

## 5 Weeks Online Course

### Course Schedule

#### Week 1

MRI Safety

Contrast Administration

#### Week 2

Instrumentation

Basic Principles of MRI

#### Week 3

Contrast and Imaging Weighting

Types of Pulse Sequences

#### Week 4

Spatial Encoding and K – Space

Parameters and Tradeoffs

#### Week 5

Flow Phenomena and Compensation

Artifacts

## **MRI REGISTRY REVIEW MADE EASY COURSE**

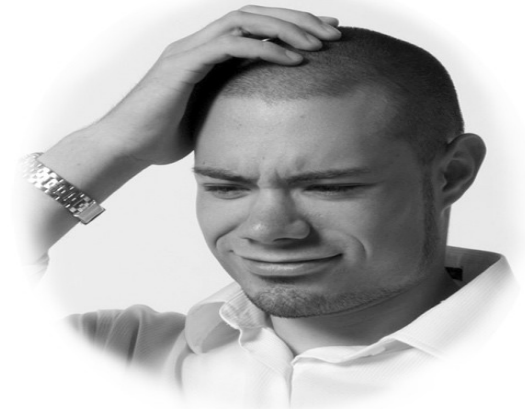
**\*All participants will receive a complimentary copy of "MRI Layman's Terms: Registry Review (LJ Notes)" and Course Materials.**

**\*Certificate of Course Completion**

**\*Access to Instructor for MRI questions and explanations**

**\* See Terms and Conditions**

**MRI  
REGISTRY  
REVIEW  
MADE EASY  
COURSE**



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ONE INNOVATION AT  
A TIME**

# AN EDUCATIONAL

## SERVICE OF:



## Objectives

1. To review the Standards of MRI Safety and types of Contrast Agents
2. To review the different types of MRI Machines and Coils used in MRI Scanning.
3. To review the Basic Principles and Terms of MRI Physics.
4. To review the different concepts of Imaging Weighting and the technical factors involved.
5. To review the concepts of Spatial Encoding and K – Space.
6. To review the advantages and disadvantages of the Parameters involved in MRI Scanning.
7. To review the different Pulse Sequences used in MRI Scanning.
8. To review the concepts of Flow Phenomena and Compensation Techniques.
9. To review and recognize the different types of image Artifacts.

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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. He also serves as the MRI Clinical Instructor at Birmingham Veterans Hospital. 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](http://www.laymanterms.org).**

## COURSE OBJECTIVE

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

## Sample of Topics Covered

Magnetism, Alignment of Spins, & Precession  
Larmor Equation, Resonance, & Free Induction Decay  
T1 and T2 Relaxation  
Repetition Time & Echo Time  
T1, T2, and PD Contrast Weighting  
Types of Pulse Sequences (Pros and Cons)  
Scanning Parameters  
Flow Phenomena and Compensation Tech.