

Curriculum mapping to Subject Benchmark Statements

Subject Benchmark Statements are part of the QAA Quality Code – Part A: Setting and maintaining academic standards (see <https://www.qaa.ac.uk/quality-code/subject-benchmark-statements>). According to the QAA they “set out expectations about standards of degrees in a range of subject areas. They describe what gives a discipline its coherence and identity and define what can be expected of a graduate in terms of the abilities and skills needed to develop understanding or competence in the subject.”

Subject benchmark statements are regularly updated, and it is important to map degree programmes to their benchmark statements on a regular basis to ensure the programmes remain appropriate. The documents provided by QAA are extensive and can cover a very large set of skills. For example, the one for biosciences covers intellectual skills, analytical skills, communication skills, interpersonal skills, and professional development skills as well as core knowledge and understanding expected in that discipline. The benchmark standards are also couched in terms of generic standards and subject-specific standards and each of those is split into threshold standards and typical standards. Given this complexity you are advised to map your programme to the **typical** level of the **subject-specific** standards. See overleaf for a typical mapping of the biochemistry degree programme to the relevant biosciences subject benchmark statements.

Curriculum mapping to Aberdeen Graduate Attributes

The Aberdeen Graduate Attributes describes a set of 19 attributes that students should have the opportunity to develop during their time studying at the University of Aberdeen. Not every course has to offer the opportunity to develop every attribute, but the expectation is that each programme will afford students the opportunity to develop all 19 Aberdeen Graduate Attributes. This information is required as part of the course and programme approval process, but it is useful to revisit this every few years as programmes change over time. The Internal Teaching Review (ITR) process is a timely opportunity for programme leaders to map the programme as it currently stands against the 19 Aberdeen Graduate Attributes to ensure that all are covered within the degree programme.

Shown overleaf is an example for the Biochemistry degree programme. Whilst we do not ask where or how in the course a particular attribute may be developed, bear in mind that an ITR panel may request this information.

Example 1: Curriculum mapping to subject benchmark statements: biochemistry and related subjects (biosciences) - Biochemistry degree programme

Subject-specific standards; typical standard: On graduating with an Honours degree in biosciences in which the study of molecular aspects of biology (including biochemistry) forms a significant proportion, graduates will be able to:

Subject benchmark statement	SM1501 (the cell)	BI20M3 (mol. Biol. of the gene)	BI2017 (genes & evolution)	BI25M5 (microbes, infection & immunity)	BI25M7 (energy for life)	BC3503 (mol. Control cell function)	SM3001 (frontiers mol. Med. Sci.)	MB3006 (Molbiol of cell)	BC4014 (Biochem option 1)	BC4314 (Biochem option 2)	MB4050 (core Hons course)	MB4502 (project)
understand the chemistry that underlies biochemical reactions and the techniques used to investigate them	X			X	X		X	X	X	X	X	X
explain the principles that determine the three-dimensional structure of biological macromolecules and give detailed examples of how structure enables function	X	X				X		X	X		X	
demonstrate a critical understanding of the molecular basis of genetics and explain some detailed examples			X								X	
demonstrate critical knowledge and understanding of gene expression, with a detailed knowledge of specific examples; the structure, arrangement, expression, and regulation of genes; and relevant experimental methods	X	X				X	X	X			X	
demonstrate knowledge of a wide range of cells (both prokaryotic and eukaryotic) and explain critically how their properties suit them for their biological function, and how they could be investigated experimentally	X			X	X	X		X		X	X	

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devise and evaluate suitable experimental methods for the investigation of relevant areas of biochemistry and molecular biology					X	X	X	X				X
demonstrate a critical understanding of essential features of cell metabolism and its control, including topics such as energy and signal transduction, respiration and photosynthesis (including knowledge and experience of some experimental techniques)	X				X	X						
explain the chemical and thermodynamic principles underlying biological catalysis and the role of enzymes and other proteins in determining the function and fate of cells and organisms	X					X						
mine, manipulate and interpret data from small molecule and/or macromolecular databases.							X				X	

Example 2: Curriculum mapping to Aberdeen Graduate Attributes - Biochemistry degree programme

Aberdeen Graduate Attribute	SM1501 (the cell)	B120M3 (mol. Biol. of the gene)	B12017 (genes & evolution)	B125M5 (microbes, infection & immunity)	B125M7 (energy for life)	BC3503 (mol. Control cell function)	SM3001 (frontiers mol. Med. Sci.)	MB3006 (Molbiol of cell)	BC4014 (Biochem option 1)	BC4314 (Biochem option 2)	MB4050 (core Hons course)	MB4502 (project)
Academic Excellence												
In-depth and extensive knowledge, understanding and skills at internationally-recognised levels in their chosen discipline(s)	X	X	X	X	X	X	X	X	X	X	X	X
A breadth of knowledge, understanding and skills beyond their chosen discipline(s)	X		X	X							X	
An ability to participate in the creation of new knowledge and understanding through research and inquiry								X				X
A contextual understanding of past and present knowledge and ideas;						X	X	X		X	X	X
An intellectual curiosity and a willingness to question accepted wisdom and to be open to new ideas									X	X	X	X

Aberdeen Graduate Attribute	SM1501 (the cell)	BI20M3 (mol. Biol. of the gene)	BI2017 (genes & evolution)	BI25M5 (microbes, infection & immunity)	BI25M7 (energy for life)	BC3503 (mol. Control cell function)	SM3001 (frontiers mol. Med. Sci.)	MB3006 (Mol biol of cell)	BC4014 (Biochem option 1)	BC4314 (Biochem option 2)	MB4050 (core Hons course)	MB4502 (project)
Critical Thinking & Effective Communication												
A capacity for independent, conceptual and creative thinking;						X	X	X	X	X	X	X
A capacity for problem identification, the collection of evidence, synthesis and dispassionate analysis;					X	X	X	X	X	X	X	X
A capacity for attentive exchange, informed argument and reasoning;						X	X	X	X	X	X	X
An ability to communicate effectively for different purposes and in different contexts;	X	X	X	X	X	X	X	X	X	X	X	X
An ability to work independently and as part of a team;	X	X	X	X	X	X	X	X	X	X	X	X
A diverse set of transferable and generic skills	X	X	X	X	X	X	X	X	X	X	X	X
Learning & Personal Development												
An openness to, and an interest in, life-long learning through directed and self-directed study;						X	X	X	X	X	X	X
An awareness of personal strengths and weaknesses,	X						X	X				X
A capacity for self-reflection, self-discovery and personal development					X		X	X	X	X	X	X
Active Citizenship												
An awareness and appreciation of ethical and moral issues;	X	X	X	X	X	X	X	X		X		
An awareness and appreciation of social and cultural diversity;			X		X					X		
An understanding of social and civic responsibilities, and of the rights of individuals and groups;	X				X							
An appreciation of the concepts of enterprise and leadership in all aspects of life;	X				X							X
A readiness for citizenship in an inclusive society	X				X					X		

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