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### Biosciences Benchmark Statement

#### *Extracts Relevant to Linking Teaching and Research\**

The full Benchmark statement can be downloaded from <http://www.qaa.ac.uk/>

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#### **3.2 Subject knowledge**

Methods of acquiring, interpreting and analysing biological information with a critical understanding of the appropriate contexts for their use through the study of texts, original papers, reports and data sets

#### **3.3 Generic skills**

The ability to read and use appropriate literature with a full and critical understanding while addressing such questions as content, context, aims, objectives. Quality of information, and its interpretation and application.

[The ability to employ a variety of methods of study in investigating, recording and analysing material.]

#### **3.6 Practical skills**

Designing, planning, conducting and reporting on investigations which may involve primary or secondary data . . .

Obtaining, recording, collating and analysing data using appropriate techniques in the field and/or laboratory . . .

Undertaking field and/or laboratory investigations of living systems in a responsible, safe and ethical manner . . .

#### **3.7 Numeracy, communication and IT skills**

Sample selecting; recording and analysing data in the field and/or the laboratory; validity, accuracy, calibration, precision, replicability and uncertainty during collection.

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Preparing, processing, interpreting and presenting data, using appropriate qualitative and quantitative techniques, statistical programmes, spreadsheets and programs for presenting data visually.

#### **4.3 Teaching, learning and assessment**

Lectures should encourage and enable students to . . . understand the means by which scientific information is obtained.

#### **4.4 Teaching, learning and assessment**

Laboratory classes, fieldwork and computer sessions provide education in scientific approaches to discovery, practical experience, opportunities for acquisition of subject-specific and transferable skills . . .

#### **4.6 Teaching, learning and assessment**

All honours degree students are expected to have some personal experience of the approach, practice and evaluation of scientific research (e.g. within a project or research-based assignments). This is likely to be in a student's final year . . .

##### **Generic standards**

Be able to plan, execute and present an independent piece of work (e.g. a project) in which qualities such as time-management, problem solving and independence are evident, as well as interpretation and critical awareness of the quality of evidence.

##### **Subject-specific standards (molecular aspects)**

Be able to devise and evaluate suitable experimental methods for the investigation of relevant areas of biochemistry and molecular biology.