Module Details

Module Title: Telemedicine for the Digital Health Age
Module Code: MHT5010-B
Academic Year: 2019-20
Credit Rating: 20
School: Department of Biomedical and Electronics Engineering
Subject Area: Engineering
FHEQ Level: FHEQ Level 5
Pre-requisites: 
Co-requisites: 

Contact Hours

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>24</td>
</tr>
<tr>
<td>Tutorials</td>
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<tr>
<td>Directed Study</td>
<td>152</td>
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Availability

<table>
<thead>
<tr>
<th>Occurrence</th>
<th>Location / Period</th>
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<tbody>
<tr>
<td>BDA</td>
<td>University of Bradford / Academic Year (Sept - May)</td>
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Module Aims

The module aims to provide students with a good working knowledge related to Telemedicine and digital health care management. It also addresses the strategic, technical and operational issues of a wide range of telemedicine services for a variety of situations.

Outline Syllabus

Telemedicine, Telehealth and Telecare; A telehealth taxonomy; Healthcare technology, Types of Telemedicine, Telemedicine applications, Telemedicine Infrastructure; Benefits and Limitations of Telemedicine; Ethical and Legal Aspects of Telemedicine; Challenges to utilise mobile based health care monitoring systems; Communication networks and services;
Learning Outcomes

1. Demonstrate good knowledge and understanding of scientific principles and methodology necessary to underpin the telemedicine for digital health

2. Ability to apply and integrate knowledge and understanding of other engineering disciplines to support healthcare technologies

3. Exercise significant judgement in the context of integrated and multidisciplinary healthcare technology

4. Apply a critical approach to solve complex engineering problems.

Learning, Teaching and Assessment Strategy

Concepts are introduced using formal lectures, tutorials, laboratory practical and seminars. Deeper/better understanding is developed during tutorials by solving practical problems. Oral feedback is given during tutorial and laboratory sessions.

The following summative assessments are included: - Classroom test in Semester 1 (15%) to assess LO1, LO2, LO4 - Report portfolio of experimental work (15%) in Semester 2 to assess LO1, LO2 and LO3. - A written closed book exam (70%) by the end of semester 2 to assess LO1, LO2, LO3 and LO4.

LO1: SM1p, SM2p, SM3p
LO2: SM3p, EA1p, SM3p, EP4p
LO3: D1p, EA3p, D4p, D6p
LO4: EA4p, EP3p

Mode of Assessment

<table>
<thead>
<tr>
<th>Type</th>
<th>Method</th>
<th>Description</th>
<th>Length</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Summative</td>
<td>Laboratory Report</td>
<td>Report portfolio of experimental work</td>
<td>0-2500 words</td>
<td>15%</td>
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<tr>
<td>Summative</td>
<td>Examination - closed book</td>
<td>Examination-closed book</td>
<td>2 hours</td>
<td>70%</td>
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<tr>
<td>Referral</td>
<td>Examination - closed book</td>
<td>Written exam</td>
<td>2 hours</td>
<td>100%</td>
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<tr>
<td>Summative</td>
<td>Classroom test</td>
<td>Classroom test</td>
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<td>15%</td>
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Reading List

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