

Assessment plan for the curriculum of the Master's degree programme in Behavioural and Cognitive Neuroscience, 2024-2025

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Date advice Board of Examiners: May 28, 2024

Date approval Faculty Board:

1. Vision on assessment

1. Assessment guides and evaluates student learning in a multidisciplinary context to develop research skills in the field of neurosciences in health and disease from a behavioural, cognitive, and/or molecular/clinical perspective.
2. Assessment actively stimulates collaboration in projects, combining specific knowledge and skills in the field of neurosciences, contributing to research teams.
3. Assessment stimulates the student's independent ability to design an experiment, collect, analyse and interpret data, 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. Summative assessment strategies comprise of two or more distinct activities.
2. Formative assessment can be organised online and onsite, all summative assessment is organised onsite.
3. For reports a maximum of two feedback rounds (one on parts, one on the first full draft) are organised, if a third round of feedback is needed to guide students to sufficient quality, the maximum grade is a 7.
4. Reports (major and minor thesis) should include a section in which the author's contribution to the report is described.
5. Individual grades from group assignments are determined using peer assessment methods or by inclusion of the assessment of practical work.
6. When incorporating AI tools into assignments that involve creating written products, students must define how they have used these tools at all stages of the writing process and include explanations of their usage within the assignment.

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
	Knowledge and Understanding
	<i>At the end of the programme, the graduate has acquired</i>

1	specialised knowledge in one of the three subfields of behavioural, cognitive or medical neurosciences and can use this knowledge to explain in detail the relevant concepts, using the appropriate terminology for their field.
2	a broad overview of contemporary issues in the area of behaviour, cognition, and neurosciences.
3	apply appropriate experimental designs and statistical models.
4	a long-lasting network of (future) colleagues valuable for their career.
5	an understanding of the requirements for a successful international scientific career and the ability to judge whether he/she fulfils these requirements.
Applying knowledge and understanding	
<i>At the end of the programme, the graduate has demonstrated</i>	
6	the ability to select and apply modern neuroscience techniques and research approaches.
7	understanding of the need for multidisciplinary/interdisciplinary approaches to investigate the working of the brain and can work in a multidisciplinary/ interdisciplinary environment.
8	the ability to design and conduct scientific research, taking into account the limitations of available information and scientific problems in behaviour, cognition and neuroscience.
9	understanding of how to act according to the guidelines of scientific integrity
10	the ability to reflect on the social and ethical responsibilities linked to the application of his/her knowledge and judgement.
11	understanding of how to apply for research grants and fund their career in research.
Making judgements	
<i>At the end of the programme, the graduate has demonstrated the ability to</i>	
12	evaluate scientific results, views and concepts with a positive critical attitude
13	independently investigate and critically evaluate scientific literature.
14	have a general work orientation that is required for participation in an international research team, contributing to collective goals, effective time management, and participation in a research network.
Communication	
<i>At the end of the programme, the graduate has demonstrated the ability to</i>	
15	present scientific research in written and verbal form, taking into account the limitations of their conclusions.
Learning skills	
<i>At the end of the programme, the graduate has demonstrated to</i>	

16	independently acquire new knowledge and skills that are relevant for his/her professional career.
17	obtain an overview of the core issues in a scientific area in a short period of time.

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.

General course units

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	1A	Introduction to BCN	3	R	Yes ▾	Continuous on fridays	A. Sarampalis	R. Havekes
1	1B	Career Related Topics	2	AST	Yes ▾	After block 1A	M.H. Kas	R.Havekes
1	1B/2 B	Advanced Statistics for BCN	5	AST	Yes ▾	*	I.R.Pen	K. J. van Benthem
1	2A/B	Minor Project	29	R/P	Yes ▾	*	Divers	Divers
1/2	2B	Summer Symposium I/II	1	P	Yes ▾	*	R. Havekes	N.Gervais
2	1A/B	Colloquium	4	P	Yes ▾	*	Divers	Divers
2	2A/B	Major Project	40	R/P	Yes ▾	*	Divers	Divers

B-track

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	1A	Rhythms in brain function and behaviour	5	P	Yes ▾	*	P. Meerlo	R.A. Hut
1	1A	The Neuroendocrine Basis of Behaviour	5	AST, P, PR, R	Yes ▾	*	A.J.W. Scheurink	J.D.A. Olivier
1	1B	Mechanisms of sensory-motor Learning	5	WE	Yes ▾	*	S. Moorman	R.Havekes
1	1B	<i>Elective</i>	5		Yes ▾			

C-track

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	1A	Cognitive Neuroscience 1	5	R, P	Yes ▾	*	M.R. Nieuwenstein	W. Kruijne
1	1A	Functional Neuroscience C-track	5	WE, AST	Yes ▾	*	M.M. Lorist	R.J. Renken
1	1B	Cognitive Neuroscience 2	5	WE, AST	Yes ▾	*	W. Kruijne	M.R. Nieuwenstein
1	1B	Cognitive Neuropsychiatry	5	WE	Yes ▾	*	M. van Tol	A. Aleman

N-track

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	1A	Functional Neuroscience N-track	5	WE, R	Yes ▾	*	S.M. Kooistra	B.J.L. Eggen
1	1A	Pathology of the Nervous System	5	WE, AST, P	Yes ▾	*	W.F.A. den Dunnen	J. D. Laman
1	1B	Stem Cell and Glia Biology	5	P, WE, R	Yes ▾	*	B.J.L. Eggen	H. van Weering
1	1B	<i>Elective (see below)</i>	5		Yes ▾			

Track electives for the B and N-track

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	1B	Molecular and Cellular Neuroscience	5	P, WE	Yes ▾	*	U.L.M. Eisel	B.J.L. Eggen
1	1B	Laboratory Animal Science*	5		Yes ▾			
1	1B	Evolutionary Medicine: Diseases of Affluence*	5		Yes ▾			

* courses organised by the master Biology, see the relevant assessment plan for more information

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)

* With block courses there is no overlap in test moments, as only one course runs at a time and therefore there is no coordination within the programme as to who will take the exam and when.

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																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Period	Course	Year 1 –compulsory courses																
1A	Introduction to BCN		x			x		x					x					
1B	Career Related Topics				x	x		x		x	x	x	x		x	x		
2A/B	Minor Project	x		x	x		x		x	x	x		x	x	x	x	x	
2B	Symposium 1		x					x					x	x		x	x	x
Period	Course	Year 1 B-track																
1A	Rhythms in brain function and behaviour	x			x		x		x				x			x		x
1A	The Neuroendocrine Basis of Behaviour	x		x							x		x	x		x	x	x
1B	Mechanisms of sensory-motor learning	x	x	x		x	x		x	x			x	x		x		x
Period	Course	Year 1 C-track																
1A	Cognitive Neuroscience 1	x		x					x	x			x	x		x		x

		Learning outcomes of the degree programme																
1A	Functional Neuroscience C-track	x		x							x		x	x		x	x	x
1B	Cognitive Neuroscience 2	x		x			x						x	x		x	x	x
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1B	Cognitive Neuropsychiatry	x		x			x	x	x				x	x	x	x	x	x
Period	Course	Year 1 N-track																
1A	Functional Neuroscience N-track	x		x			x									x	x	
1A	Pathology of the Nervous System	x		x			x									x	x	
1B	Stem Cell and Glia Biology	x	x				x						x	x		x	x	x
Period	Course	Year 1 electives for B and N-track																
1B	Molecular and Cellular Neuroscience	x	x					x					x	x		x	x	x
1B	Laboratory Animal Science*																	
1B	Evolutionary Medicine: Diseases of Affluence*																	
Period	Course	Year 2 Compulsory courses																
1A/B	Colloquium		x					x					x	x		x	x	x
2A/B	Major thesis	x		x	x		x		x	x	x		x	x	x	x	x	x
2B	Symposium 2		x					x					x	x		x	x	x
Period	Course	Year 2 Electives																
1A	Behavioural Pharmacology	x		x							x		x	x		x	x	x

		Learning outcomes of the degree programme																
1A	Function and Evolution of Behaviour	x											x	x		x	x	x
1A	Human Neuroanatomy	x											x	x		x	x	x
1A	Auditory and Visual Perception	x											x	x		x	x	x
1B	Membrane Biology and Disease																	