GUIDANCE ON THE EVALUATION OF NON–ACCREDITED QUALIFICATIONS

1. Introduction

1.1 This document provides guidance notes for the assessment of academic qualifications that have not been formally accredited by the Institute. It details the components of an accredited course. It also details the assessment process used to scrutinise all non-accredited academic qualifications in order to identify any deficiency against the academic requirements of the Health and Care Professions Council (HCPC) standards of proficiency.

1.2 All applications are assessed only on the basis of the subject content and level of the qualifications award. Applicants who do not hold an Institute accredited BSc (Hons) Biomedical Science or Healthcare Science degree may include individuals who hold other biomedical science(s) degrees, other healthcare science degrees, science degrees, “other” UK qualifications and those with qualifications from overseas (both from within and outside the European Union). Please note that all overseas qualifications must include an assessment against UK NARIC (United Kingdom National Academic Recognition Information Centre) criteria to provide a comparison to UK qualifications.

1.3 The assessment is normally carried out by senior executive staff at the Institute, who are HCPC registered biomedical scientists, as well as Chartered Scientists and Fellows of the IBMS. Academic staff closely associated with IBMS accredited biomedical science undergraduate degrees (e.g. programme leaders, IBMS/university liaison officers) may also carry out assessments.

1.4 The following serves to provide a formalised record of how these assessments should be approached and underpins the need that each decision made must be defensible and transparent.

1.5 Applicants are advised that if a qualification is not equivalent to an honours degree and basic subjects such as human anatomy & physiology, biochemistry cell biology are missing then the qualification will be rejected and they will be required to complete an IBMS accredited BSc (Hons) degree. Applicants will be advised on specific areas where their shortfall lies. Recognition of any prior learning would then be at the discretion of the university offering the individual entry to their accredited program.

1.6 Applications that are missing one or two basic subjects, any key laboratory specialities or the research project are advised they require supplementary education in order to achieve the equivalent to an IBMS accredited biomedical science degree.
2. **Degree Assessment Application Form**

2.1 Applicants are required to provide:
- Photocopy of either birth certificate or the personal details section of your passport.
- Photocopy of change of name (if certificates list any previous names, e.g. maiden name)
- Photocopy of UK NARIC (www.uknaric.org.uk) comparability for non-UK qualification(s). **This should equate to UK honours degree standard.** (To note: some designate the comparability to UK degree standard which is accepted provided there is evidence of an appropriate research project).

2.2 They must include a copy of their degree certificate(s) to confirm the name of the award. If they have already passed their degree but not received the degree certificate we will require confirmation of the degree award (i.e. a letter from the university). If they are currently enrolled on a degree programme we will not assess the degree until they are able to confirm the degree award and provide a list of modules that have been passed.

2.3 Applicants are expected to complete the application form by indicating where this is evidenced in the submitted course information of their academic qualifications. For each qualification a photocopy of the subject specific content for each of the modules listed on the academic transcript of the applicants results must be submitted if the module has been referenced the module against the basic knowledge and key laboratory specialities in the academic profile. This information is usually referred to as a module descriptor and must be clearly identifiable as a university document. If official module descriptors are not available, alternatives must be substantiated with the university stamp. This evidence is essential if the assessment is to take place.

3. **Assessment Process**

3.1 The qualifications are assessed against the academic components described in the QAA Subject benchmark statement for biomedical science (2015) which are the basis of the taught elements on an IBMS accredited degree. [http://www.qaa.ac.uk/en/Publications/Documents/SBS-Biomedical-sciences-15.pdf](http://www.qaa.ac.uk/en/Publications/Documents/SBS-Biomedical-sciences-15.pdf)

3.2 The assessment will determine whether or not the academic profile has sufficient depth and breadth of the subject areas or whether there are deficiencies that require further academic study.

3.3 Assessments are carried out by scrutiny of the following information:
- University transcript(s) of the course i.e. a list of modules receiving an award of academic credits or mark confirming the module has been passed. Compensated modules are not accepted.
- Full module descriptors, including areas of study and learning outcomes.

3.4 The assessor must confirm the following:
- Title of award, awarding institution and date of award;
- Level of award;
- UK NARIC assessment of comparability to UK award (if applicable).
3.5 The assessor must make a reasoned judgement to assess the content of the qualification(s) against the QAA subject benchmark statement for biomedical science (2015) using the completed application form.

3.6 It must not be assumed that the applicant’s own assessment of where the subjects have been studied is accurate. This is particularly important for the Key Laboratory Specialities which specifically address the knowledge and understanding of disease processes in the context of laboratory investigation.

3.7 It is important to note that the learning outcomes of modules from non-accredited courses must indicate a level of attainment in the key discipline subjects (i.e. the threshold standard) commensurate with an accredited biomedical science degree.

3.8 If information pertaining to the taught subjects is missing, the assessor must request further information from the applicant (via the Registration Department) in order to complete the assessment process.

3.9 Outcome of assessment process: There are 3 possible outcomes of the assessment process:

   a) Acceptance of the qualification(s) without the requirements for further academic study. If the assessor is unable to identify any areas where supplementary education is required the qualification is accepted;

   b) Acceptance of the qualification(s) subject to supplementary education to make up a deficit in subject knowledge. If the assessor identifies areas of academic knowledge where supplementary education is required the qualification is accepted subject to this requirement;

   c) Rejection of the qualification(s) on the basis of lack of academic achievement. Qualifications may be rejected if they fall below the academic standard commensurate with an honours degree (for example a Certificate of Medical Laboratory Practice) or significant lack of core and key subject areas, rendering the degree not relevant to biomedical science to the extent that supplementary modules are not an option.

3.10 Applicants from outcomes a) and b) are informed of the outcome of the assessment process and of the requirement to complete the IBMS registration portfolio as a record of training for the award of the Certificate of Competence, in order to become eligible to apply to the HPC for registration. Applicants from outcome c) are advised of the requirement for them to gain an IBMS accredited degree in addition to completing their registration portfolio.

3.11 All applicants have the right of appeal. Appeals will be considered on the basis of additional information or challenges to the decision making process. In the case of an appeal the original assessor is given the opportunity to review their decision in conjunction with a second assessor. This has the dual function of ensuring consistency in the assessment process.
4. **QAA Subject Benchmark Statement for Biomedical Science (2015)**

Biomedical sciences programmes generally include:

i) Human anatomy and physiology: the structure, function, neurological and hormonal control of the human body, its component parts and major systems (musculoskeletal, circulatory, respiratory, digestive, renal, urogenital, nervous, endocrine) and their relationship to each other.

ii) Cell biology: the structure and function of prokaryotic and eukaryotic cells; the cell as the fundamental unit of life; cell division, cell cycle, stem cells, cell specialisation and cooperation.

iii) Biochemistry: key chemical principles relevant to biological systems, the structure and function of biological molecules and the biochemistry of processes which support life including cellular metabolism and its control.

iv) Genetics, genomics and human variation: the structure and function of genes, the principles of their inheritance, genetic disorders with particular biomedical significance, evolution and population biology.

v) Molecular biology: the structure and function of biologically important molecules including DNA, RNA and proteins and the molecular events that govern cell function. Molecular biology overlaps with biochemistry, genetics and cell biology.

The nature of disease and fundamentals of pathology to include the development of age-related diseases and the impact of lifestyle upon health and disease.

vi) Bioinformatics and systems biology: the computation of high volumes of biological data and the properties of a network of interacting components in a system, as well as the components themselves, including an appreciation of the algorithms to decipher biological relationships.

vii) Microbiology: the structure, physiology, biochemistry, identification, classification and control of micro-organisms, including the roles of normal flora.

viii) Immunology: acute and chronic inflammation, structure, function and mechanisms of action of the components of the immune system; innate and acquired immunity.

Subject-specific knowledge, understanding and skills in Biomedical Science:

Within the broader biomedical sciences are clinical laboratory subjects that specifically address the knowledge and understanding of disease processes in the context of the study and investigation of those processes.

Cellular pathology is the microscopic examination of normal and abnormal cells (cytopathology), and tissues (histopathology) for indicators of disease. A biomedical science graduate will have a knowledge of:

- the gross structure and ultrastructure of normal cells and tissues and the
- structural changes which may occur during disease
reproductive science, including infertility and embryology
the preparation of cells and tissues for microscopic examination
the principles and applications of visualisation and imaging techniques, including
microscopy, to aid diagnosis and treatment selection.

Clinical biochemistry is the investigation of the function and dysfunction of systems, organs and tissues by the measurement of biochemical markers. A biomedical science graduate will have knowledge of:

- the range, and methods used for the collection of, clinical samples that may be subjected to biochemical analysis
- the principles and applications of biochemical investigations used for screening, diagnosis, treatment and monitoring of disease
- therapeutic drug monitoring and investigation of substance abuse.

Clinical immunology is the study of immunopathological conditions and abnormal immune function. A biomedical science graduate will have knowledge of:

- the principles of the function and measurement of effectors of the immune response
- the causes and consequences of abnormal immune function, neoplastic diseases and transplantation reactions together with their detection, diagnosis, treatment and monitoring
- immunological techniques used in clinical and research laboratories
- prophylaxis and immunotherapy.

Haematology is the study and investigation of the different elements that constitute blood in normal and diseased states. A biomedical science graduate will have knowledge of:

- the structure, function and production of blood cells
- the regulation of normal haemostasis
- nature and diagnosis of anaemias, haematological malignancies, haemorrhagic and thrombotic diseases
- techniques for their investigation.

Transfusion science is the identification of blood group antigens and antibodies which ensures a safe supply of blood and blood components. A biomedical science graduate will have knowledge of:

- the genetics, inheritance, structure and role of red cell antigens
- immune mediated destruction of blood cells
- the preparation, storage and use of blood components
- the selection of appropriate blood components for transfusion and possible adverse effects.

Clinical genetics is the identification of genetic mutations and polymorphisms and their influence on disease processes. A biomedical science graduate will have knowledge of:

- genomic, transcriptomic, proteomic methods used to analyse and study human chromosomes and DNA
- the application of molecular biology and Bioinformatics in medicine
pharmacogenetics and personalised medicine
genetic testing and associated ethical issues.

Medical microbiology is the study and investigation of pathogenic microorganisms. A biomedical science graduate will have knowledge of:

- the pathogenic mechanisms of a range of microorganisms
- public health microbiology
- the laboratory investigation of a range of infectious diseases, including isolation and identification of microorganisms
- anti-microbial and anti-viral therapy (including drug resistance)
- infection control.