the prime factors involved in x-ray production controlled by the radiologic technologist. Also, describe how those prime factors identify a quality image.

Define objectives for the course, program and profession and course expectations

Define objectives for clinical education

List total number of clinical education competencies

List total number of mandatory clinical education competencies

List total number of elective clinical education competencies

Describe exams performed in Emergency room rotation

Describe exams performed in Operating Room rotation

Describe exams performed in Portable rotation

Describe exams performed in Miscellaneous rotation

Describe exams performed in 3300 main street rotation

Describe exams performed in adult Fluoroscopy rotation

Describe exams performed in pediatric Fluoroscopy rotation

Describe exams performed in Pain Management rotation

List locations for all clinical rotations

List types of radiographic equipment used at the clinical sites

Define kilovoltage peak

Define Milliamperage seconds

Define Image Contrast and Optical Density

Compare and contrast High and Low contrast images

Compare and contrast increased and decreased density images

Define the 15% rule

Define and calculate the Inverse Square Law equation

Define Grid Construction

Describe when to use a grid and what affect it has on the image

Students will describe and follow infection control guidelines.
Define possible infectious diseases radiologic technologists come into contact with.

Define and describe healthcare communication.

Examine the role culture, beliefs, and diversity plays in the delivery of healthcare.

Describe the importance of handwashing in reducing infection
Define the cycle of infection
Describe common infectious diseases radiologic technologists are exposed to
Define Contact Precautions
Define Droplet Precautions
Define Neutropenic Precautions
Define Airborne Precautions
Define universal precautions
Demonstrate Sterile Glove technique
Describe Equipment cleaning guidelines

Describe the role verbal, written, and non-verbal communication plays in the workplace.
Identify the meaning and propose of a variety of non-verbal behaviors.
Discuss the importance of reporting observations verses inferences.
Demonstrate effective written communication skills using accurate spelling and punctuation, appropriate parts of speech, and proper grammar during completion of medical forms and reports.

Articulate the importance of understanding one's own cultural background and practices, personal biases, and assumptions
Articulate an understanding of the role culture plays in shaping

Course Objective	Competencies
<p>Students will define the biological effects of ionizing radiation</p>	<p>the health beliefs and health seeking behaviors of people from different cultural or religious backgrounds. Identify potential communication barriers and challenges including the which come from miscommunication based on cultural confusion and the use of technology</p> <p>Define Short term and Long term effects Define Hereditary and Genetic effects Define Stochastic and Non Stochastic effects List the measurement units for radiation</p>