



Initial Certification

Diagnostic Medical Physics (DMP)

Part 2 Content Guide

PLEASE NOTE: List of Constants and Physical Values for Use on the Part 2 Physics Exams

The ABR provides candidates with a list of constants, physical values, and related information, which can be found on [this page](#). While the list includes many constants and physical values, the ABR does not warrant the list as a compilation of all constants and physical values needed on the examinations. Candidates should review the list carefully before their examinations to familiarize themselves with the contents and list organization. Please note that although constants are provided, equations are not typically provided.

Content Guide

The content of all ABR exams is determined by a panel of experts who select the items based on a content guide that the ABR publishes. The content guides are assembled using guidance from medical physics organizations. The content guides are general documents, and individual exam items may not appear to be exactly congruent with the content listed in the guide. In addition, since there is only a limited number of items on any exam, selected items will only be a sample from the larger domain of the content guide.

1. Radiography, Mammography, Fluoroscopy, and Interventional Imaging

- X-ray imaging physics
- Radiography
- Mammography
- Fluoroscopy and Interventional Radiology
- Clinical Medical Physics Practice (radiography, mammography, fluoroscopy)

2. Computed Tomography

- CT Design and Fundamentals of Operation
- CT Clinical protocols and procedures
- CT Image Quality

- CT Radiation Dose and Patient Safety
- CT Clinical Medical Physics Practice

3. **MRI and Ultrasound**

- Magnetic Resonance Imaging and Spectroscopy Basic Physics
- MR Imaging procedures and Safety considerations
- Ultrasound basic physics, interactions, production and beam properties
- Ultrasound data acquisition, image characteristics and safety
- MRI and US Clinical Medical Physics Practice

4. **Informatics, image display, and image fundamentals**

- Information Systems Design and Fundamentals of Operation
- Image Display and Workstation
- Modality Image Characteristics
- Imaging Fundamentals
- [Professionalism and Ethics](#) – Clinical Medical Physics Practice

5. **Radiation Biology, Dosimetry, Protection, and Safety**

- Radiation Biology
- Dosimetry Fundamentals
- Radiation Protection
- Radiation Safety
- Room Shielding Design