Access to H.E.
National Programme Unit

Unit Title:	Non-Ionising Medical Imaging		
Graded Unit Code:	GA33PHY16	Ungraded Unit Code:	UA33PHY16
Pathway(s):	Health Science and Engineering Construction and the Built Environment		
Module(s):	Science for Health Physics		
Level:	Three	Credit Value:	3
Valid from:	1st August 2014	Valid to:	31st July 2024

The following QAA grade descriptors must be applied if you are delivering the graded version of this unit:

1	Understanding of the subject
2	Application of Knowledge
3	Application of Skills
7	Quality

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	**The learner can:**
1. Understand the principles and medical uses of ultrasound	1.1 Explain the principle of imaging using ultrasound in terms of: a) reflection and transmission characteristics of sound waves at tissue boundaries b) acoustic impedance c) attenuation
	1.2 Compare medical ultrasound scanning with other forms of imaging, including resolution and safety issues

LEARNING OUTCOMES	ASSESSMENT CRITERIA
The learner will:	**The learner can:**
2. Understand the principles and medical uses of fibre optics	2.1 Describe the structure of an optical fibre and explain the principle allowing light to bend along a fibre optic strand
	2.2 Describe the construction of the flexible endoscope
	2.3 Explain the advantages of the use of the flexible endoscope for a **range** of medical uses
3. Understand principles and medical applications of magnetic resonance	3.1 Explain the principles of the magnetic resonance scanner in terms of: a) Method of scanning and its effect at the molecular level b) Method of detection and image processing
	3.2 Explain the advantages of magnetic resonance scanning compared with X-ray tomography