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### Biosciences Benchmark Statement

#### *Extracts Relevant to ethics\**

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

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### **3 Knowledge, understanding and skills in the biosciences**

**3.2 Subject knowledge:** Engagement with some of the current developments in the biosciences and their applications, and the philosophical and ethical issues involved. Awareness of the contribution of biosciences to debate and controversies, and how this knowledge and understanding forms the basis for informed concern about the quality and sustainability of life.

**3.3 Generic skills:** The capacity to give a clear and accurate account of a subject, marshal arguments in a mature way and engage in debate and dialogue both with specialists and non-specialists.

**3.5 Intellectual skills:** recognising the moral and ethical issues of investigation and appreciating the need for ethical standards and professional codes of conduct.

**3.6 Practical skills:** undertaking field and /or laboratory investigations of living systems in a responsible, safe and ethical manner. For example, students must pay due attention to risk assessment, relevant health and safety regulations, and procedures for obtaining informed consent. In some biosciences, graduates will show that they respect the rights of access, for example in field work or in order to map the genes of a community, family or group of plants or animals, including humans. They should show sensitivity to the impact of investigations on the environment, on the organisms or subjects under investigation, and on other stakeholders.

### **4 Teaching, learning and assessment**

4.6 All honours degree students are expected to have some personal experience of the approach, practice and evaluation of scientific research (eg within a project or research-based assignments). This is likely to be in the student's final year, and may draw on the experience gathered during the course as a whole. Such work is likely to include collection and analysis of information (eg from fieldwork, laboratory work, or questionnaires, as well as from the literature), interpretation of the information within the context of current knowledge, suggestions for further work, reference to safety and ethical considerations where relevant and a presentation or report on the findings. It may sometimes be appropriate for students to do this kind of work in areas not strictly related to research, for example in education or in the public understanding of science.

### **5 Subject standards**

Have some understanding of ethical issues and the impact on society of advances in the biosciences; be able to construct reasoned arguments to support their position on the ethical and social impact of advances in the biosciences.

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\*Note that under "Subject standards" a digest has been produced of the wording in the two levels specified [threshold and good].