De Montfort University

Course Template

1. Basic information

• Course Name: Advanced Biomedical Science

• Course Code: SM087U

• Level (UG, PG): Postgraduate Taught

• Academic Period: 2015

Faculty: HLS - Faculty of Health & Life Sciences
 Department: School of Allied Health Sciences

• PMB ALHE

Offered at: DM - DMU Leicester

• Type (single, joint.): SI

• Highest Award : Master of Science

• All possible exit awards Postgraduate Certificate; Postgraduate Diploma; Institutional

Postgraduate Credit

• Award notes: The specialism in the Award title given to students will be based upon

their Dissertation topic.

Professional Body Recognition

Accreditation by Professional/Statutory body:

No

• Exemption by Professional/Statutory body:

No

Details

• Modes of attendance: Main MOA: Full-Time

Other MOA: Part-Time

• Mode Notes:

• Course leader: Peter Chimkupete

2. Entry Requirements and Profile

Normally a minimum of a 2:2 or equivalent Honours degree in Biomedical Science, or a relevant biological subject Other qualifications with relevant experience may be considered. Please contact us for more information In addition to this, part-time students will also need relevant professional experience (this would be normal practice as a Health and Care Professions Council (HCPC) registered biomedical scientist working in the NHS) Experienced practitioners are encouraged to apply

If English is not your first language an score of 6.5 or equivalent when you start the course is essential. English language tuition, delivered by our British Council accredited Centre for English Language Learning, is available both before and during the course if you need it.

3. Course Description

Characteristics and Aims

The aim of this programme is to provide students with an enhanced portfolio of skills relevant to biomedical science within the context of a developing inter-professional education agenda. The course will provide an interesting balance between the pathology, as well as the development of research skills, all of which culminate in a dissertation on a topic of the student's choosing linked to a specialist area of practice. Assessment will be via a number of different methods including essays, presentations, evaluation of published research, poster presentations, etc.

In the first year of the course the modules include Research Designs in Health; Molecular

Biology and Genomics; Quality Management and Evidence Based Practice. These modules examine the underpinnings of modern Biomedical research and provide the foundation for the dissertation. Some of the modules are also taken by several other cohorts of students from a health background, and inter-professional discussion will be encouraged, so as to ensure that topics are examined from a range of perspectives.

In the second semester of the course the modules comprise of Pathophysiology, Diagnostics and Cancer Biology; and Advanced Topics in Biomedical Science.

In the second semester the students undertake an assignment and also carry out a dissertation in a chosen specialist BMS discipline (i.e. Chemical Pathology, Histopathology and Cytopathology, Haematology and transfusion Science, Immunopathology or Medical Microbiology)

By the end of the course the students should be more knowledgeable and confident in their approach to problems and current issues in Biomedical Science. They will have developed core skills in leadership and quality management, with the ability to update knowledge in specialist areas of biomedical science.

Teaching, Learning and Assessment Strategies

This programme will provide opportunities for students to discuss their understanding of key issues (the use of evidence, quality, research, etc.) in the health service with other professionals working within a health context.

In the second semester students will have the opportunity to develop their knowledge and understanding of the principles behind routine and advanced diagnostics, pathophysiology and cancer biology with respect to the five main Biomedical Science disciplines. This will expand and enrich their understanding of Advanced Biomedical Science.

The dissertation will enable students to investigate an area of their own choosing relevant to a career in biomedical science.

The final year of the course is a dissertation, which will enable the students to investigate an area of their own choosing, relevant to their professional practice, in considerable depth.

Key Skills

Several modules, e.g. Evidence Based Practice will provide opportunities for students to develop their skills in group work and debate, within an inter-professional context. Students will also be able to develop their critical thinking and ability to present material to others succinctly and clearly. Students' IT skills will also be enhanced, particularly their internet searching skills, as well as their ability to present data in an appropriate manner.

Methods

The course employs a variety of methods of teaching, with a strong emphasis on the students' ability to investigate topics and issues for themselves. During the course students will encounter lectures, seminars and workshops as well as participate in discussions about teaching and learning methods themselves, to ensure that they are both comfortable with the course content and its methods of delivery. Detailed examination and discussion of the topics within the modules will also help the students develop their analytical and problem solving skills.

Assessment

Students will be able to demonstrate their achievement of learning outcomes using a variety of appropriate assessment tasks including:

- Poster presentations
- · Evaluation of published research
- Dissertation
- Reports

The assessment criteria for each assessment task will refer to the relevant learning outcome/s.

Structure and Regulations

The modules are delivered in the order above with the aim of ensuring that there is a progressive development of the knowledge and skills necessary for the students to complete successive years of their course, culminating in the dissertation. Students with appropriate qualifications (see above) will be able to join the course at any point and also to exit at any point after the first year with an award (see above).

4. Outcomes

| Generic outcome headings | | What a student should know and be able to |
|--------------------------|-------------------------|--|
| | <u> </u> | do upon completion of the course |
| • Kn | owledge & understanding | On completion of the course the students will: Have an increased understanding of research design and analysis Understand the increasing importance of evidence based practice Understand the holistic context of education and practice within biomedical science |
| • Coş | gnitive skills | Students will be able to demonstrate the following cognitive skills: The ability to reason critically The ability to select relevant information/evidence and evaluate it The ability to formulate questions appropriate to the material being investigated The ability to identify methodological and logical problems in experiments, evaluations and arguments |
| • Suk | oject specific skills | Design an appropriate investigation Find the evidence to determine the preferred assessments and treatments of choice |
| • Key | y Skills | Students will Develop their ability to think critically Improve their collaborative skills Improve their debating skills Enhance their IT skills Improve their ability to present data and information |

5. Structure and Regulations

Relationship Details

| remained by | wiib | | | | | |
|-----------------|---------|-------|-----------|--------------|---------------|-----------|
| Module | Credits | Level | Take/Pass | <u>S</u> | emester | Locations |
| BIOM5007 | 15.00 | 5 | Both | 2 | DM | |
| BIOM5008 | 15.00 | 5 | Both | Y, 1 | \mathbf{DM} | |
| BIOM5009 | 15.00 | 5 | Both | Y, 2 | DM | |
| BIOM5011 | 30.00 | 5 | Both | 2 | \mathbf{DM} | |
| BIOM5012 | 60.00 | 5 | Both | \mathbf{X} | DM | |
| HEST5001 | 30.00 | 5 | Both | 1 | DM | |
| MPHE5100 | 15.00 | 5 | Both | 1, 2 | DM | |
| | | | | | | |

Structure

Structure notes

1 The modules are delivered in the order above with the aim of ensuring that there is a progressive development of the knowledge and skills necessary for the students to complete successive years of their course, culminating in the dissertation. Students with appropriate

| | qualifications (see above) will be able to join the course at any point and also to exit at any point after the first year with an award (see above). |
|--------|---|
| L | point after the first year with an award (see accord). |
| | Course Specific Differences or Regulations |
| | 1 |
| F | Numbers at sites, including partner institutions |
| | 1 |
| F | Relevant QAA Subject Benchmarking statement(s) |
| | 1 |
| 6. | Quality Assurance Information |
| | QA of Workbased Learning |
| | |
| г | Liaison with Collaborative Partners |
| | |
| F | Procedures for Maintaining Standards |
| | As per DMU procedures for PG. |
| Course | Handbook Descriptor |
| | |