



Cognitive Neuropsychology (MScRes)

Vrije Universiteit Amsterdam - Fac. der Gedrags- en Bewegingswetensch. - RM Cognitive Neuropsychology - 2016-2017

The Research Master program in Cognitive Neuropsychology is part of the William James Graduate School. The curriculum consists of obligatory courses and elective courses. It is a two year program of total 120 ECTS, 60 ECTS a year.

Goals of the Program

The aim of the Research Master is to provide students with the skills and knowledge to interpret clinical neuropsychological cases in terms of cognitive and neuropsychological theories. Moreover, students learn to use those cases to improve these theories. The curriculum consists of multiple courses in cognitive psychology, clinical neuropsychology, neuroscience, and general academic skills concerning methodology, writing, and modern brain imaging techniques.

[Course program 2016-2017 Research Master Cognitive Neuropsychology](#)

[Course program 2015-2016 Research Master Cognitive Neuropsychology](#)

Information about the Academic calendar on [this page](#)

[Teaching and Examination Regulations WJGS \(PDF\)](#)

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Research master Cognitive neuropsychology, year 1

First year Research Master Cognitive Neuropsychology consists of compulsory and elective courses.

Opleidingsdelen:

- [Research master Cognitive neuropsychology, year 1, Compulsory courses](#)
- [Research master Cognitive neuropsychology, year 1, Elective courses 1](#)
- [Practical electives](#)

Research master Cognitive neuropsychology, year 1, Compulsory courses

Below the first year compulsory courses.

Vakken:

Naam	Periode	Credits	Code
Advanced Data Analysis	Periode 1	6.0	P_MADV DAT
Aging and Dementia	Periode 2, Periode 3+4	6.0	P_MAGINGD
Brain Imaging	Periode 4	6.0	P_MBRIMAG
Medical Neuroscience and Neuroanatomy	Periode 1+2	6.0	P_MMEDINN
Programming for Psychologists	Periode 1	6.0	P_MP PROPSY

Research master Cognitive neuropsychology, year 1, Elective courses 1

Students choose either one of the courses out of the Electives Pool, or (only once during their programme) the Review Paper.

Opleidingsdelen:

- [Electives Pool research masters FGB Graduate School](#)

Vakken:

Naam	Periode	Credits	Code
Review Paper	Ac. Jaar (september)	6.0	P_MREVPAP

Electives Pool research masters FGB Graduate School

students choose max. 1 course from the Electives pool in each year.
Some of the courses will taught every other year.

Vakken:

Naam	Periode	Credits	Code
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Advanced Organizational Research Skills	Periode 2	6.0	P_MADORS
Autism and Developmental Disorders	Periode 2	6.0	P_MAUTDEV
Leadership and Organisations	Periode 2	6.0	P_MLEAORG
Memory and Memory Disorders	Periode 2	6.0	P_MMEMORY
Neuroscience and Education	Periode 2	6.0	P_MNEURED
The Psychology of Emotion Regulation: From Basic Principles to Clinical Applications	Periode 2	6.0	P_MPEMREG

Practical electives

Choose one of two Practical Electives.

Elective package contains 2 compulsory courses. Elective package 2 contains a clinical internship. Only students that fulfill the requirements for the clinical internship can choose package 2.

Opleidingsdelen:

- [RM CNP: Elective Package 1](#)
- [RM CNP: Elective Package 2](#)

RM CNP: Elective Package 1

Vakken:

Naam	Periode	Credits	Code
Practical Skills for Researchers	Periode 4+5+6	18.0	P_MPRACSK
Seminar Attention	Periode 5	6.0	P_MSEMATT

RM CNP: Elective Package 2

Elective package 2 contains a clinical internship and several workshops. Both are lectured in the Dutch language.

Vakken:

Naam	Periode	Credits	Code
Klinische stage RM Cognitive Neuropsychology	Ac. Jaar (september)	24.0	P_MKSRMCNP

Research master Cognitive neuropsychology, year 2

Second year Research Master Cognitive Neuropsychology consists of compulsory and elective courses.

Opleidingsdelen:

- [Research master Cognitive neuropsychology, year 2, Compulsory courses](#)
- [Research master Cognitive neuropsychology, year 2, Elective courses 3](#)

Research master Cognitive neuropsychology, year 2, Compulsory courses

Below the second year compulsory courses.

Vakken:

Naam	Periode	Credits	Code
Master's Thesis Clinical and Cognitive Neuropsychology	Ac. Jaar (september)	30.0	P_MTHCCNP
Neuropsychological Dysfunctioning in Psychiatric Disorders	Periode 1	6.0	P_MNDPD
Seminar Cognitive Neuroscience	Periode 1	6.0	P_MSEMCNS
Thesis Proposal RMCNP	Periode 3	6.0	P_MTHPROP

Research master Cognitive neuropsychology, year 2, Elective courses 3

Students choose either two of the courses out of the Electives Pool, or ((only once during their programme) the Review Paper, and one course out of the electives pool (so 12 EC in total).

Opleidingsdelen:

- [Electives Pool research masters FGB Graduate School](#)

Vakken:

Naam	Periode	Credits	Code
Review Paper	Ac. Jaar (september)	6.0	P_MREVPAP

Electives Pool research masters FGB Graduate School

students choose max. 1 course from the Electives pool in each year.
Some of the courses will taught every other year.

Vakken:

Naam	Periode	Credits	Code
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Advanced Organizational Research Skills	Periode 2	6.0	P_MADORS
Autism and Developmental Disorders	Periode 2	6.0	P_MAUTDEV
Leadership and Organisations	Periode 2	6.0	P_MLEAORG
Memory and Memory Disorders	Periode 2	6.0	P_MMEMORY
Neuroscience and Education	Periode 2	6.0	P_MNEURED
The Psychology of Emotion Regulation: From Basic Principles to Clinical Applications	Periode 2	6.0	P_MPEMREG

Other information

Opleidingsdelen:

- [Research master Cognitive neuropsychology - Transition rules](#)
- [Subscription terms](#)

Research master Cognitive neuropsychology - Transition rules

For courses that will not be lectured anymore from 2013/14, the student is granted two opportunities to succeed the course.

For courses that are lectured only once every two years and will not be lectured in 2013/14, the student is granted one opportunity to succeed the course.

Below the courses to which a transition rule is applied.

Vakken:

Naam	Periode	Credits	Code
Neural Models of Cognitive Processes	Ac. Jaar (september)	6.0	P_MNEUMOD
Perception		6.0	P_MPERCEP

Subscription terms

1. For the following of classes and/or for taking an exam, the student has to register via the Student portal. When a student has registered himself for the classes of a course, the student is automatically also registered for the first upcoming exam of the course. When a student is not registered for the courses of a course (e.g. in case of a resit), the student registers for the exam only. The student needs to verify that the registration was successful. The student should timely de-register himself when he decides not to follow a course, or take an exam.

2. The student needs to register ultimately four weeks before t he start

of the period the course is scheduled for. Registration for an exam is possible till two weeks before the date of the exam. Late registration will result in administration costs.

3. De-registering for a course is possible via the Student portal till four weeks before the start of the period a course is scheduled for. De-registering for an exam is possible via het Student portal till two weeks before the date of the exam. In case of circumstances beyond one's control it is possible to de-register after the official de-registration deadlines at the programme secretariat for a course or exam.

4. Registration for courses and exams after the deadline is still possible if you pay 25 euro administration fee; calculated per course. The administration fee is maximized at 50 euro's a time. In the case the student thinks to have a justified reason for a late registration, the student can ask the Faculty board for release of these costs. The decision of the Faculty board is binding in this case.

5. When a student does not appear at the exam, without de-registering, the result will be booked as 'no show'.

Advanced Data Analysis

Vakcode	P_MADV DAT (815033)
Periode	Periode 1
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. M. Gallucci
Examinator	dr. M. Gallucci
Docent(en)	dr. M. Gallucci
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

This course provides a theoretical overview and detailed practical knowledge concerning statistical analyses of psychological data.

Inhoud vak

After an introduction of the general linear model, with emphasis on estimation of effect sizes and hypothesis testing, the course concentrates on applications of the model, such as analysis of variance, regression analysis, path analysis, and logistic regression. Along with these techniques, issues such as mediation, moderation, and hypothesis testing are considered. The aim of the course is to enable students to plan, execute, and interpret appropriate statistical analyses for applied and experimental research data. Because the application of advanced statistical techniques is central to the course, students will have several assignments to analyze existing data sets, and interpret the results.

Onderwijsvorm

Lectures and tutorials.

Toetsvorm

Exam and assignments.

Literatuur

- Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003), Applied Multiple regression / correlation; analysis for the behavioural sciences (3rd ed.) Hillsdale, NJ: Erlbaum
- Additional material provided during the course.

Advanced Organizational Research Skills

Vakcode	P_MADORS ()
Periode	Periode 2
Credits	6.0
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. J. te Nijenhuis
Examinator	dr. J. te Nijenhuis
Docent(en)	dr. J. te Nijenhuis
Lesmethode(n)	Hoorcollege, Practicum, Deeltoets extra zaalcapaciteit
Niveau	400

Doel vak

To gain knowledge and insight in advanced statistical techniques and experience with the practical use of these techniques.

Inhoud vak

Different--relevant for organizational psychology--research methods will be described and explained, such as meta-analysis, methods to calculate utility, and (field) experiments and quasi-experiments. In the course, practical examples and assignments will be provided to obtain an in-depth understanding of these methods and their usefulness for human resource management and organizational development.

Onderwijsvorm

Lectures and practical assignments

Toetsvorm

Assignments and written exam

Literatuur

Scientific papers and/or (book-)chapters

Aanbevolen voorkennis

Bachelor-level methodology and statistics

Overige informatie

This course will be taught in English. At the moment of writing, it is unknown who will coordinate and teach this course.

Aging and Dementia

Vakcode	P_MAGINGD (815181)
Periode	Periode 2, Periode 3+4

Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	prof. dr. E.J.A. Scherder
Examinator	prof. dr. E.J.A. Scherder
Docent(en)	prof. dr. E.J.A. Scherder
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

Provide an advanced course on the neuropathological, cognitive and behavioural consequences of aging and age- related neurodegenerative diseases, in particular dementia.

Inhoud vak

The neuropathology characteristic for aging and various subtypes of dementia will be related to specific functional neuronal circuits. Based on these functional neuronal circuits the clinical outcome in terms of cognitive and behavioural disorders will be explained. Specific attention will be given to the relationship between dementia and motor activity and between dementia and pain experience.

Onderwijsvorm

Plenary lectures, with an emphasis on interaction with the students.

Toetsvorm

Open-end questions or mc questions

Literatuur

E. Scherder. Aging and Dementia. Neuropsychology, motor skills and pain. VU Uitgeverij.

Overige informatie

This course will be lectured twice:

- In periode 2 the course is scheduled for the Research master Cognitive neuropsychology.
- In period 3 the course is scheduled for the Master psychology, track Clinical neuropsychology.

Autism and Developmental Disorders

Vakcode	P_MAUTDEV ()
Periode	Periode 2
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. S.M. Begeer
Examinator	dr. S.M. Begeer
Docent(en)	dr. S.M. Begeer
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

This course will offer a critical overview of recent research on phenotype, cause, prevalence, co-morbidity, assessment and treatment of autism spectrum disorders. Students will also be informed about the most recent assessment and treatment methods available.

Inhoud vak

Autism Spectrum Disorders are complex neurobiological disorders that last throughout an individual's lifetime. With a prevalence of 1 in 68, they are more common than pediatric cancer, diabetes, and AIDS combined. However, few disorders seem more confusing than autism. Common stereotypes, of the withdrawn, mute child with repetitive activities, do no justice to the wide variety of individuals with an autism spectrum diagnosis. To date, there is no single treatment protocol for all children with autism spectrum disorders. More importantly, the information about the effectiveness of treatments is very limited. While the main focus will be on autism, several other disorders with overlapping problem domains will also be discussed.

Onderwijsvorm

Lectures and presentation meetings.

Toetsvorm

Oral presentation and research proposal.

Literatuur

Recent research papers provided through BlackBoard.

Overige informatie

This course is taught every two years. It is not taught in 2015-16, but will be taught again in 2016-17.

Students who took the course in 2014-15 but did not pass it, have the right to one resit in 2015-16. Please contact the course coordinator in that case.

Brain Imaging

Vakcode	P_MBRIMAG (815103)
Periode	Periode 4
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. T.H.J. Knapen
Examinator	dr. T.H.J. Knapen
Docent(en)	dr. T.H.J. Knapen, D.M. van Es MSc
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

Students will learn to analyse and interpret imaging data from different modalities, such as fMRI and EEG. Emphasis will be placed on the analysis of imaging data as time series.

Inhoud vak

Treatment of the mathematical and physical concepts of the different recording techniques, among which basic linear algebra, Fourier analysis and GLM.

Students will learn to programmatically analyse fMRI and EEG data using Python. Standard GLM analysis for fMRI is conducted using FSL.

Half of the course will be practicals in which students will gain hands-on experience with EEG and fMRI data analysis using open-source tools.

Each student will be required to discuss one paper from the field at the end of the course.

Onderwijsvorm

Class teaching, Practicals, Presentations

Toetsvorm

Final Exam, open-end questions 40%

Practical assignments 40%

Article presentation 20%

Literatuur

Handbook of Functional MRI Data Analysis, Poldrack et al, Cambridge press. Further EEG analysis literature to be announced.

Overige informatie

Prior knowledge of Python programming and statistics is recommended.

Klinische stage RM Cognitive Neuropsychology

Vakcode	P_MKSRMCNP ()
Periode	Ac. Jaar (september)
Credits	24.0
Voertaal	Nederlands
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	S.R. van Eck MSc
Examinator	S.R. van Eck MSc
Niveau	400

Doel vak

De stage Klinische Neuropsychologie dient ter oriëntatie op het werk van een neuropsycholoog binnen een klinische setting (zoals een bijvoorbeeld een verpleeghuis, revalidatiecentrum, algemeen ziekenhuis/medisch centrum of psychiatrische instelling). De stagiair leert met name het psychodiagnostisch proces in toenemende mate zelfstandig uitvoeren en wordt betrokken bij behandeling/advisering.

Inhoud vak

Oefenen van klinische vaardigheden.

Onderwijsvorm

Kennis onder begeleiding toepassen in de praktijk. De stageperiode neemt minimaal 560 uur in beslag (een halfjaar of meer) en vraagt een ruime tijdsinvestering. De afdeling ondersteunt naar vermogen het vinden van een stageplaats, maar de student heeft een eigen verantwoordelijkheid in het welslagen van het zoekproces. De plaats moet voldoen aan de door de

afdeling gestelde eisen. Neem dus altijd contact op met de stagecoördinator. Bij aanvang van de master zal aan de RM-studenten met interesse in het klinisch traject voorlichting worden gegeven over de klinische stage.

Naast de stage dienen de volgende stagebijeenkomsten gevolgd te worden:

- 4 bijeenkomsten Intervisie (contactpersoon S.R. van Eck)
- 4 bijeenkomsten Gesprekstechnieken (contactpersoon F. Jonker)

Tevens zijn de hoorcolleges horende bij het vak Research Mastervak 'Practical Skills voor Researchers' (vakcode: P_MPRACSK) verplicht (contactpersoon Sander Los).

Toetsvorm

- Stagebeoordeling geschiedt zoals omschreven in de stagehandleiding, verkrijgbaar bij Susanne van Eck.
- Class Assignments horende bij het vak 'Practical Skills for Researchers'

Vereiste voorkennis

Voor toelating tot het klinisch traject (en daarmee de klinische stage) gelden strikte richtlijnen, te vinden op de website:

http://www.vu.nl/en/Images/Voorwaarden_klinisch_traject_CNPx_V032414_tcm12-314881.pdf

Overige informatie

Dit vak is basis voor de Basisaantekening Psychodiagnostiek.

Voor de aanvraag van de BAPD moeten drie casussen worden beschreven volgens de richtlijnen van het NIP.

De docenten die de stagebijeenkomsten verzorgen zijn Susanne van Eck, Aafra ter Horst, Frank Jonker en Nadine van der Esch.

Leadership and Organisations

Vakcode	P_MLEAORG ()
Periode	Periode 2
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	R.D. Ronay
Examinator	R.D. Ronay
Docent(en)	R.D. Ronay
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

Leaders must be able to manage information, diagnose problems, and make effective decisions, as well as coordinate and motivate the human and social capital of their organizational members. This course aims to prepare you to understand and meet these goals by familiarizing you with leadership theory, and providing you with practical experiences through case studies and experiential activities.

Inhoud vak

This course uses insights from psychology and management science to inform students about leadership theory and practice. In addition to formal lectures, we will use a combination of case studies and practical exercises to help students develop their decision-making skills, their powers of persuasion and influence, and their ability to negotiate more effectively with others.

Onderwijsvorm

Lectures

Toetsvorm

Course contribution (10%); Group project (25%); Final exam (65%). Partial grades are only valid during the study year in which the grade has been achieved.

Literatuur

Course packet including articles, chapters, and cases

Master's Thesis Clinical and Cognitive Neuropsychology

Vakcode	P_MTHCCNP (815105)
Periode	Ac. Jaar (september)
Credits	30.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. R.J. Godijn
Examinator	dr. R.J. Godijn
Niveau	500

Doel vak

To actively conduct experimental research in cognitive (neuro)psychology and report the results of this independent study in the master's thesis.

Inhoud vak

Students choose a topic in line with their personal interests in cognitive (neuro)psychology. Research for the master thesis can be conducted at the departments of Cognitive Psychology of Clinical Neuropsychology, an external research organization (eg., TNO), a company, or an (international) university other than the VU University.

A specific research question, hypotheses and testable predictions are formulated and reported to the department. Approval of this research proposal by the internal supervisor is required prior to the start of the study. The internal supervisor is a person from the academic staff of the departments of Cognitive Psychology of Clinical Neuropsychology who may be accompanied by an external supervisor if the research is performed outside the department.

The research performed by the students provides the basis for the master's thesis. The master's thesis is written in journal article style and should be written at a level appropriate for submission to an academic journal.

Toetsvorm

The thesis is evaluated on the basis of the quality of the student's master thesis and the quality of student's performance during the research. Students are expected to present their project in the style of a conference talk to the staff or at a formal conference. The internal supervisor and the head of the department grades the thesis according to eight generally acknowledged scientific criteria.

Literatuur

Not applicable.

Overige informatie

Students are expected to have attended at least 10 colloquia before they can receive their thesis grade. They have to hand in the filled out colloquium card to the coordinator of the William James Graduate School.

Medical Neuroscience and Neuroanatomy

Vakcode	P_MMEDINN (815124)
Periode	Periode 1+2
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	prof. dr. E.J.A. Scherder
Examinator	prof. dr. E.J.A. Scherder
Docent(en)	prof. dr. E.J.A. Scherder
Lesmethode(n)	Hoorcollege, Practicum
Niveau	400

Doel vak

This course provides the medical background in neurology and anatomy for clinical applications of neuroscience. Key fields covered by this course are the structure, functions and dysfunctions of:

- the human brain, with special focus on
- the central versus the peripheral nervous system
- the brainstem, the spinal cord
- vasculature, blood flow and cerebrospinal fluid circulation
- autonomic, neuroendocrine, and regulatory functions
- higher neural functions

After completing the course the student is supposed to have the knowledge and the skills to examine the functions and diagnose dysfunctions in the central and peripheral nervous system.

Onderwijsvorm

Lectures and practical assignments

Toetsvorm

Acquired knowledge and skills of the student will be tested by means of:

- Exam (open questions plus multiple choice questions)
- Satisfactory completion of the practical anatomical sessions.

Partial grades are only valid during the study year in which the grade has been achieved.

Literatuur

Neuroanatomy through Clinical cases. Author: Hal Blumenfeld. Second Edition. Publisher: Sinauer. ISBN978-0-87893-058-6.

Memory and Memory Disorders

Vakcode	P_MMEMORY (815102)
Periode	Periode 2
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. R.J. Godijn
Examinator	dr. R.J. Godijn
Docent(en)	dr. R.J. Godijn
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

The course aims to give students an overview of memory at the cognitive and neurophysiological level, and to give students the background to interpret memory disorders in patients with brain damage.

Inhoud vak

The course focuses on various approaches in the study of human memory and memory disorders. We will discuss working memory, encoding-retrieval interactions, interference and forgetting implicit memory, and the brain substrate of memory. We will also discuss clinical testing of memory, and memory loss after local brain damage, dementia, and other conditions.

Onderwijsvorm

12 two- hour lectures and workshops, assignments and oral presentations.

Toetsvorm

Quizzes, presentations and research proposal.

Literatuur

Various papers, to be announced via Blackboard.

Overige informatie

This course is taught every two years. It is not taught in 2015-16, but will be taught again in 2016-17.

Students who took the course in 2014-15, but did not pass it, have the right to one resit in 2015-16. Please contact the course coordinator in that case.

Neural Models of Cognitive Processes

Vakcode	P_MNEUMOD (815051)
Periode	Ac. Jaar (september)
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.

Coördinator	dr. W. Kruijne
Examinator	dr. W. Kruijne
Docent(en)	dr. W. Kruijne
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

Computational models are an important feature in cognitive neuroscience. When used appropriately, they allow for the integration of findings from a wide range of experiments, as well as detailed predictions. As opposed to many theories, they are rich in detail and allow for a mechanistic view on how the brain operates.

In this course, you will:

- > Learn about how models can enrich the field of cognitive neuroscience
- > Gain insight into different types of models, their strengths and weaknesses
- > Obtain in-depth knowledge about several specific models
- > Get hands-on experience with a variety of models

Inhoud vak

The course starts with a general introduction on models within the field of cognitive neuroscience, and getting familiar with the software used in the practical sessions. Then, you will learn about some prototypical neural models, and their applications within (and beyond) your field. The practical sessions will have you explore the inner workings of these models, by means of exercises and essay questions.

In the second half of the course, you will learn about a wider variety of models, with different levels of abstraction. Furthermore, you will dive into (and present) articles where models, inspired by the prototypical ones discussed in the lectures, have been applied in cognitive neuroscience.

Onderwijsvorm

Lectures and discussion, computer tutorial and practicals, one oral presentation.

Toetsvorm

Grades are based on a weighted average of performance on a final exam, the oral presentation and the practical sessions.

Literatuur

articles, tutorials and other reading material on blackboard

Overige informatie

This course is taught every two years. It is taught in 2015-16, but not in 2016-17.

Neuropsychological Dysfunctioning in Psychiatric Disorders

Vakcode	P_MNDPD ()
Periode	Periode 1
Credits	6.0

Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. H. van Ewijk
Examinator	dr. H. van Ewijk
Docent(en)	dr. H. van Ewijk
Lesmethode(n)	Hoorcollege, Werkgroep
Niveau	500

Doel vak

- Understanding potential factors underlying neuropsychological dysfunctioning in different psychiatric disorders by looking at the neuroanatomical, neuroendocrine, and/or neuropharmacological basis.
- Obtaining knowledge of neuroscientific and behavioural interventions restoring psychological functioning.

Inhoud vak

The objective of this course is to bridge the gap between neuroscience and clinical psychiatry, by understanding potential neurobiological factors underlying different psychiatric disorders. The course will cover the neuroanatomical, neuroendocrine, neuropsychological and/or neuropharmacological basis of different psychiatric disorders, as well as knowledge of neuroscientific and behavioural interventions that may influence or restore neuropsychological or clinical symptoms in patients. Students will learn to understand common psychiatric disorders from a broad perspective and will be able to not only understand the neurobiological and behavioural level of these disorders, but also to understand how these two are related and how one might explain or influence the other.

The course consists of a series of lectures, in which each lecture covers a specific psychiatric disorder (such as eating disorders, schizophrenia, or ADHD) from a neuroscience perspective. Each lecture will cover current knowledge about the disorder from different angles, such as neuropsychology, neuroimaging, neurophysiology and/or neuropharmacology. Furthermore, connections will be made between these different angles (e.g. 'is there a specific brain network implicated in the pathophysiology of this disorder', or 'how is the neurophysiology connected to the behavioural symptoms?').

Onderwijsvorm

(Guest) Lectures and student presentations

Toetsvorm

Exam, presentation and writing assignment

Literatuur

Scientific papers (will be provided during the course)

Vereiste voorkennis

Basic knowledge of psychiatry, cognitive neuropsychology and neuropharmacology is required.

Overige informatie

Basic knowledge of psychiatry, cognitive neuropsychology and neuropharmacology is required.

Neuroscience and Education

Vakcode	P_MNEURED ()
Periode	Periode 2
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. N.M. van Atteveldt
Examinator	dr. N.M. van Atteveldt
Docent(en)	prof. dr. A.C. Krabbendam, dr. N.M. van Atteveldt
Lesmethode(n)	Hoorcollege

Doel vak

The aim of the course Neuroscience and Education is to provide students with the knowledge and skills necessary to evaluate and conduct research at the interface between neuroscience and education.

Inhoud vak

Many scientists, policymakers and teachers share the belief that knowledge of the brain is relevant to educational practice. Yet, implementing neuroscientific findings in the classroom is by no means straightforward. This course will focus on the interdisciplinary knowledge and skills needed to integrate neuroscientific and educational approaches and to translate neuroscientific research to educational practice. Students will learn how to integrate diverse methodological approaches, ranging from the highly controlled laboratory experiments typical to the cognitive neuroscience approach, to the approaches used in educational sciences. During the whole course, students are encouraged to critically reflect on the current enthusiasm for a brain-based education. In this context, the course will specifically discuss the proliferation of neuromyths and the ethical issues arising from the neuroeducational approach.

Onderwijsvorm

Lectures and tutorials

Toetsvorm

Written exam with open-end questions (50%); research proposal (50%).

Literatuur

A selection of relevant articles, to be announced.

Overige informatie

This course is taught every two years. It is not taught in 2015-16, but will be taught again in 2016-17.

Students who took the course in 2014-15, but did not pass it, have the right to one resit in 2015-16. Please contact the course coordinator in that case.

Perception

Vakcode	P_MPERCEP ()
Credits	6.0

Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	A.M. van Loon
Examinator	A.M. van Loon
Docent(en)	A.M. van Loon
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

To familiarize students with the theories and methods of the scientific study of perception.

Inhoud vak

Advanced topics of perception, including:

- Representation
- Feature extraction
- Perceptual construction
- Object, face, and scene recognition
- Visual memory
- Dynamics of perception
- Neuropsychology of perception
- Neurochemistry of perception
- Multisensory perception
- Conscious vs. subconscious perception

Onderwijsvorm

Lectures and literature study. Lectures will consist of one part relevant background, one part discussion of specific (classic and recent) research articles.

Toetsvorm

2 written examinations on classic and recent research articles with a mixture of multiple choice and open end questions.
The two written examinations each account for 50% of the end grade.

Literatuur

- List of research papers (provided during the course)
- Background reading for those unfamiliar with the basics of perception: Goldstein, E.B. Sensation and Perception. 8th Edition or higher. London: Wadsworth/Cengage.

Aanbevolen voorkennis

Introductory knowledge of perception is assumed (things like basic physiology of the eye, ear and of neurons, rods vs. cones, center-surround, Gestalt principles, what versus where processing). The above-mentioned book by Goldstein is a good reference for reading beforehand or for looking up things.

Overige informatie

This course is taught every two years. It is taught in 2015-16, but will not be taught in 2016-17.

Practical Skills for Researchers

Vakcode	P_MPRACSK ()
Periode	Periode 4+5+6

Credits	18.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. S.A. Los
Examinator	dr. S.A. Los
Docent(en)	dr. S.A. Los, dr. M.V. Milders
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

To provide students with necessary practical skills to design, carry out and present an individual research project in cognitive neuropsychology, clinical neuropsychology or cognitive neuroscience.

Inhoud vak

Each student is allocated to an individual research project, proposed and supervised by a member of the department of Clinical Neuropsychology or Cognitive Psychology. Alongside this project there are twelve meetings to familiarize students with a variety of practical issues related to research in cognitive neuropsychology, such as ethics, writing, presenting, factorial design, and neuropsychological assessment. During the course, students hand in three writing samples (an abstract, an essay, and a brief research report) and deliver two oral presentations (a 5-minutes research proposal and a 10-minutes presentation of completed research in a final symposium).

Onderwijsvorm

Lectures and research internship

Toetsvorm

Three class assignments (pass / fail); research internship (20%); writing samples: abstract (10%), essay (20%), research report (30%); presentations: research proposal (pass / fail); 10-minutes presentation (20%).

Literatuur

Literature is directly related to the student's research project. Some articles will be provided by the supervisor at the beginning of the project, further articles are found by the students themselves as the project unfolds. Class assignments can be completed on the basis of the slides presented during the meetings.

Programming for Psychologists

Vakcode	P_MPROPSY (815120)
Periode	Periode 1
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. ing. E. van der Burg

Examinator	dr. ing. E. van der Burg
Docent(en)	dr. ing. E. van der Burg
Lesmethode(n)	Hoorcollege, Practicum
Niveau	400

Doel vak

Acquire programming skills and use them to build your own experiments.
Learn the intricacies of experimental design.

Inhoud vak

You will learn how to design psychological experiments and how to implement these using the OpenSesame software package and the Python programming language. Although you will mainly be working with OpenSesame, which is specifically designed for constructing experiments, this course will also address general programming principles that will facilitate the learning of other programming languages in the future. We will furthermore look at how to efficiently design behavioral experiments, with the focus on randomization procedures, how to present visual and auditory stimuli, and on how to record responses of participants.

Onderwijsvorm

6 x 1 hour lecture, 12 x 4 hours practicals (compulsory), assignments (twice a week).

Toetsvorm

Of the 12 assignments, at least 8 need to be marked 6 or higher. At the end there will be an exam consisting of essay questions and programming assignments. You are allowed to bring your book and any other material.

Literatuur

Online documentation.

Review Paper

Vakcode	P_MREVPAP ()
Periode	Ac. Jaar (september)
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. W. Donk
Examinator	dr. W. Donk
Niveau	500

Doel vak

To write a current literature review that covers an open issue in clinical or cognitive (neuro)psychology.

Inhoud vak

The review paper is a literature review written by the student under supervision of a member of the department of Clinical Neuropsychology or the department of Cognitive Psychology. Students may write a review on the basis of a self-selected topic provided that they find a member of the department willing to supervise the writing of the paper.

The topic must be narrow enough for the students to cover the literature within the designed period, but must be broad enough so that something is gained from writing a review, and must be of current interest in the literature.

-The review must be written at such level that it could be published in an academic journal

Onderwijsvorm

Students will be individually monitored and instructed by their supervisor in writing a literature review.

Further guidelines are given on the blackboard site 'Master Thesis Cognitive Neuropsychology'

Toetsvorm

The literature review is evaluated on the basis of the quality of paper and is graded by the supervisor.

Literatuur

Depends on the topic of research.

Overige informatie

The supervisor for the review paper cannot also be a thesis supervisor.

The topic of the review may not be the same as the topic of the review written in PSR.

Seminar Attention

Vakcode	P_MSEMATT (815100)
Periode	Periode 5
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. R.J. Godijn
Examinator	dr. R.J. Godijn
Docent(en)	prof. dr. J.L. Theeuwes
Lesmethode(n)	Hoorcollege
Niveau	400

Doel vak

To learn how to interpret and analyze theories and findings on attention and eye-movements. Learn how to set up experiments. Learn how to present and to write an essay.

Inhoud vak

The format of the seminar will be a discussion of one or two target articles, and student presentations, each week. Target articles for each week will be "classic" articles representing early and/or important studies on a specific topic or recent new papers in attention and eye movements. For the presentations, each student has to present the main findings of the target article for that week and is required to find a recent paper on the topic covered by the target article. Students have to prepare a 20 minute oral presentation in Microsoft Powerpoint. The rest of the class will be spent discussing the target articles and their relationship to the presented papers. Each student will give two presentations. The presentation will determine 30% of the course grade

for each student. The target papers will be available on the course website and accessible via blackboard. One week after the last class, each student will submit a final paper (up to 8 pages, 12 pt. font, double spaced) on one of the topics covered in class. The paper will consist of a brief review of (at least) 6 research papers (including those already covered on that topic in class) and a proposal for a new experiment. The paper will be worth 40%. Each class all students have to turn in a sheet of paper with a short question/remark about one of the papers discussed during that class (30% of the grade). Students will receive an introduction into the arts of oral presenting and of writing an essay as a preparation to the assignments.

Onderwijsvorm

Lectures and practical assignments.

Toetsvorm

Student presentation (30%), and writing a paper (40%) and sheet of paper with a short question/remark about one of the papers discussed (30%). Students are required to be present during all meetings. Attending the class is required.

Literatuur

Articles.

Seminar Cognitive Neuroscience

Vakcode	P_MSEMCNS (815098)
Periode	Periode 1
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. A.V. Belopolskiy
Examinator	dr. A.V. Belopolskiy
Docent(en)	dr. A.V. Belopolskiy
Lesmethode(n)	Hoorcollege

Doel vak

To extend students' knowledge in the field of cognitive and clinical neuroscience.

Inhoud vak

This is an advanced course on the current topics in cognitive neuroscience. After this course the students will have a firm understanding of the current state of affairs in the area of Cognitive Neuroscience, the current directions of the field and the contemporary methods that are used. Students will be able to present a summarized research article, critically evaluate it and discuss it with peers. Students will learn how to write a review paper on the contemporary topic in Cognitive Neuroscience and aggregate the relevant literature. Students will be prepared for choosing a topic for the future research project, internship or a thesis. Over the last two decennia, scientific research in the field of cognitive neuroscience has led to fundamental new insights in the relation between brain function and behavior. Research is ongoing, and in many cases, the latest insights have not yet traversed their ways down into the regular textbooks. This seminar

offers students the possibility to discuss state of the art research. The latest insights into topics such as consciousness, default network, working memory, multisensory perception, and the mirror neuron system will be covered. The seminar will also cover important questions regarding legal and ethical aspects of cognitive and clinical neuroscience research.

Onderwijsvorm

Lectures, literature study, oral presentations and discussions.

Toetsvorm

Oral presentation, contribution to discussion, and a review paper.

Literatuur

Research papers to be announced.

Vereiste voorkennis

The requirement to participate is the completion of the basic Cognitive Neuroscience and Neuropsychology course. Alternatively, students may study the required literature by self- study. You need to contact the professor of Seminar Cognitive Neuroscience beforehand.

The Psychology of Emotion Regulation: From Basic Principles to Clinical Applications

Vakcode	P_MPEMREG ()
Periode	Periode 2
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. S.L. Koole
Examinator	dr. S.L. Koole
Docent(en)	dr. S.L. Koole
Lesmethode(n)	Werkcollege
Niveau	400

Doel vak

- Acquire knowledge of and insight into modern theories of, and research on, emotion regulation.
- Learn to generate and discuss new and critical questions about emotion regulation research.
- Learn to develop a proposal for new, theory-driven empirical research in the area of emotion regulation.
- Learn how to apply insights from emotion regulation research to address clinical problems.
- Develop oral and written presentation skills to communicate effectively within the scientific forum.

Inhoud vak

Unwanted emotions are implicated in virtually all forms of psychopathology throughout the lifespan. It is therefore vital for clinical and developmental psychologists to understand what causes people to fail or succeed at emotion regulation, and how people can be taught to regulate their emotions more effectively.

Over the past twenty years, research on emotion regulation has developed into a vibrant and productive scientific discipline. The sheer volume of emotion regulation research is overwhelming, with more than 18,000 articles appearing annually on this topic. Furthermore, the study of emotion regulation is inherently interdisciplinary, and involves vital contributions from developmental psychology, clinical psychology, social and personality psychology, psychophysiology and social-cognitive and affective neuroscience.

In this course, we want to help students to get a grasp of the large and complex literature on the science of emotion regulation. In the first part of the course, we address basic issues in emotion regulation theory, including its development across the lifespan, biological foundations, emotion regulation strategies, implicit emotion regulation and social emotion regulation. During the second part of the course, we relate emotion regulation processes to psychopathology and consider the role of emotion regulation in psychotherapy. Finally, in the third part of the course, we consider specific clinical applications of emotion regulation research, covering such topics as anger management, restorative environments, and language as an emotion regulation tool.

Onderwijsvorm

The format of this course is highly interactive, and includes the following activities:

- Thought questions: For each class, the students will formulate one or more thought questions based on the required readings for that day. This ensures that everyone has thought actively about the readings. During the class, these questions will provide the basis a discussion and lecture.
- Article presentation: Each student will prepare a presentation on a selected article in the area of emotion regulation. The goal of this presentation is to provide a more in-depth examination of emotion regulation research and its major findings.
- Research proposal: At the end of the course, each student will write an innovative research proposal on a topic that is relevant to emotion regulation science. This proposal will receive extensive feedback from the other students and the lecturers,

Toetsvorm

Thought questions (handed in before each class), oral presentations (one per student for the whole course), and written research proposal.

Literatuur

Selected readings. The selection will be announced two weeks before the start of the course, so that we can include the very latest work in the area. Students who wish to get a sense of the contents of the course may pick up the following paper: Koole, S. L., & Aldao, A. (in press). The self-regulation of emotion: Theoretical and empirical advances. In K. D. Vohs & R. F. Baumeister (Eds.), *Handbook of self-regulation* (3rd edition, pp. 101-112). New York: Guilford. This article can be downloaded for free via this link:

https://www.researchgate.net/publication/277711749_The_Self-Regulation_o
(you have to join ResearchGate for the download).

Aanbevolen voorkennis

Because the course builds on a basic understanding of psychopathology and its developmental origins, background knowledge in clinical and

development psychology is recommended. However, this background is not compulsory.

Doelgroep

This course is an elective course within the Research Master Clinical and Developmental Psychology. However, emotion regulation is a major topic in many other areas, including social and personality psychology and cognitive neuroscience. Therefore, the course is open to all research masters students, and to PhD students after consultation with the coordinator.

Intekenprocedure

Students sign up via VUnet, and find more information on Blackboard

Thesis Proposal RMCNP

Vakcode	P_MTHPROP ()
Periode	Periode 3
Credits	6.0
Voertaal	Engels
Faculteit	Fac. der Gedrags- en Bewegingswetensch.
Coördinator	dr. R.J. Godijn
Examinator	dr. R.J. Godijn
Docent(en)	dr. R.J. Godijn
Lesmethode(n)	Hoorcollege
Niveau	500

Doel vak

To learn to write a grant proposal, to learn to defend it in public

Inhoud vak

Students write up a proposal for their thesis research, in the format of a grant proposal (an NWO grant will be used as template). They defend this proposal in front of a "committee" consisting of staff members, with fellow students in the audience.

Onderwijsvorm

2 plenary lectures on "how to" and to check progress, individual mentorship by future internal thesis supervisor.

Toetsvorm

70% written proposal, 30% oral defense.