# **5 Weeks Online Course**

# **Course Schedule**

### Week 1

Patient Care and Screening

Contrast Administration and Safety

#### Week 2

**Radiation Protection** 

Basic Principles of CT

### Week 3

**Data Acquisition** 

Image Reconstruction

Digital Image Processing

### Week 4

Image Manipulation

**Image Quality Factors** 

### Week 5

Spiral—Helical and Multislice Spiral—Helical

**Artifacts** 

# CT REGISTRY REVIEW MADE EASY COURSE

- \*All participants will receive a complimentary copy of <u>"CT Layman's Terms: Registry Review</u> (LJ Notes)" and Course Materials.
- \*Certificate of Course Completion
- \*Access to Instructor for CT questions and explanations
- \* See Terms and Conditions



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NEW AGE INNOVATIONS LLC.

TOUCHING LIVES
ONE INNOVATION AT
A TIME

## AN EDUCATIONAL

## **SERVICE OF:**



- 1. To become familiar with Patient Care and Screening Issues related to CT.
- 2. To review the Standards of CT Safety and types of Contrast Agents.
- 3. To review the radiation protection issues related to CT
- 4. To review the Basic Principles and Terms of CT Physics and the Instrumentation used in CT scanning.
- 5. To review the concepts of Data Acquisition, Image Reconstruction and Digital Imaging Processing used in CT scanning.
- 6. To review the concepts of Image Quality Factors and Manipulation involved in CT scanning.
- 7. To review the advantages and disadvantages of Spiral—Helical and Multislice Spiral—Helical CT machines.
- 8. To review the different types of CT Artifacts.

LAWRENCE MCNAIR JR., M.P.H., R.T. (R) (CT) (MR)

**Lawrence McNair is currently** working as an independent consultant with New Age **Innovations LLC, providing** MRI, CT, and X-ray education and operations consulting. Lawrence is the author of "MRI Layman's Terms Registry Review (LJ Notes)", "MRI **Layman's Terms: The Basis Concepts of MRI Physics Made** Easy (LJ Notes)", CT Layman's Terms Registry Review (LJ Notes)", "CT Layman's Terms: The Basic Concepts of CT Physics Made Easy (LJ Notes)", "Diagnostic X-Ray Layman's **Terms: The Basis Concepts of Diagnostic X-Ray Physics Made** Easy (LJ Notes)" and "Diagnostic X-Ray Layman's **Terms Registry Review (LJ** Notes)". Lawrence approach to this course is always entertaining and informative. Lawrence McNair's website is www.laymanterms.org.

# **COURSE OBJECTIVE**

This course is designed to provide a comprehensive review of Computer Tomography and a step by step method of preparation for successful completion of the America Registry of Radiologic Technologists (ARRT) CT Registry Exam. This course is also designed for students that had a difficult time passing the CT Registry in the past.

# **Sample of Topics Covered**

Positive and Negative Contrast Media

MSAD, CTDI, DLP, DAP, and Dose Profile

Penumbra, SSP, Rads and Grays

Automatic Exposure Controls and Automatic Tube Current Modulation

Attenuation, CT Numbers, and Windowing

SFOV, DFOV, Targeting, and Magnification

Contiguous and Non Contiguous Slices

Array processor, Gantry, and CPU

Parallel, Beam, Spiral, and Cone Beam

WW, WL, Isotropic, and Volume Coverage

Slice Thickness, Collimation, and Pitch