

Module Details	
Module Title	Medical Ethics And Quality Management
Module Code	MHT6020-B
Academic Year	2021/2
Credits	20
School	Department of Biomedical and Electronics Engineering
FHEQ Level	FHEQ Level 6

Contact Hours	
Type	Hours
Lectures	16
Seminars	17
Tutorials	11
Directed Study	156

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Academic Year

Module Aims
To critically review medical ethics and quality systems as applied to medical engineering and clinical technology

Outline Syllabus
Ethics systems and codes of conduct. Research ethics - animals, people, human tissue. Confidentiality and data protection. Disclosure, testimony and freedom of information. Research ethics committees and clinical trials. Allocation of resources in healthcare. Standards of practice. Medical device regulation and quality standards. Risk assessment. Definition of quality and principles of quality management in a health care environment. Systems approach to quality management in a clinical setting. Human error and classification. Information management in health care quality to support risk management and patient safety. Data collection and performance measurement. Metrics and measures of healthcare quality and productivity improvement. Patient Safety management. Healthcare resource management. Leading, managing and organising quality and safety in healthcare. Service quality management. Care quality standards and regulations. Clinical governance. Accountability and learning from failure.

Learning Outcomes	
Outcome Number	Description
01	Critically evaluate medical ethics and quality assurance processes, and their importance and application in a range of medical engineering and clinical technology applications
02	Apply medical ethics and quality assurance to critically evaluate professional scenarios
03	Systemically solve problems.

Learning, Teaching and Assessment Strategy

Core content will be delivered through key lectures and directed reading, providing students with the opportunity to acquire the information to enhance their knowledge and understanding of subject LO 1&2. This will be complemented by group discussions and tutorials to allow students to apply this learning to specific issues.

Discipline skills will be developed in open-ended problem solving, tackled by working in small groups supported by members of academic staff LO 2&3.

Directed study provides students with the opportunity to undertake guided reading and to develop their own portfolio of learning to enhance transferable skills and knowledge LO 1&2.

The VLE will be used to provide access to online resources, lecture notes and external links to websites of interest.

The coursework will assess LO 1,2 & 3. This will include group and individual work with peer and tutor assessment. The coursework will relate to a detailed analysis of a Case Study and the formulation of detailed lessons learned from it. Research findings will be presented by each group to all students with the view to further enhancing experiential learning. Presenters will respond to challenging questions from peers and this will enhance critical thinking and enquiry based learning.

The examination component will assess LO 1,2 & 3. Example exam questions will be practiced in tutorial sessions.

This module satisfies the below Learning Outcomes as specified by the Accreditation of Higher Education Programmes: Third Edition (AHEP3) as published by The Engineering Council in-line with the UK Standard for Professional Engineering Competence (UK-SPEC). These outcomes specify six key areas of learning: Science and Mathematics (SM), Engineering Analysis (EA), Design (D), Economic, Legal, Social, Ethical and Environmental Context (EL), Engineering Practice (P) and Additional General Skills (G).

D2, EL1, EL2, EL5, EL6b, P5, P6, P7, EA3m, D3m, D7m, EL5m, EL6m.

Further details of these learning outcomes can be found at <https://www.engc.org.uk/>.

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Examination - Closed Book	Closed book, long answer exam (1.5 Hrs)	50%
Summative	Coursework - Written	Group project assessed by peers and academic staff 5000 words in total, approx 2000 per group member contribution	50%
Formative	Coursework - Written	Past exam paper to be completed prior to assessment and review during tutorial session (1.5 hours)	N/A

Reading List
To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

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