

This Exam Outline was developed to help you prepare for the knowledge exam.

Review:

- Material classifications such as water or tissues
- Contrast agents, classifications, materials, dosing
- Imaging techniques such as CT, radiography, ultrasound, MRI
- Imaging sequencing and features
- MRI indications, contraindications, and clinical requirements
- Types of imaging, indications, contraindications, techniques
- Types of artifact, sources and causes
- Frequency types, uses, indications
- Magnetic field components and hardware
- Machine maintenance requirements
- FDA Recommended absorption rates
- Define:
 - o Central frequency
 - o Fast Fourier transform
 - o K-space formula
 - o Sum of Squares
 - Net magnetization factors
 - o Weighted sequence signals
 - o Anti-aliasing
 - Excitation pulses
 - o Inversion recover sequence
 - Slice select gradient
 - o Echo collection
 - o Frequency encoding
 - o Phase encoding
 - o RF pulse
 - o Faraday's law of induction
 - o Gauss
 - o Tesla

