

Assessment plan for the curriculum of the Bachelor's degree programme in Biology, 2025-2026

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Date advice Board of Examiners: 31-07-2025

Date approval Faculty Board:

1. Vision on assessment

1. Assessment guides and evaluates student learning towards an understanding of the unifying principles of biology, and in-depth knowledge in one of the focus areas: molecular life sciences, behaviour and neuroscience, biomedical sciences, ecology and evolution, or integrative biology.
2. Assessment cultivates the development of (academic) communication skills, collaboration in projects, scientific literacy, critical thinking, and biological research skills; it also enables students to experience how these skills are applied in the context of scientific research in biology.
3. Assessment assures and rewards transparency and integrity in learning, research and communication, and activates student learning to encourage a self-motivated mindset and lifelong learning.

2. Assessment guidelines

Please explain the general assessment procedures that are used in the programmes. For example, 4-eyes principle in test design, standardised grading forms, rubrics.

1. Assessment strategies incorporate a mix of formative and summative assessment activities.
2. Course units that use multiple summative tests, use different methods of summative evaluation to determine partial grades. Course units in the same academic period coordinate their method of summative assessment so as to realize a sufficiently diversified mix of assessment activities.
3. Formative assessment can be organized online and onsite, all summative assessment is organized onsite.
4. Resits follow the original assessment strategy, unless this is not feasible. In any event, the result of a resit must be a valid and reliable assessment of the student's mastery of the learning outcomes. Except in case of force majeure, the use of a different assessment method in a resit must be specified in the course unit description on Ocasys.
5. Individual grades from group assignments are determined using peer assessment methods or by inclusion of the assessment of practical work.
6. Unless explicitly prohibited in the description of the relevant course unit on Ocasys, students may use AI tools in assignments in which they have to create written products. The design of the writing assignment and its assessment help to ensure that the student's creative input is complemented rather than substituted by the use of AI tools. In addition, students must define how they have used AI tools at all stages of the writing process and include explanations of their usage within the assignment.
7. In a BSc research project, thesis, or other learning activity where a student is supervised individually, a typical learner can be expected to deliver a final product of sufficient quality after

two rounds of feedback (one in an early stage, focusing on design and global structure , the other with detailed comments when a first complete draft is available). If a third round of feedback is needed to achieve a product of sufficient quality, supervisors will take this into account in the determination of the final grade, along with other relevant information: if no mitigating circumstances apply, the grade awarded for the final product is restricted to be ≤ 7 .

3. Learning outcomes of the degree programme

Learning outcomes for the degree programme, further specified learning outcomes (where relevant) and/or specified for tracks within the degree programme. Please add extra rows if necessary.

	Learning Outcome <i>At the end of the programme, the graduate is able to ...</i>
1	Explain general basic principles of biology and describe how they relate to each other
2	Estimate the relevance of research results in one or more areas of biology published in academic journals and discuss these results with peers
3	Describe fundamental and/or applied scientific research and recognize areas of interest within it
4	Describe the relationship between various disciplines and integrate terms and concepts from the subject areas
5	Recognise and analyse scientific problems, and design a scientific/academic approach to them in a systematic manner
6	Under supervision, formulate a research hypothesis or propose a research design within their own discipline, and possess sufficient practical skills to conduct the research themselves
7	Explain the societal relevance of the discipline, evaluate the related responsibilities and judge their individual role in that context
8	Develop a work method independently and proactively, justify it, and carry it out in order to achieve a specific aim
9	Contribute to and take responsibility for solving a specific problem or task in a specific role as part of a team
10	Report about research in a structured manner, both orally and in writing
	<i>The degree programme also offers the student:</i>
11	To explore career opportunities and opportunities for follow-on degree programmes

4. Overview of assessment methods for course units, and examiners

This table shows all the course units for each year of the programme and assessment methods.

Year 1

Year	Period	Course code	Course title	EC	Assessment methods	Does (part of the) assessment have a formative function?	Course coordinator (if different from first examiner)	First examiner	Second examiner
1	1a+1b	WBBY086-02	Basic Academic Skills	2	R, P, AST	Yes	Kortholt, A. (1b); Drion, C.D. (1a)	Kortholt, A. + Drion, C.M.	Scheffers, D.J.
1	1a	WBBY001-05	Basic Cell and Molecular Biology	5	WE, MC	No		D.J. Scheffers	Quax, T.E.F.
1	2a	WBBY026-05	Behavioural Neurosciences	5	MC, R	Yes		Havekes, R.	Zee, E.A. van der
1	2a	WBBY029-05	Biochemistry and Cell Biology in Ecology and Evolution	5	WE	Yes		Thunnissen, A.M.W.H.	t.b.a.
1	1b	WBBY014-05	Biostatistics 1	5	MC	Yes		Miliars-Argeitis	Verhulst, S.
1	2a	WBBY033-05	Cell Biology and Immunology	5	MC, AST	t.b.d.		Kamenz, J.L.	Heeringa, P.
1	2b	WBBY052-05	Ecophysiology of Plants and Animals	5	WE, PR	Yes		Veen, H. van	Dietz, M.W.
1	2a	WBBY038-05	Evolutionary Ecology	5	WE	t.b.d.		Verhulst, S.	Pen, I.R.
1	1a	WBBY005-05	Genetics, Ecology and Evolution	5	WE	Yes		Dugdale, H.L.	Tiedge, K.
1	1b	WBBY021-03	Lab course	3	R, PR, AST	No		Bij, K. van der	Visser, S.
1	2b	WBBY087-05	Laboratory Research Skills in Life Sciences	5	R, PR, AST	Yes		Bianchi, F.	Bij, K. van der
1	1b	WBBY058-05	Metabolism	5	WE	t.b.d.		Heinemann, M.	Bakker, B.
1	2a	WBBY022-05	Microbiology	5	WE, IT	Yes		Poolman, B.	Driessen, A.J.M.
1	1a	WBBY047-05	Molecules of Life	5	WE	No		Kudernac, T.	Walvoort, M.T.C.
1	2b	WBBY011-05	Physiology	5	MC, PR	Yes		Drion, C.M.	Scheurink, A.J.W.

1	2b	WBBY079-02	Research Skills in Ecology and Evolution 1	2	R	Yes		Geuverink, E.	Smit, C.
1	2b	WBBY080-05	Research Skills in Ecology and Evolution 2	5	WE, MC	No		Smit, C.	Geuverink, E.
1	2b	WBBY081-03	Research Skills in Ecology and Evolution 3	3	PR	Yes		Geuverink, E.	Smit, C.
1	2b	WBBY088-05	Theoretical Research Skills in Life Sciences	5		t.b.d.		Kortholt, A.	Drion, C.

Years 2 and 3

Year	Period	Course code	Course title	E C	Assessment methods	Does (part of the) assessment have a formative function ?	Course coordinator (if different from first examiner)	First examiner	Second examiner
3		WBBY091-05	Bachelor's Thesis Life Sciences	5	R	t.b.d.		Appointed examiner	Appointed examiner
2	1b	WBBY013-05	Behavioural Biology	5	MC	No		Moorman, S.	Riedstra, B.J.
2	2a	WBBY027-05	Big Data in Human Disease	5	R, P, PR	No		Kurilshchikov, A.M.	Fu, Jingyuan
3	2a	WBBY073-05	Bioanalytical and Omics Techniques	5	WE, P	No		Thunnissen, A.M.W.H.	Horvatovich, P.L.
2	1a	WBBY002-05	Bioinformatics	5	R, P, PR, AST	Yes		Jong, A. de	Incarnato, D.
2	2b	WBBY049-05	Biology & Society: Ethical and Professional Aspects	5	WE, P, AST	Yes		Genne, M.K. van	Zevenberg, J.
2	2a	WBBY030-05	Biology of Cancer	5	MC, PR	Yes		Bruyn, de M.	De Jong, S.
2	2a	WBBY031-05	Biology of Human Behaviour	5	MC	t.b.d.		Riedstra, B.J.	Zee, E.A. van der
2	1b / 2a	WBBY090-05	Biomedical Sciences Practical	5	R, PR	Yes		Ma, K.Y.; Bruyn-Rybczynska, de, A.A.	Bij, K. van der
2	2b	WBBY050-05	Bio-organic Chemistry	5	WE	t.b.d.		Mayer, C.	Walvoort, M.T.C.
2	2a	WBBY032-05	Biostatistics 2	5	WE	No		Bentham, K.J. van	Pen, I.R.
3	2a	WBBY074-05	Biotechnology	5	WE	Yes		Fraaije, M.W.	Fürst, M.J.L.J.
2	2b	WBBY051-05	Cardiovascular Disease	5	MC, AST	t.b.d.		Krenning, G.	Kamps, J.A.A.M.
2	2a	WBBY034-05	Cell Biology and Microscopy	5	WE	No		G. van den Bogaart	Roos, W.H.
2	1a	WBBY003-05	Chronobiology	5	MC, PR, AST	No		Hut, R.A.	Meerlo, P.
3	2b	WBBY076-05	Competences and Professionalization in Biology	5	R, P, AST	No		Rijssel, M. van	Westerhof, M.

2	1b	WBBY016-05	Conservation Biology	5	WE	No		Eriksson, B.D.H.K	Oloff, H.
2	2b	WBBY083-05	Ecological and Evolutionary Modelling	5	WE, P, AST	No		Egas, C.J.M.	Erten, Y.
2	2a	WBBY035-05	Endocrinology	5	MC, R	Yes		Faas, M.M.	Smink, A.M.
2	2b	WBBY053-05	Enzymology and Thermodynamics	5	WE	No		Slotboom, D.J.	Maglia, G
2	2a	WBBY036-05	Epigenetics and Gene-editing	5	WE, MC, PR	Yes		Rots, M.G.	Olivier, J.D.A.
2	2a	WBBY037-05	Evolution and Development	5	MC, P, AST	No		Chan, Y.G.F.	Billeter, J.C.
2	2b	WBBY054-05	Evolutionary and Ecological Genomics	5	WE, AST	Yes		Hackl, T.	Lequime, S.
2	2a	WBBY039-05	Evolutionary Medicine	5	WE, P	Yes		Vos, M.G.J. de	Lequime, S.
2	2a	WBBY040-05	Evolutionary Processes	5	AST, PR	Yes		Erten, E.Y.	Etienne, R.S.
2	2a	WBBY041-05	Food and Metabolism	5	MC, R	Yes		Kruit, J.K.	Jonker, J.W.
2	1b	WBBY018-05	Genes and Behaviour	5	WE, P, PR	Yes		Billeter, J.C.	Eisel, U.L.M.
2	1a	WBBY004-05	Genes and Evolution	5	WE	Yes	Jones, F.C.	Geuverink, E.	Wilwert, E.
2	2b	WBBY055-05	Hematopoietic stem cells: development, differentiation and disease	5	MC, P, PR, AST	No		Boom, V. van den	Schuringa, J.J.
2	1b	WBBY042-05	Human Genetics and Genomics	5	WE, P, AST	Yes		Ma, K.Y.	Westers, H.
2	1b	WBBY020-05	Immunology	5	MC	No		Bogaart, G. van den	Nawijn, M.
2	2a	WBBY043-05	Immunology and Disease	5	MC, AST	t.b.d.		Laman, J.D.	Heeringa, P.
2	2b	WBBY056-05	Integrative Biology	5	WE, P, AST	Yes	Laetz, E.M.J.	Wilwert, E.	Laetz, E.M.J.
2	1a	WBBY006-05	Integrative Neuroscience	5	MC, R, PR	No		Dijk, G.J. van	Zee, E.A. van der
2	2a	WBBY091-05	Machine Learning in Ecology and Evolution	5	P, AST	t.b.d.		Bentham, K.J. van	Doorn, van G.S.
2	2a	WBBY044-05	Marine Biology	5	WE, AST	Yes		Meij, S. van der	Boer, M.K. de
2	2a	WBBY045-05	Medical Cell Biology	5	WE, P	No		Mauthe, M.	Baron, W.
2	2b	WBBY057-05	Medical Physiology	5	MC	Yes		Duinen, H. van	Otter-Drost, T.A.
2	1a	WBBY007-05	Medical Structural Biology	5	WE, AST	No		Guskov, A.	Thunnissen, A.M.
2	2a	WBBY059-05	Microbes and Infection	5	MC, PR	Yes		Sol, M.	Huckriede, A.L.W.
2	2b	WBBY060-05	Microbiome	5	WE, P	No		Falcao Salles, J.	Vos, M.J. de
2	1b	WBBY024-05	Modelling Life	5	WE, AST	Yes		Doorn, G.S. van	Milias, A.
2	1a	WBBY008-05	Molecular Genetics	5	WE	Yes		Incarnato, D.	Alvarez-Sieiro, P.
2	2b	WBBY061-05	Molecular Research in Human Disease	5	R, P, AST	No		Koonen, D.P.Y.	Sluis, A.J.A. van de
2	2b	WBBY062-05	Neurobiology of Ageing	5	MC, AST	Yes		Zee, E.A. van der	Jorna, L.M.

2	2b	WBBY084-05	Palaeobiology – connecting past and present	5	MC, PR, AST	Yes		Geer, van der, A.A.E.	Etienne, R.S.
2	2a	WBBY048-05	Practical Carrousel	5	R, PR, AST	t.b.d.		Alvarez Sieiro, P.	Fraaije, M.W.
2	2b	WBBY063-05	Psychobiology	5	WE, R, P, AST	No		Drion, C.M.	Meerlo, P.
2	1b	WBBY089-05	Python for Biologist	5	AST	t.b.d.		Doorn, G.S. van	Erten, E.Y.
3	2b	WBBY903-10	Research Project Behaviour & Neurosciences	0	R, P, PR	Yes		Jorna, L.M.	Appointed examiner
3	2b	WBBY902-10	Research Project Biomedical Sciences	10	R, P, PR	t.b.d.		Bruyn-Rybczynska, de, A.A.	Appointed examiner
3	2a	WBBY911-15	Research Project Ecology and Evolution	15	R, P, PR	t.b.d.	Geuverink and Tiedge	Appointed examiner	Appointed examiner
3	2a	WBBY910-20	Research Project Integrative Biology	20	R, P, PR	t.b.d.	Laetz	Laetz, E.M.J.	Appointed examiner
3	2b	WBBY909-15	Research Project Molecular Life Sciences	15	R, P, PR	t.b.d.	Alvarez Sieiro	Alvarez Sieiro, P.	Appointed examiner
2	2a	WBBY085-05	Sensory Biology	05	MC	Yes		Kooi, C.J. van der	Billeter, J.C.
2	1a	WBBY070-05	Systems Ecology & Ecological Interactions 1	5	WE	No		Veen, H. van	Both, C.
2	1a	WBBY071-05	Systems Ecology & Ecological Interactions 2	5		t.b.d.		Both, C.	Veen, H. van

The column 'Test moment(s)' was omitted from the table, as this information is currently not available.

The abbreviations for the relevant teaching methods are explained in the legend of the table.

Examples of assessment methods include:

- *Written Exam (WE)*
- *Multiple Choice (MC)*
- *Oral Exam (OR)*
- *Report (R)*
- *Presentation (P)*
- *Practical Work (PR)*
- *Assignment (AST)*

5. Relationship between course units and details of the learning outcomes

Please note in the table below the course units per block in the programme. Indicate which learning outcomes are assessed in which courses by adding an X in the relevant cell. Please add extra rows if necessary.

An X means that the learning outcome is explicitly assessed (not merely addressed) in the course.

Year 1

Period	Course code	Course title	BMS	BN	MLS	EE	IB	Learning outcomes of the degree programme										
								1	2	3	4	5	6	7	8	9	10	11
1a+1b	WBBY086-02	Basic Academic Skills	C	C	C	C	C		x							x	x	
1a	WBBY001-05	Basic Cell and Molecular Biology	C	C	C	C	C	x			x							
2a	WBBY026-05	Behavioural Neurosciences	C	C	C	C	C	x	x		x			x				x
2a	WBBY029-05	Biochemistry and Cell Biology in Ecology and Evolution				C	C - route B	x			x			x				
1b	WBBY014-05	Biostatistics 1	C	C	C	C	C	x	x			x	x		x	x		x
2a	WBBY033-05	Cell Biology and Immunology	C	C	C		C - route A	x			x							
2b	WBBY052-05	Ecophysiology of Plants and Animals				C	C - route B	x	x	x	x			x				x
2a	WBBY038-05	Evolutionary Ecology				C	C - route B	x	x	x	x			x				x
1a	WBBY005-05	Genetics, Ecology and Evolution	C	C	C	C	C	x	x	x	x	x		x				x
1b	WBBY021-03	Lab course	C	C	C	C	C	x			x	x			x		x	x
2b	WBBY087-05	Laboratory Research Skills in Life Sciences	C	C	C		C - route A	x	x	x		x	x				x	
1b	WBBY058-05	Metabolism	C	C	C		C - route A	x		x								
2a	WBBY022-05	Microbiology	C	C	C	C	C	x	x	x	x	x		x				
1a	WBBY047-05	Molecules of Life	C	C	C		C - route A	x		x	x	x		x	x			
2b	WBBY011-05	Physiology	C	C	C	C	C	x		x	x			x				
2b	WBBY079-02	Research Skills in Ecology and Evolution 1				C	C - route B		x								x	

2b	WBBY080-05	Research Skills in Ecology and Evolution 2				C	C - route B		x		x		x		x	x	x	
2b	WBBY081-03	Research Skills in Ecology and Evolution 3				C	C - route B				x		x		x	x	x	
2b	WBBY088-05	Theoretical Research Skills in Life Sciences	C	C	C		C - route A	x	x	x		x	x	x		x	x	x

C = compulsory, E = elective, Major- # = choice group (students must choose a specified number of course units from this group).

Abbreviations majors:

BMS = Biomedical Sciences

BN = Behaviour and Neurosciences

MLS = Molecular Life Sciences

EE = Ecology and Evolution

IB = Integrative Biology

Years 2 and 3

									Learning outcomes of the degree programme										
Year	Period	Course code	Course title	BMS	BN	MLS	EE	IB	1	2	3	4	5	6	7	8	9	10	11
3	2a or 2b	WBBY01-05	Bachelor's Thesis Life Sciences	C	C					x							x	x	
2	1b	WBBY013-05	Behavioural Biology		C		EE-1	IB-1	x	x	x								
2	2a	WBBY027-05	Big Data in Human Disease	E	E				x	x	x	x	x	x		x	x	x	
3	2a	WBBY073-05	Bioanalytical and Omics Techniques			MLS-2			x	x	x	x	x				x	x	
2	1a	WBBY002-05	Bioinformatics	C	BN-1	C		IB-2	x				x			x	x	x	
2	2b	WBBY049-05	Biology & Society: Ethical and Professional Aspects	C	C	C	C	C		x		x		x	x		x	x	x
2	2a	WBBY030-05	Biology of Cancer	E		E			x	x	x	x	x		x		x	x	
2	2a	WBBY031-05	Biology of Human Behaviour		BN-3		E	E	x	x				x				x	
2	1b	WBBY090-05	Biomedical Sciences Practical	C					x			x	x	x		x	x	x	
2	2a	WBBY090-05	Biomedical Sciences Practical	C	E				x			x	x	x		x	x	x	
2	2b	WBBY050-05	Bio-organic Chemistry	E		C			x	x	x	x							
2	2a	WBBY032-05	Biostatistics 2	E	E	E	C	C* (only for RP in EE area)		x			x	x		x			
3	2a	WBBY074-05	Biotechnology			MLS-2			x	x	x	x			x		x		x
2	2b	WBBY051-05	Cardiovascular Disease	E					x	x	x	x	x				x	x	
2	2a	WBBY034-05	Cell Biology and Microscopy	E	E	C			x	x		x			x				x
2	1a	WBBY003-05	Chronobiology		BN-1			IB-2	x	x			x	x		x	x	x	x
3	2b	WBBY076-05	Competences and Professionalization in Biology	E	E		E	E		x	x	x	x		x		x	x	x
2	1b	WBBY016-05	Conservation Biology				EE-2	IB-4	x	x	x	x			x				x
2	2b	WBBY083-05	Ecological and Evolutionary Modelling				E	E	x		x	x	x						x
2	2a	WBBY035-05	Endocrinology	E	BN-3	E			x	x	x						x	x	

2	2b	WBBY053-05	Enzymology and Thermodynamics			C			x			x						
2	2a	WBBY036-05	Epigenetics and Gene-editing	E	E	E			x		x						x	
2	2a	WBBY037-05	Evolution and Development		E		E	C	x	x	x	x			x			x
2	2b	WBBY054-05	Evolutionary and Ecological Genomics		E		E		x	x	x	x			x			x
2	2a	WBBY039-05	Evolutionary Medicine	E	BN-3	E	E	IB-3	x	x	x	x					x	x
2	2a	WBBY040-05	Evolutionary Processes		E		E		x	x	x	x	x		x			x
2	2a	WBBY041-05	Food and Metabolism	E	E	E			x	x	x	x	x		x	x	x	x
2	1b	WBBY018-05	Genes and Behaviour		BN-2		EE-2	IB-4	x			x	x	x	x	x	x	x
2	1a	WBBY004-05	Genes and Evolution		BN-1		C	IB-2	x		x	x						x
2	2b	WBBY055-05	Hematopoietic stem cells: development, differentiation and disease	E					x	x	x	x	x		x		x	x
2	1b	WBBY042-05	Human Genetics and Genomics	E	E	E	E	IB-1	x	x	x	x	x		x		x	
2	1b	WBBY020-05	Immunology	C	BN-2	C		IB-4	x		x				x			
2	2a	WBBY043-05	Immunology and Disease	E		E			x	x	x	x	x		x		x	x
2	2b	WBBY056-05	Integrative Biology		E		E	C	x	x	x	x					x	x
2	1a	WBBY006-05	Integrative Neuroscience	BMS-1	C	MLS-1		C	x			x					x	x
2	2a	WBBY091-05	Machine Learning in Ecology and Evolution				E			x	x	x	x		x	x		x
2	2a	WBBY044-05	Marine Biology				E	E	x			x			x		x	x
2	2a	WBBY045-05	Medical Cell Biology	E		E			x	x	x	x	x					x
2	2b	WBBY057-05	Medical Physiology	E	E				x			x					x	
2	1a	WBBY007-05	Medical Structural Biology	BMS-1		MLS-1			x		x	x	x			x		
2	2a	WBBY059-05	Microbes and Infection	E	E	E			x		x	x	x		x		x	x
2	2b	WBBY060-05	Microbiome	E	E	C	E	E	x	x	x	x	x		x			x
2	1b	WBBY024-05	Modelling Life	C	C	C	C	C	x		x	x	x				x	x
2	1a	WBBY008-05	Molecular Genetics	C	C	C		C	x	x	x	x	x		x			
2	2b	WBBY061-05	Molecular Research in Human Disease	E					x	x	x		x	x		x	x	x

2	2b	WBBY062-05	Neurobiology of Ageing	E	BN-3				x	x	x	x			x				x
2	2b	WBBY084-05	Palaeobiology – connecting past and present				E	E	x		x	x						x	
2	2a	WBBY048-05	Practical Carrousel			C								x		x	x	x	
2	2b	WBBY063-05	Psychobiology	E	BN-3				x	x	x	x	x	x	x		x		
2	1b	WBBY089-05	Python Programming for Biologists	E		C	EE-1	IB-1											
3	2a or 2b	WBBY903-10	Research Project Behaviour & Neurosciences		C					x	x		x	x		x	x	x	
3	2a or 2b	WBBY902-10	Research Project Biomedical Sciences	C						x	x		x	x		x	x	x	x
3	2a or 2b	WBBY911-15	Research Project Ecology and Evolution				C			x	x		x	x		x	x	x	x
3	2a	WBBY910-20	Research Project Integrative Biology					C		x	x		x	x		x	x	x	x
3	2b	WBBY909-15	Research Project Molecular Life Sciences			C				x	x		x	x		x	x	x	
2	2a	WBBY085-05	Sensory Biology		E		E	IB-3	x			x					x	x	
2	1a	WBBY070-05	Systems Ecology & Ecological Interactions 1				C		x	x	x	x							x
2	1a	WBBY071-05	Systems Ecology & Ecological Interactions 2				C		x	x	x	x							x
Course units from other programmes																			
		WBFA060-05	Introduction to Nanomedicine and Drug Targeting	E		E													
		WBLT009-05	Programming for Life Sciences		E														

C = compulsory, E = elective, Major- # = choice group nr. X (students must choose a specified number of course units from this group).

Abbreviations majors:

BMS = Biomedical Sciences

BN = Behaviour and Neurosciences

MLS = Molecular Life Sciences

EE = Ecology and Evolution

IB = Integrative Biology