Assessment plan for the curriculum of the Master's degree programme in Ecology and Evolution, 2025-2026

Programme director: prof. dr. ir. C. (Chris) Smit

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1. Vision on assessment

1. Assessment guides and evaluates student learning in a multidisciplinary context to investigate structures, functions and changes in conservation ecology and evolutionary biology from several perspectives.
2. Assessment stimulates the integration of knowledge and skills in a research-based educational context, including the development of (academic) communication skills, collaboration in projects, creative and analytical thinking, and the acquisition of field-specific methodological expertise.
3. Assessment stimulates the student's ability to perform scientific research in an independent manner: including designing experiments and data collection; critically analyze and interpret results; and effectively communicate the conclusions to an interdisciplinary audience.

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. Formative assessment can be organized online and onsite, all summative assessment is organized onsite.
3. 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 intended learning outcomes.
4. 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.
5. Oral exams need to be supervised by at least two teachers, where one person leads the discussion/asks the questions, and the other takes notes or in some other way records the process.
6. In a MSc research project, colloquium, or other learning activity where a student is supervised individually, the student is 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.

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 *At the end of the programme, the graduate*
1	a) has acquired in depth knowledge on one or more scientific disciplines within the field of Ecology and Evolution, and can use this knowledge to explain in detail the relevant concepts, using the appropriate terminology; b) has acquired cross disciplinary knowledge of issues across scientific disciplines within the field of Ecology and Evolution and can use this knowledge to explain current societal and scientific challenges;
2	can design, and conduct scientific research, and systematically organize his/her work in scientific research;
3	can independently investigate, and critically evaluate scientific literature;
4	can identify new developments in the related disciplines, and can become familiar with these developments;
5	can formulate realistic, and original solutions to complex problems;
6	can participate in, and contribute to a multidisciplinary team;
7	can effectively communicate acquired knowledge, insights and skills to others, both in writing, and in oral presentation;
8	can identify societal and ethical implications of scientific research, and is able to critically reflect on his/her actions in this context;
9	can independently acquire new knowledge, and skills that are relevant for his/her professional career, in science, in policy & management or society.

	Track-specific Learning Outcome *After completion of the track Ecology and Conservation, the graduate*
T1	can contribute to the development of new knowledge and to solving current ecological problems and future challenges;
T2	can apply relevant eco-evolutionary theories and methods to current pertinent issues in nature conservation;
T3	can analyse the functioning and stability of natural communities in the wild by integrating theory and ecological research;
T4	can communicate research and philosophies of ecology and conservation at a professional level to a scientific audience.

	Track-specific Learning Outcome *After completion of the track Evolutionary Biology, the graduate*
T1	can contribute to the development of new knowledge and to elucidating evolutionary processes;
T2	can apply central concepts of evolutionary theory in various research contexts, including empirical research and theoretical modelling;
T3	can analyse population or individual-based genetic and genomic data to address research questions in conservation genetics, evolutionary ecology, development and behaviour;
T4	can communicate eco-evolutionary principles, theory and research at a professional level to a scientific audience.

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

This table shows all the course units for each year of the programme and assessment methods. Please add extra rows if necessary.

Track Ecology and Conservation:

Year	**Period**	**Course**	**EC**	**Assessment methods** *Multiple answers may apply*	**Does (part of the) assessment have a formative function?**	**Test moment(s)** *Multiple answers may apply* (e.g. mid-term, continuous assessment, exam week, etc)	**First examiner**	**Second examiner**
1	1a1-2	Ecological Research Skills	10	R/P	Yes		Prof. Dr. H. Olff	Prof. Dr. ir. C. Both
1	1a3	Conservation Ecology Practices	5	R/P/AST	No		Prof. Dr. Ir. C. Smit	Prof. Dr. T. van der Heide
1	1B1	Advanced Population and Community Ecology	5	P/PR/AST	Yes		Prof. Dr. ir. C. Both	Prof. Dr. H. Olff
1/2	1B2	Ecology of sustainable farming (biennial)	5	R/P/AST	Yes		Prof. Dr. P.A. Tittonell	Prof. Dr. H. Olff
1/2	1B2	Agroecology for Sustainable Landscapes (biennial fieldcourse)	5				Prof. Dr. P.A. Tittonell	Prof. Dr. Ir. C. Smit
1/2	1B2	Flyway ecology	5	R/P	Yes		Prof. Dr. ir. C. Both	Dr. Ir. T.K. Lameris
1/2	1B3	Research proposal Ecology and Evolution	5	R/P	Yes		Prof. Dr. B.I. Tieleman	Dr. M. Nicolaus
1/2	2a1	Island Biology	5	P/R/AST	Yes		L. Lima Valente	Prof. dr. R. Etienne
1/2	1B3	Molecular Methods in Ecology and Evolution	5	R/P/PR	Yes		Dr. E. Geuverink	Prof. Dr. J. Falcão Salles
1/2	2a3	Mathematical Models in Ecology and Evolution	6	WE	Yes		Prof. Dr. I.R. Pen	Prof. Dr. C.J.M. Egas

Year	Period	Course	EC	Assessment methods *Multiple answers may apply*	Does (part of the) assessment have a formative function?	Test moment(s) *Multiple answers may apply* (e.g. mid-term, continuous assessment, exam week, etc)	First examiner	Second examiner

Track Evolutionary Biology:

Year	Period	Course	EC	Assessment methods	Does (part of the) assessment have a formative function?	Test moment(s) (e.g. mid-term, continuous assessment, exam week, etc)	First examiner	Second examiner
1	1a1-2	Behaviour, Ecology and Evolution	10	R/P/PR/ AST	Yes		Prof. Dr. ir. J. Komdeur	M. Nicolaus, PhD
1	1a3	Evolutionary Theory	5	AST	Yes		Prof. Dr. I.R. Pen	Prof.dr. G.S. van Doorn
1	1B1	Principles of Population Genetics in Natural Populations	5	P/MC	Yes		Prof. Dr. P.J. Palsboll	Dr. M. Bérubé
1	1B2	Genomics in Ecology and Evolution	5	R/AST	Yes		T. Hackl, PhD	Prof. Dr. J. Falcão Salles
1/ 2	1B3	Research proposal Ecology and Evolution	5	R/P	Yes		Prof. Dr. B.I. Tieleman	Dr. M. Nicolaus
1/ 2	2a1	Island Biology	5	P/R/AST	Yes		L. Lima Valente	Prof. dr. R. Etienne
1/ 2	1B3	Molecular Methods in Ecology and Evolution	5	R/P/PR	Yes		Dr. E. Geuverink	Prof. Dr. J. Falcão Salles

Year	Period	Course	EC	Assessment methods	Does (part of the) assessment have a formative function?	Test moment(s) (e.g. mid-term, continuous assessment, exam week, etc)	First examiner	Second examiner
1/2	2a3	Mathematical Models in Ecology and Evolution	6	WE	Yes		Prof. Dr. I.R. Pen	Prof. Dr. C.J.M. Egas

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.

		Learning outcomes of the degree programme Ecology and Conservation																		
		1	2	3	4	5	6	7	8	9	T 1	T 2	T 3	T 4						
Period	**Course**	**Year 1 –compulsory courses**																		
1a1-2	Ecological Research Skills	X	X	X	X	X	X	X	0	X										
1a3	Conservation Ecology Practices	X	X	X	X	X	X	X	X	X										
1B1	Advanced Population and Community Ecology	X	X	X	X	X	0	X	0	X										
	Research Project 1	X	X	X	X	X	X	X	X	X										
Period	**Course**	**Year 1 Electives (if applicable)**																		
1B2	Ecology of sustainable farming (biennial)	X	X	X	X	X	0	X	X	X										
1B2	Agroecology for Sustainable Landscapes (biennial)	X	X	X	X	X	0	X	X	X										
1B2	Flyway ecology (	X	X	X	X	0	X	X	X	X										
1B3	Research proposal Ecology and Evolution	X	X	X	X	X	0	X	X	X										
2a1	Island Biology	X	X	X	X	X	0	X	X	X										

		Learning outcomes of the degree programme Ecology and Conservation																		
2a3	Mathematical Models in Ecology and Evolution	X	X	X	X	X	X	X	0	X										
Period	**Course**	**Year 2 compulsory courses**																		
	Research Project 2	X	X	X	X	X	X	X	X	X										
	Colloquium	X	0	X	X	X	0	X	X	X										
Period	**Course**	**Year 2 Electives (if applicable)**																		
1B3	Molecular Methods in Ecology and Evolution	X	X	X	X	X	X	X	0	X										

		Learning outcomes of the degree programme Evolutionary Biology																		
		1	2	3	4	5	6	7	8	9	T 1	T 2	T 3	T 4						
Period	**Course**	**Year 1 –compulsory courses**																		
1a1-2	Behaviour, Ecology and Evolution	X	X	X	X	X	X	X	0	X										
1a3	Evolutionary Theory	X	X	X	X	X	X	X	0	X										
1B1	Principles of Population Genetics in Natural Populations	X	X	X	X	X	X	X	X	X										
1B2	Genomics in Ecology and Evolution	X	X	X	X	0	X	X	X	X										
	Research Project 1	X	X	X	X	X	X	X	X	X										

		Learning outcomes of the degree programme Evolutionary Biology																			
Period	**Course**	**Year 1 Electives (if applicable)**																			
1B3	Research proposal Ecology and Evolution	X	X	X	X	X	0	X	X	X											
2a1	Island Biology	X	X	X	X	X	0	X	X	X											
Period	**Course**	**Year 2 compulsory courses**																			
	Research Project 2	X	X	X	X	X	X	X	X	x											
	Colloquium	X	0	X	X	X	0	X	X	X											
Period	**Course**	**Year 2 Electives (if applicable)**																			
1B3	Molecular Methods in Ecology and Evolution	X	X	X	X	X	X	X	0	X											