

Biosciences Benchmark Statement

Extracts Relevant to Linking Teaching and Research*

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

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.

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 som 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.