Applied Statistics I

Faculty of Psychology and Neuroscience

PSY4162

Period 1:
1 Sep 2025 **24 Oct 2025**

Credits:
4.0

Coordinator:
J. Schepers

Teaching methods:
Lecture(s), Skills, Assignment(s)

Assessment methods:
Written exam, Attendance, Assignment

Keywords:
univariate analysis of variance, multivariate analysis of variance, regression analysis, within-subject designs, repeated measures ANOVA, mixed (multilevel) regression, marginal versus random effects models

Full course description

The course consists of eights units.
In the first four units, students will be given an in-depth training in the following standard statistical methods: factorial ANOVA for between-subject designs, analysis of covariance (ANCOVA), multivariate ANOVA (MANOVA), discriminant analysis and multiple linear regression. Students are assumed to have background knowledge of balanced two-way factorial ANOVA and multiple regression. These methods will be briefly reviewed. The following advanced topics will then be covered: unbalanced factorial designs, contrast analysis, interaction in multiple regression, simple slope analysis, dummy coding, centering covariates, different coding schemes, collinearity and residuals checks and data transformation.
The second half of the core course consists of four units, two on repeated measures ANOVA and two on mixed linear regression for repeated measures. The first two units cover classical repeated measures ANOVA for the one- and two-way within-subject design and the split-plot (between x within) design. Special attention is given to: a) the choice between multivariate and univariate data formats and method of analysis, and the sphericity assumption; b) the distinction between the

within-subjects and between-subjects part of a split-plot ANOVA, and how to obtain both using regression analysis;

Subsequently, two units are devoted to mixed (multilevel) regression for repeated measures. This starts with a unit on marginal models for repeated measures as an alternative to repeated measures ANOVA in cases of missing data and/or of within-subject covariates. Students are shown the pros and cons of various models for the correlational structure of repeated measures, such as compound symmetry and AR1. The second unit covers the random intercept and random slope model for repeated measures as a method to include individual effects into models for longitudinal data (growth curves) or single trial analyses of lab data (response times, ERP, fMRI). Students learn how this can be combined with e.g. ARMA modelling to distinguish between inter-personal and intra-personal outcome variation.

The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand:

- oneway analysis of variance, contrast analysis, unbalanced designs, multivariate analysis of variance, discriminant analysis, linear regression with interaction terms, linear regression with dummy variables, data transformations, simple slope analysis, analysis of covariance
- repeated measures ANOVA for within-subject and split-plot (between x within) designs, mixed (multilevel) linear regression with random effects and autocorrelation, and so-called marginal models;
- Specifically, students are able to choose the correct method of analysis, and specify a statistical model to compare different models and choose the best model (based on checking assumptions, model fit and parsimony on top of plausibility), and to interpret effect estimates and significance tests obtained with that model.

Prerequisites

Good understanding of descriptive and inferential statistics at the elementary and intermediate level, including t-tests

Brain Damage

Faculty of Psychology and Neuroscience

PSY4407

Period 1:
1 Sep 2025 **24 Oct 2025**

Credits:
4.0

Coordinator:
S.A. Kotz

Teaching methods:
PBL, Lecture(s), Presentation(s)

Assessment methods:
Written exam, Attendance

Keywords:
neuroanatomy, neurology, history of neuropsychology, neuropsychology acquired brain dysfunction, brain injury, neuropsychological assessment, rehabilitation, brain plasticity, brain imaging

Full course description

Much of what we know about cognitive and affective functions and processes comes from close observation of patients with acquired damage to the central nervous system. This course reviews mechanisms underlying the brain-behavior relationships that form the basis of neuropsychological dysfunctions in persons who suffer from acquired brain damage across the lifespan. Perceptual and cognitive dysfunctions after focal or diffuse cortical and subcortical lesions and/or in connection fiber tracts are discussed together with the neurocognitive assessment procedures that are commonly used to identify such deficits, including disorders of memory, praxis, language, visual spatial abilities, and executive functions. Students are introduced to the fields of Behavioral Neurology and Neuropsychology and will work on central questions such as: What do different neurological pathologies entailing functional and/or structural brain changes tell us about the brain-behavior relationship? The intended learning goals are: (1) acquisition of knowledge about the causes and neurobiological effects of acquired brain lesions, (2) acquaintance with the etiology and taxonomy of common neurological and neuropsychological syndromes, and (3) critical reflection of the consequences of brain lesions for diagnostics and treatment in clinical settings. This knowledge and reflection are essential for understanding the principles of neuropsychological rehabilitation, which

can be used to support or even improve residual function after acquired brain damage and can ameliorate the life quality of neurological patients.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to understand:
functional brain anatomy, cerebral vascularisation, neurophysiology of brain repair, neurological diseases, stroke, epilepsy, traumatic brain injury, alcohol-induced brain dysfunction, Korsakoff's disease, cognitive control, neuropsychological syndromes, brain plasticity, history of neuropsychology, neuropsychological assessment, cognitive rehabilitation.

Prerequisites

Bachelor's level knowledge of the hierarchical organisation of brain functions, basic brain anatomy and physiology.

Behavioural Disorders

Faculty of Psychology and Neuroscience

PSY4408

Period 1:
1 Sep 2025 **24 Oct 2025**

Credits:
4.0

Coordinator:
M. Schwartze

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Attendance

Keywords:
Neuropsychology, disorders, development, risk and vulnerability, neurobiology, cognition

Full course description

The course covers a range of cognitive and behavioural problems that accompany the most common neuropsychiatric and neurological disorders (e.g., psychosis and schizophrenia, ADHD, autism, anxiety disorders, depression, as well as consequences of acquired brain injuries). The course provides insight into theoretical models and into underlying neurobiological and psychological mechanisms. It further touches on the principle of vulnerability and on protective/risk factors in the aetiology of behavioural disorders.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students will gain an understanding of the psychological, neurobiological, and epidemiological mechanisms underlying cognitive and biological models of developmental-, psychiatric-, and neurological disorders and neuropsychiatric syndromes.

Basic Cognitive Psychological Skills

Faculty of Psychology and Neuroscience

PSY4434

Period 1:
1 Sep 2025 **24 Oct 2025**

Credits:
3.0

Coordinator:
L. Kloft - HellerM.C. Marzolla

Teaching methods:
Lecture(s), Skills, Assignment(s)

Assessment methods:
Assignment

Keywords:
Field experiment, applied behavioural testing, data reduction and analysis techniques, report writing

Full course description

This course focuses on the acquisition and training of basic skills required in cognitive performance research. The course is centred around a psychological experiment in which students study the detrimental effects of arousal manipulation (environmental noise) on cognitive processing. Students will learn how to perform a field experiment and will undertake all the various stages that are necessary to acquire and analyse the data and report on the results. Students will be required to recruit a small number of subjects and to administer the test battery according to a pre-defined protocol. The test battery consists of paper and pencil tests that have been presented and discussed in previous courses. After data acquisition, a number of interactive sessions are planned in which students not only learn to explore and analyse their data with SPSS but also lean how to interpret the results. Students conclude the course by writing a journal style paper in APA format describing the experiment. Particular attention will be given to predicting and explaining the results within a theoretical perspective and comparing them with previous findings.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to understand:

- psychological testing;
- data preparation;
- data analysis using multivariate techniques;
- report writing.

Arousal and Attention

Faculty of Psychology and Neuroscience

PSY4409

Period 2:
27 Oct 2025 **19 Dec 2025**

Credits:
4.0

Coordinator:
S.X. DuggiralaN.L. Mason

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Final paper, Attendance, Assignment

Keywords:
arousal, alertness, attention networks, brainstem arousal systems, sleep-wake regulation, Arousal

Full course description

This course familiarises students with key concepts and controversies in the study of effects of arousal and alertness on attention and cognitive performance, with an emphasis on the role of brain circuitry and neurotransmitters. It is known that human performance fluctuates depending on the state of alertness; when we are sleepy or tired, we are less attentive to events going on around us than when we are fully awake and alert. However, people who are extremely stressed or highly aroused can also have problems in effectively focussing or shifting their focus of attention (e.g. ADHD, anxiety disorders). The mechanisms underlying the relation between arousal, attention and performance have been the subject of extensive research in psychology. Therefore, this course will review current knowledge on subcortical arousal systems, attention networks and the neurobiology of sleep, in addition to a critical discussion of the classical Arousal Theory. Psychopharmacological studies will be presented that illustrate the role of different neurotransmitters in arousal and attention.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to understand:

arousal theory, inverted-U model, Yerkes-Dodson law, cognitive energetic model, additive factors method, Posner's attentional networks, orienting, Posner's cueing paradigm, Corbetta's model of attentional control, focused attention and the underlying neural mechanisms, alertness, sustained attention, vigilance, noradrenergic locus coeruleus activity, clonidine, signal detection theory, executive attention, prefrontal dopaminergic activity, Borbely's model of sleep regulation, caffeine, neurocognitive theory of insomnia, benzodiazepines, flip-flop mechanism of sleep-wake regulation, antihistamines.

Ageing

Faculty of Psychology and Neuroscience

PSY4416

Period 2:
27 Oct 2025 **19 Dec 2025**

Credits:
4.0

Coordinator:
W.J. Jansen

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Attendance

Keywords:
physical, neural, Cognitive, and emotional ageing, dementia, Alzheimer's disease, Parkinson's disease, neurodegeneration, intervention, Prevention, cognitive, prevention

Full course description

This course covers a broad range of topics in the field of cognitive development and ageing. The initial focus is on healthy ageing, to better understand processing changes that may arise in abnormal aging such as in neurodegeneration. Important questions covered will include: What is ageing, why do we age? What neurobiological and cognitive mechanisms determine whether a person ages pathologically, normally, or successfully? Can the ageing process be influenced? To address these questions, students will critically reflect on influential theories, state-of-the-art research, established research methods, and clinical interventions. General themes are physical ageing, neural ageing, cognitive ageing, pathological ageing (mild cognitive impairment, dementia, Parkinson's disease), intervention strategies in ageing (including body/mind), and methodological issues in ageing research.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Participants will obtain active understanding of:

Physical ageing, evolutionary theories of ageing, neural aging, amyloid cascade hypothesis, temporal lobe dysfunction, frontal lobe dysfunction, subcortical dysfunction, processing-speed theory, white matter decline, decline of cognitive control, inhibition deficit hypothesis, default-mode network dysfunction, parietal lobe dysfunction, mild cognitive impairment, Alzheimer's disease, vascular dementia and other types of dementia, Parkinson's disease, successful ageing, reserve theories, compensation and intervention, body/mind interventions in ageing and emotional ageing.

Neuropsychological Assessments

Faculty of Psychology and Neuroscience

PSY4433

Period 2:
27 Oct 2025 **19 Dec 2025**

Credits:
2.0

Coordinator:
M.C. Marzolla

Teaching methods:
Skills, Paper(s), Assignment(s), Work in subgroups, Patient contact

Assessment methods:
Final paper, Attendance

Keywords:
neuropsychological assessment, cognitive disorders, brain disease, brain injury, test taking, interviewing, observations, psychometry

Full course description

Neuropsychological assessment runs parallel to the courses Arousal and Attention and Ageing. The core elements in this skills training are the collection and interpretation of cognitive, emotional and behavioural data in order to support neurological or neuropsychiatric diagnosis. The skills training commences with an introductory lecture covering the principles and interpretation of neuropsychological assessment.
During a 6-week period, students are trained in neuropsychological history taking, observing patient behaviour, cognitive testing and interpreting cognitive and behavioural data. Several homework assignments concerning neuropsychological report writing will be done, and students will gain experience interviewing a patient. Finally, each student writes a comprehensive neuropsychological report based on a simulated clinical case.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students will obtain the basic skills of neuropsychological assessment, i.e. observing, interviewing, cognitive testing, combining and interpreting behavioural and cognitive data and neuropsychological report writing.

Prerequisites

Introductory knowledge of psychodiagnostics and related psychometrics.

Colloquia

Faculty of Psychology and Neuroscience

PSY4100

Period 3:
5 Jan 2026 **30 Jan 2026**

Credits:
1.0

Coordinator:
R. Schreiber

Teaching methods:
Lecture(s)

Assessment methods:
Attendance

Keywords:
interdisciplinary knowledge

Full course description

Each specialisation organizes two colloquia, in which senior researchers from Maastricht University or visiting lecturers present their scientific insights. Each colloquium focuses in depth on one of a wide range of topics, with issues transcending the courses and specialisations. Each colloquium lecture will be followed by active discussion, chaired by the lecturer or the host of the guest lecturer. A total of ten colloquia will be offered.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand:
key research domains from different specialisations;

- interdisciplinary research.
- Students are able to interact with students from different specialisations.

Neuroanatomy

Faculty of Psychology and Neuroscience

PSY4108

Period 3:
5 Jan 2026 **30 Jan 2026**

Credits:
1.0

Coordinator:
D.L.A. van den Hove

Teaching methods:
Lecture(s), Skills, Work in subgroups

Assessment methods:
Written exam, Attendance

Keywords:
Neuroanatomy, limbic system, basal ganglia, basal ganglia.

Full course description

The aim of this practical training is to make you acquainted with the neuroanatomical terminology and to gain insight into the spatial and functional organisation of the brain. It is essential to have a basic knowledge of the brain anatomy when working in the field of neuropsychology or neurobiology. Many specific brain areas can be linked to particular functions. Thus, knowledge of the brain anatomy and its main functions allows direct linkage of specific neurological or psychiatric disorders to particular brain areas. After a short theoretical introduction, you will study whole brains and brain material of mammals at both macroscopical (visual inspection) and microscopical level. The emphasis will be on major brain systems, including the basal ganglia and limbic system.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand:

- organisation of the brain, in particular the ventricular system, the (cortico)limbic system and basal ganglia;
- brain dissection;
- microscopical staining techniques.

Introduction to R

Faculty of Psychology and Neuroscience

PSY4373

Period 3:
5 Jan 2026 **30 Jan 2026**

Credits:
1.0

Coordinator:
S.E. PishvaW. Viechtbauer

Teaching methods:
Skills, Paper(s), Assignment(s), Work in subgroups

Assessment methods:
Attendance, Assignment

Keywords:
R, statistical software

Full course description

R is a programming language and software environment for carrying out computations, manipulating and analyzing data, and creating various types of plots and graphics (https://www.r-project.org). R has become the 'lingua franca of statistics' and the software of choice for analyzing data in various disciplines. However, for many researchers, getting up and running with R remains a hurdle due to the command-driven nature of the software. The purpose of this course is to lay the necessary foundation for becoming a proficient R user.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students will learn about the history and development of R, how to use and interact with R, understand its basic data structures, be able to import and export data files, inspect and manipulate data and obtain summary statistics, create various types of data visualizations, apply standard statistical techniques (e.g., t-tests, correlation, regression, ANOVA), find/install/use add-on packages, know how and where to obtain help when getting stuck, be able to use basic programming structures (e.g., loops, if-else statements), and write documents with R Markdown.

Biopsychology

Faculty of Psychology and Neuroscience

PSY4418

Period 3:
5 Jan 2026 **30 Jan 2026**

Credits:
3.0

Coordinator:
P.R.A. Heckman

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Final paper, Attendance

Keywords:
action potentials, second messengers, neurotransmitters, depression, cognition, Alzheimer, neurogenesis

Full course description

This course provides an in-depth description of biopsychological concepts of brain function. It will cover elements from functional neuroanatomy, neurophysiology and psychopharmacology as they are applied to brain and behaviour research. The students will first review the macro- and microanatomy of the brain, and also neurochemical and neurobiological mechanisms related to neurotransmission. Special attention will be paid to basic cellular processes leading to disturbances in the brain. The students will discuss questions such as: How do the chemicals in our brain influence neurons? How do they potentially affect the brain and lead to Alzheimer's disease? What is the specific role of second messengers in these processes? Additionally, the students will deal with sexual differentiation and which biological processes determine sexual or gender differences. In the fourth task the students will learn more about the neurobiological changes that lead to addiction.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to:

- explain the basic mechanisms of neuronal communication within a neuron and between neurons;

- explain the principles and mechanisms of neurotransmission and receptor binding;
- explain the consequences of receptor activation (metabotropic or ionotropic) on intracellular events, i.e, second messenger signaling cascades;
- explain the biological factors that lead to sexual differentiation and which factors underlie gender identity;
- explain how addiction can be explained on basis of the biological changes in the mesolimbic system. The students will learn that dopamine and endorphins play an essential role. The students will learn the concepts of wanting and liking as different properties of addiction, each with a different neuronal substrate;
- write a short research proposal on a biological oriented topic of their choice;

Applied Statistics II: A

Faculty of Psychology and Neuroscience

PSY4163

Period 4:
2 Feb 2026 **2 Apr 2026**

Credits:
2.0

Coordinator:
J. Schepers

Teaching methods:
Lecture(s), Skills, Assignment(s)

Assessment methods:
Written exam, Attendance, Assignment

Keywords:
sample size, power, structural equation modeling, LISREL, bootstrapping, permutation test, cross-validation

Full course description

Theme 1, Period 4, offered in PSY4163 & PSY4164

Course lecturer: Gerard van Breukelen

Sample size calculation and nested designs: This course provides an introduction to sample size/power calculation for elementary and often encountered research designs in psychology and neuroscience. First, sample size calculation is explained and practiced for comparing two independent samples (e.g. parallel groups or between-subject design) and for comparing two dependent samples (e.g. crossover or within-subject design) on a quantitative dependent variable (outcome). Subsequently, this is extended to a) correlation between two quantitative variables, b) the comparison of two groups on a binary outcome, and c) two-way factorial designs (BS*BS, WS*WS, BS*WS). The opposite effects of a covariate on the sample size needed in randomized and nonrandomized studies are also explained and practiced. Finally, the data analysis and sample size calculation are covered for some popular nested designs, specifically cluster randomized trials and multicenter/multisite trials. Sample size calculations will be done with GPower and possibly some free software for nested designs, and with pencil-and-paper assignments.

Theme 2, Period 4, offered in PSY4163 & PSY4165

Course lecturer: Nick Broers
Structural equation modeling: Structural equation modeling (SEM) is an advanced multivariate method that is gaining importance in psychology but still requires special software (such as Lisrel, EQS, AMOS or Mplus). SEM is introduced in two units, starting with causal modelling and mediation analysis in cross-sectional research and then extending to longitudinal research and latent variables (factors). Special attention is given to identifying models, model equivalence, global and local goodness of fit indices, parsimony, model modification and cross- validation. Some concepts from matrix algebra are needed for SEM, and these will be briefly discussed without going into technical detail.
Theme 3, Period 5, offered in PSY4164 & PSY4165
Course Lecturer: Jan Schepers
Resampling methods in statistics: Many modern statistical analyses make use of resampling methods in applications where theoretical statistics cannot readily provide answers for making statistical inferences from the data at hand. This elective provides an introduction to three important resampling methods, bootstrapping, permutation testing and cross- validation, for obtaining measures of accuracy for parameters of a model or for studying model fit. The methods will be practiced using the software R.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to choose the correct formula for computing the sample size for basic and often used research designs, and to compute the sample size with that formula (Theme 1)
Students are able to understand path analysis, structural equation modeling, confirmatory factor analysis, structural models with latent variables, creating and testing SEM models (Theme 2)
Students are able to understand bootstrap sampling, permutation testing, cross-validation, bias, bootstrap confidence interval, bootstrap standard error, prediction error (Theme 3)

Prerequisites

All electives: good understanding of basic and intermediate statistics, including factorial ANOVA and multiple regression
Good working knowledge of R for theme 3: basic programming skils such as for-loops, logical operators, vectors

Applied Statistics II: B

Faculty of Psychology and Neuroscience

PSY4164

Period 4:
2 Feb 2026 **2 Apr 2026**

Credits:
2.0

Coordinator:
J. Schepers

Teaching methods:
Lecture(s), Skills, Assignment(s)

Assessment methods:
Written exam, Attendance, Assignment

Keywords:
sample size, power, structural equation modeling, LISREL, bootstrapping, permutation test, cross-validation

Full course description

Theme 1, Period 4, offered in PSY4163 & PSY4164

Course lecturer: Gerard van Breukelen

Sample size calculation and nested designs: This course provides an introduction to sample size/power calculation for elementary and often encountered research designs in psychology and neuroscience. First, sample size calculation is explained and practiced for comparing two independent samples (e.g. parallel groups or between-subject design) and for comparing two dependent samples (e.g. crossover or within-subject design) on a quantitative dependent variable (outcome). Subsequently, this is extended to a) correlation between two quantitative variables, b) the comparison of two groups on a binary outcome, and c) two-way factorial designs (BS*BS, WS*WS, BS*WS). The opposite effects of a covariate on the sample size needed in randomized and nonrandomized studies are also explained and practiced. Finally, the data analysis and sample size calculation are covered for some popular nested designs, specifically cluster randomized trials and multicenter/multisite trials. Sample size calculations will be done with GPower and possibly some free software for nested designs, and with pencil-and-paper assignments.

Theme 2, Period 4, offered in PSY4163 & PSY4165

Course lecturer: Nick Broers
Structural equation modeling: Structural equation modeling (SEM) is an advanced multivariate method that is gaining importance in psychology but still requires special software (such as Lisrel, EQS, AMOS or Mplus). SEM is introduced in two units, starting with causal modelling and mediation analysis in cross-sectional research and then extending to longitudinal research and latent variables (factors). Special attention is given to identifying models, model equivalence, global and local goodness of fit indices, parsimony, model modification and cross- validation. Some concepts from matrix algebra are needed for SEM, and these will be briefly discussed without going into technical detail.
Theme 3, Period 5, offered in PSY4164 & PSY4165
Course Lecturer: Jan Schepers
Resampling methods in statistics: Many modern statistical analyses make use of resampling methods in applications where theoretical statistics cannot readily provide answers for making statistical inferences from the data at hand. This elective provides an introduction to three important resampling methods, bootstrapping, permutation testing and cross- validation, for obtaining measures of accuracy for parameters of a model or for studying model fit. The methods will be practiced using the software R.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to choose the correct formula for computing the sample size for basic and often used research designs, and to compute the sample size with that formula (Theme 1)
Students are able to understand path analysis, structural equation modeling, confirmatory factor analysis, structural models with latent variables, creating and testing SEM models (Theme 2)
Students are able to understand bootstrap sampling, permutation testing, cross-validation, bias, bootstrap confidence interval, bootstrap standard error, prediction error (Theme 3)

Prerequisites

All electives: good understanding of basic and intermediate statistics, including factorial ANOVA and multiple regression
Good working knowledge of R for theme 3: basic programming skils such as for-loops, logical operators, vectors

Applied Statistics II: C

Faculty of Psychology and Neuroscience

PSY4165

Period 4:
2 Feb 2026 **2 Apr 2026**

Credits:
2.0

Coordinator:
J. Schepers

Teaching methods:
Lecture(s), Skills, Assignment(s)

Assessment methods:
Written exam, Attendance, Assignment

Keywords:
sample size, power, structural equation modeling, LISREL, bootstrapping, permutation test, cross-validation

Full course description

Theme 1, Period 4, offered in PSY4163 & PSY4164

Course lecturer: Gerard van Breukelen

Sample size calculation and nested designs: This course provides an introduction to sample size/power calculation for elementary and often encountered research designs in psychology and neuroscience. First, sample size calculation is explained and practiced for comparing two independent samples (e.g. parallel groups or between-subject design) and for comparing two dependent samples (e.g. crossover or within-subject design) on a quantitative dependent variable (outcome). Subsequently, this is extended to a) correlation between two quantitative variables, b) the comparison of two groups on a binary outcome, and c) two-way factorial designs (BS*BS, WS*WS, BS*WS). The opposite effects of a covariate on the sample size needed in randomized and nonrandomized studies are also explained and practiced. Finally, the data analysis and sample size calculation are covered for some popular nested designs, specifically cluster randomized trials and multicenter/multisite trials. Sample size calculations will be done with GPower and possibly some free software for nested designs, and with pencil-and-paper assignments.

Theme 2, Period 4, offered in PSY4163 & PSY4165

Course lecturer: Nick Broers
Structural equation modeling: Structural equation modeling (SEM) is an advanced multivariate method that is gaining importance in psychology but still requires special software (such as Lisrel, EQS, AMOS or Mplus). SEM is introduced in two units, starting with causal modelling and mediation analysis in cross-sectional research and then extending to longitudinal research and latent variables (factors). Special attention is given to identifying models, model equivalence, global and local goodness of fit indices, parsimony, model modification and cross- validation. Some concepts from matrix algebra are needed for SEM, and these will be briefly discussed without going into technical detail.
Theme 3, Period 5, offered in PSY4164 & PSY4165
Course Lecturer: Jan Schepers
Resampling methods in statistics: Many modern statistical analyses make use of resampling methods in applications where theoretical statistics cannot readily provide answers for making statistical inferences from the data at hand. This elective provides an introduction to three important resampling methods, bootstrapping, permutation testing and cross- validation, for obtaining measures of accuracy for parameters of a model or for studying model fit. The methods will be practiced using the software R.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to choose the correct formula for computing the sample size for basic and often used research designs, and to compute the sample size with that formula (Theme 1)
Students are able to understand path analysis, structural equation modeling, confirmatory factor analysis, structural models with latent variables, creating and testing SEM models (Theme 2)
Students are able to understand bootstrap sampling, permutation testing, cross-validation, bias, bootstrap confidence interval, bootstrap standard error, prediction error (Theme 3)

Prerequisites

All electives: good understanding of basic and intermediate statistics, including factorial ANOVA and multiple regression
Good working knowledge of R for theme 3: basic programming skils such as for-loops, logical operators, vectors

Executive Control

Faculty of Psychology and Neuroscience

PSY4413

Period 4:
2 Feb 2026 **2 Apr 2026**

Credits:
4.0

Coordinator:
P. van Ruitenbeek

Teaching methods:
PBL, Lecture(s), Presentation(s)

Assessment methods:
Written exam, Participation, Attendance

Keywords:
motor control, cognitive control, executive functions

Full course description

A key element in the current understanding of behavioural organisation is executive control. At present, a redefinition of related concepts and a rapid expansion of our knowledge are taking place, based on insights from cognitive neuroscience. Based on data from imaging studies, the behavioural and computational models of cognitive mechanisms are being restructured. Throughout the course, emphasis will be on mechanisms of control, such as motor control needed for movement, and cognitive control (or executive function) to bias the selection of action and thoughts to achieve our goals. Various experimental approaches are evaluated and discussed in the light of recent literature. Experts in the field of cognitive and motor control research will present their current work, and students will be able to discuss their own papers and topics with them.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to understand:
motor and cognitive control (executive functions) and brain structures involved in these types of control.

Stress, the Brain and Depression

Faculty of Psychology and Neuroscience

PSY4417

Period 4:
2 Feb 2026 **2 Apr 2026**

Credits:
3.0

Coordinator:
C.R. Markus

Teaching methods:
Lecture(s), Paper(s), Presentation(s)

Assessment methods:
Attendance, Assignment

Keywords:
stress, genes, brain, depression, psychopharmacology

Full course description

It has become increasingly clear that stress is one of the most important triggers for several cognitive-affective disorders. For instance, a tremendous amount of biological and cognitive-psychological research has been conducted on the onset and course of stress-related affective disorders like depression. Cognitively oriented psychologists have shown that the chance of developing stress-related depression is enhanced as a result of negative and dysfunctional (stress-inducing) thoughts, whereas biologically oriented psychologists and psychiatrists particularly emphasize the importance of biochemical brain dysfunction. Yet, despite intensive research over the past decades, unidirectional biological and cognitive achievements have not yet produced definitive conclusions about critical psychobiological risk factors involved in stress-related affective disorders like depression. In addition, and contrary to a one-dimensional approach, this course will concentrate on the interaction between stress and (genetic-) brain vulnerability in explaining susceptibility for stress-related affective disorders.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to understand:

- gene-brain mechanisms involved in stress;

- biochemistry of depression;
- interaction between genes, brain, stress and depression.

Neuropsychiatric Disorders

Faculty of Psychology and Neuroscience

PSY4414

Period 5:
7 Apr 2026 **5 Jun 2026**

Credits:
3.0

Coordinator:
W.J. JansenI.H.G.B. Ramakers

Teaching methods:
PBL, Lecture(s), Paper(s), Work in subgroups, Presentation(s)

Assessment methods:
Final paper, Presentation, Attendance

Keywords:
neuropsychiatric disorders, brain mechanisms, biological theories, biopsychosocial theories, research, treatment

Full course description

This course provides basic and advanced knowledge of neuropsychiatric disorders. Several neuropsychiatric disorders will be extensively discussed from a biopsychosocial perspective. In particular, the focus will be on new knowledge and developments within the neuropsychiatry, related to both research and clinical practice. The course covers main findings, biopsychosocial theories and controversies related to several neuropsychiatric disorders, with an emphasis on brain mechanisms and behavioural and cognitive dysfunction. The course discusses disorders at the interface between neuropsychiatry and cognitive/behavioural neurology. Each tutorial meeting covers another neuropsychiatric disorder, for example Gilles de la Tourette, pediatric delirium, somatic symptom disorder, dementia, apathy in Parkinson's disease,ECT by depression, and anxiety disorders. Specific attention is given to neuropathology related to functional and structural brain imaging, neurochemistry as well as psychosocial factors. In short, this course deals with all major aspects of a number of specific neuropsychiatric disorders, including: biopsychosocial theories; neurobiological mechanisms; cognitive and behavioural implications; treatment and research. Students learn to integrate all the previously mentioned aspects of the disorders in order to increase their general knowledge of neuropsychiatry. The tutorial meetings will be led by renowned clinical experts in the field and will provide an excellent learning experience for students who want to focus on working

within neuropsychiatry. Students also have to give a group presentation by themselves being related to a neuropsychiatric disorder, from a biopsychosocial perspective.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

- students are able to recognize neuropsychiatric disorders and related biopsychosocial models;
- students are able to identify different biopsychosocial (and cultural) factors being related to a specific neuropsychiatric disorder, and summarize these in a review;
- students are able to interpret the relationships of different factors, including neurobiologic mechanisms, gene environment interactions, behavioural and cognitive problems, neurotransmitters, and neuroimaging, being related to a specific neuropsychiatric disorder;
- students are able to write a review from a biopsychosocial perspective related to a specific neuropsychiatric disorder, including etiology, treatment, implications for clinical practice, and future perspectives.

Neuropsychology in Practice: From Test Results to Report and Advice

Faculty of Psychology and Neuroscience

PSY4423

Period 5:
7 Apr 2026 **5 Jun 2026**

Credits:
2.0

Coordinator:
C.A.G. Wolfs

Teaching methods:
Skills, Assignment(s), Presentation(s)

Assessment methods:
Participation, Presentation, Attendance

Keywords:
clinical neuropsychology, assessment, cognitive dysfunctioning, emotional problems, behavioural problems

Full course description

Students learn to integrate several aspects of a neuropsychological examination. This kind of examination can be used both in clinical settings and in clinical research and contains the following aspects: interview, clinical impression, test results, rating scales, questionnaires, etc. Learning to interpret and integrate the different aspects will result in a coherent neuropsychological report and conclusion. Tests and theoretical and practical knowledge will be presented in the current skills training to help students achieve the course goals. Note that the major focus of this skills training is not to test a patient or a subject participating in a study, but to interpret the data and to discuss the findings with the patients by means of role playing.

The skills training consists of eight meetings. In the first two meetings, an overview will be presented of the skills needed to form a conclusion about the data acquired by testing a patient or research subject. Furthermore, students will practise performing and interpreting tests, rating scales and questionnaires. The use of normative data, the concept of validity and what to do when a subject's performance is lower, or otherwise deviant from what would be expected, will also be addressed. Meetings three to eight will be led by clinical experts. Video segments of different patients with a neuropsychological or psychiatric problem (e.g. patients from the departments of psychiatry,

neurology and geriatrics) will form the basis of a group discussion and presentations, in which the emphasis will be on the interpretation of patient material. In the final meeting an actual patient is interviewed by the students, and the neuropsychological test results are reported back to the patient.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

- students will practice performing neuropsychological tests, rating scales and questionnaires;
- students will be able to interpret test results and ratings on questionnaires;
- students will be able to translate theoretical knowledge on neuropsychological assessment to application in clinical practice.

Neuropsychological Rehabilitation

Faculty of Psychology and Neuroscience

PSY4424

Period 5:
7 Apr 2026 **5 Jun 2026**

Credits:
2.0

Coordinator:
C. ReschI. Winkens

Teaching methods:
Lecture(s), Skills, Assignment(s), Presentation(s)

Assessment methods:
Participation, Presentation, Attendance

Keywords:
rehabilitation, treatment, acquired brain damage, effectiveness

Full course description

The course will address the content of neuropsychological interventions as well as the procedures and designs that can be used for the execution of patient-related research. Throughout the meetings, the basic premises and 'pitfalls' in this type of research will be elaborated and the possibilities to circumvent these problems by proper choice of approach and design will be discussed. Various research designs will be compared in terms of their strengths and weaknesses (e.g. experimental studies, quasi-experimental designs, intention-to-treat, single case designs, challenge-studies, depletion studies). Various forms of neuropsychological treatments will be discussed and students will receive practical training in rehabilitation principles. Skills will be developed that can be applied in cognitive training and psycho-education.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

- students will be able to explain the different neuropsychological treatment methods used in clinical practice;
- students can select and apply an adequate research design for the evaluation of the effects of neuropsychological treatment;
- students are able to design a randomized clinical trial to evaluate the effect of neuropsychological treatment.

Human Neuroimaging

Faculty of Psychology and Neuroscience

PSY4435

Period 5:
7 Apr 2026 **5 Jun 2026**

Credits:
3.0

Coordinator:
R. AuksztulewiczT.W. Boonstra

Teaching methods:
PBL, Lecture(s), Skills, Work in subgroups

Assessment methods:
Written exam, Presentation, Attendance

Keywords:
Magnetic Resonance Imaging (MRI), functional MRI, structural MRI, neuroimaging, data analysis, Brain connectivity, Functional MRI

Full course description

This course aims at introducing basic knowledge and principles of functional brain imaging techniques, with a special emphasis on their application in addressing clinically oriented research questions. The workshop comprises three sections.

The first section is a practical introduction into MRI/EEG image processing and statistical analysis, centering on functional MRI and ERPs. During the meeting you will become familiar with the following basic aspects of image analyses: the MR image and its preprocessing; First level statistical analysis (creating colored blobs); Second level analysis, with special emphasis on between subject designs.

The second part of the workshop consists of more theoretical introductions to novel clinically relevant imaging techniques. In three education group meetings you will study at a deeper level some imaging topics that are thought basic and very important for the ability to interpret patient-oriented research. General topics that may be discussed include brain connectivity (structural, functional and effective connectivity), structural imaging techniques (voxel-based morphometry, cortical volume and thickness ...), and image analysis techniques (head motion correction, multiple comparisons correction).

A third section comprises a group assignment. In a small group you get the opportunity to elaborate in more depth an imaging topic that has your interest. Each group will prepare a presentation in which they share their insight and understanding of this topic with the rest of the students.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to understand:

- functional brain imaging techniques and principles;
- data analysis;
- between group experimental designs and its pitfalls;
- available imaging techniques for clinically oriented research.

Prerequisites

Basic knowledge of brain anatomy, experimental design and statistics.

Research Grant Writing Workshop

Faculty of Psychology and Neuroscience

PSY4114

Period 6:
8 Jun 2026 **3 Jul 2026**

Credits:
2.0

Coordinator:
R.L.H. HandelsS. Köhler

Teaching methods:
Lecture(s), Skills, Assignment(s), Work in subgroups

Assessment methods:
Final paper, Attendance

Keywords:
Funding possibilities, grant applications, academic writing, team science

Full course description

Research is expensive. Finding appropriate funding sources and writing a convincing grant application is therefore a core comptency of scientists. During this workshop, students will learn why and how to apply for research grants and they will be taught academic writing skills. The need for acquiring funding for research, the opportunities for, and availability of grant application funding will be discussed. Students will start by chosing a topic (from a list of topics) and write an abstract on their research idea. Subsequently, they work in teams to discuss individual ideas and decide on a joint research idea that will serve as a basis for writing a full grant proposal during the second-year Research Grant Writing Course with guidance of a mentor (see description of PSY5112). Mentors are researchers from all RM tracks who have experience in applying for different types of grants and will provide students with first-hand knowledge and tips. Students will learn fundamentals of good grant writing, general preparation of the grant application and how to deal with reviewer comments. Ethical issues including feasibility and acceptability of the research, and the role of the local research ethics committee will be discussed.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

- students will acquire skills on general academic writing as well as grant writing

- students will learn about the importance of grant writing for an academic career;
- students will recognize opportunities for funding, ethical aspects of grants and how grants can be acquired;
- students will develop a first outline of a grant proposal with peers.

Psychopharmacology

Faculty of Psychology and Neuroscience

PSY4335

Period 6:
8 Jun 2026 **3 Jul 2026**

Credits:
1.0

Coordinator:
P. van Ruitenbeek

Teaching methods:
Lecture(s), Work in subgroups, Presentation(s)

Assessment methods:
Presentation, Attendance

Keywords:
psychopharmacology

Full course description

Students will become acquainted with some current topics in psychopharmacology, i.e. mechanisms of medicinal drugs including new avenues, nutritional substancesmanipulations of frontal cortex functioning and substance use disorder.

There will be explicit attention to the different perspectives of Psychopharmacology from the tracks in which participating students are residing, ie. Neuropsychology (NP) and Psychopathology (PP).

Some research topics and perspectives in Psychopharmacology:

- Old illicit drugs, new drugs or new targets?
- Addiction
- Basic psychopharmacological mechanisms
- Dopaminergic manipulations of frontal cortex function

The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

- students are able to understand and remember principles of psychopharmacology and illustrate them using examples of psychopharmacological studies;
- students are able to create a poster presentation on a topic of psychopharmacology and present (apply) it professionally.

Psychiatric Epidemiology

Faculty of Psychology and Neuroscience

PSY4371

Period 6:
8 Jun 2026 **3 Jul 2026**

Credits:
1.0

Coordinator:
W. Viechtbauer

Teaching methods:
Lecture(s), Skills, Assignment(s), Work in subgroups

Assessment methods:
Final paper, Attendance

Keywords:
Epidemiology, methodology, statistics, experimental studies, observational studies, diagnostic studies, systematic reviews, meta-analysis

Full course description

The course provides an introduction to the methodologies and analytical strategies of epidemiology as applied to mental health outcomes. The principles and practice of various study types (cohort, case-control, RCT, ecological) will be taught, with emphasis on interpreting associations and possible causality thereof. Consideration will be given to such issues as confounding, bias, and moderation. Further topics to be covered include the use and interpretation of diagnostic studies, the basic principles of analysing dichotomous and time-to-event outcomes, genetic epidemiology, and the use of systematic reviews and meta-analysis for building cumulative knowledge.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to understand:

- different epidemiological study types, including their purpose, advantages and disadvantages;
- calculation and interpretation of effect size and outcome measures for dichotomous and time-to-event outcomes;
- principles of analysing epidemiological studies;
- genetic epidemiology;

- the basic steps of conducting a systematic review and meta-analysis.

Neuropsychopharmacology

Faculty of Psychology and Neuroscience

PSY4415

Period 6:
8 Jun 2026 **3 Jul 2026**

Credits:
3.0

Coordinator:
J.G. Ramaekers

Teaching methods:
PBL

Assessment methods:
Final paper, Presentation, Attendance

Keywords:
drug action, psychopharmacology of CNS disorders, behavioural toxicity

Full course description

This course addresses the influence of drugs upon normal functioning and on disease states. Neurobiological and neurochemical mechanisms are presented with the aim to deepen insight into the various mechanisms of drug action. The course will review major classes of drugs that are used frequently in the treatment of mental disorders and neurological disease, but also other classes of drugs that have side effects on the central nervous system. Other topics in this course are behavioural toxicology, experimental designs used in treatment studies, drugs of abuse and recreational drugs.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to understand neurobiology of drugs and mental disorders.

Prerequisites

Students will be able to understand neurobiology of drugs and mental disorders.

Research Grant Writing Course

Faculty of Psychology and Neuroscience

PSY5112

Period 1:
1 Sep 2025 **24 Oct 2025**

Credits:
3.0

Coordinator:
R.L.H. HandelsS. Köhler

Teaching methods:
Skills, Assignment(s), Work in subgroups

Assessment methods:
Final paper, Presentation, Attendance

Keywords:
grant proposal, interdisciplinary, hypothesis, design, methods, research symposium, Interdisciplinary

Full course description

Research is expensive. Finding appropriate funding sources and writing a convincing application is therefore a core comptenency of scientists. In this course, students will apply what they have learned during the Research Grant Writing Workshop (PSY4114) by going through a full grant proposal writing and review process. Students will work together (groups of 4-6 students) to write a joint research proposal as group on their selected topic, including an original research hypothesis, design, methods, motivation and valorization. Students are encouraged to think across boundaries of different scientific fields. A mentor (senior researcher) will guide students during this writing process. The students will write their proposal in 3 steps, and they will receive feedback from their mentor and peers along the way. The resulting grant proposals will be reviewed by two assessors and presented during a symposium by way of a group-based oral presentation.

The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to:

- review literature;

- formulate a research hypothesis;
- design a innovative research study;
- write a competitive grant proposal;
- present and illustrate a grant proposal at a symposium.

Prerequisites

This course is a continuation of the Research Grant Writing Workshop (PSY4112).

Cognitive Development

Faculty of Psychology and Neuroscience

PSY5411

Period 1:
1 Sep 2025 **24 Oct 2025**

Credits:
3.0

Coordinator:
E.H.H. Keulers

Teaching methods:
Assignment(s), Work in subgroups, Presentation(s)

Assessment methods:
Final paper, Presentation, Attendance

Keywords:
child neuropsychology, individual differences, cognitive and brain development, methodological challenges

Full course description

The focus of the course is on cognitive development during childhood and adolescence. Behavioral changes and underlying brain changes will be discussed. The aim is to learn more about scientific views on typical cognitive development and the methodological difficulties in demonstrating these views empirically. Although the focus is on typical development, development is often studied in the context of abnormal development. Examples of topics that are discussed during the course are general cognitive abilitydevelopment, executive function, brain maturation, giftednedd and cognitive stimulation and training.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to:

- understand and critically evaluate theoretical and methodological issues in studies of - cognitive development from childhood to adolescence;
- generate research ideas about and think about solutions to issues relevant in the field of cognitive development.

Brain, Learning and Memory

Faculty of Psychology and Neuroscience

PSY5414

Period 1:
1 Sep 2025 **24 Oct 2025**

Credits:
3.0

Coordinator:
P. van Ruitenbeek

Teaching methods:
PBL, Lecture(s), Assignment(s), Presentation(s)

Assessment methods:
Final paper, Attendance

Keywords:
prefrontal cortex, hippocampus, limbic system, neurotransmitters, working memory, short-term memory, long-term memory, acquisition, consolidation, retrieval, cognition enhancing drugs

Full course description

There has been a rapid increase in our understanding of the basic mechanisms underlying the consolidation of new information, and its subsequent retrieval and its use to make sense of the world around us. Both data from preclinical research in animal models and in preclinical human models and neuroimaging experiments will be used in this course, together with seminal experiments in patients. Recent theories and experimental data illustrate how a multidimensional view of learning and memory can help elucidate the relevant mechanisms in terms of neurobiology, neurochemistry and cognition. The influences of drugs on information processing and memory are also discussed in depth.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

- students are able to remember and understand the role of the hippocampus in memory functions, the role of other limbic structures in learning and memory, the role of neurotransmitters as drug targets in learning and memory;
- students are able to evaluate the use of various methods (e.g. lesions, animal models, cognitive tasks) in learning and memory research.

Neuropsychological Assessment in Children

Faculty of Psychology and Neuroscience

PSY5431

Period 1:
1 Sep 2025 **24 Oct 2025**

Credits:
1.0

Coordinator:
E.C.H.M. Haijen - Bongers

Teaching methods:
Skills, Assignment(s), Work in subgroups

Assessment methods:
Final paper, Attendance

Keywords:
cognitive abilities, multiple disability, neuropediatrics, specific impairment, neuropsychological assessment/methods

Full course description

The aim of this workshop is to acquaint students with neuropsychological testing in children and with the interpretation of clinical data in relation to a conceptual model of brain-behaviour relationships. The constructs and assessment of cognitive functions in children will be discussed, with special attention given to methodological aspects of assessment. A number of cognitive tests for children will be presented during the workshop. Models of cognitive psychology will be considered in the context of developmental disorders, including memory, attention, information processing and intelligence. The focus is on test paradigms from the field of child neuropsychology used to probe domain-specific functions, with an emphasis on the need to integrate information from different sources: medical history, radiology, interview, test results, scientific literature, etc.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students will be able to:

- understand as well as critically evaluate concepts relevant for neuropsychological assessment (cognitive abilities), assessment methods and test results;
- analyse and interpret neuropsychological assessment data from patient with different syndromes/ difficulties;

- integrate different sources of information in answering diagnostic questions about patient cases and write a clinical report about this.

Research Proposal

Faculty of Psychology and Neuroscience

PSY5107

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
1.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Paper(s), Assignment(s), Research

Assessment methods:
Final paper, Participation, Attendance, Oral exam, Observation

Keywords:
research project, research, master's thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a master thesis research projectinternship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their master thesis research projectinternship abroad. Students start their masterthesis research projectinternship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their master thesis research projectinternship and orally defending their thesis.

The master thesis research projectinternship can be completed at Maastricht University or at external research institutes. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors must be a member of the Faculty of Psychology and Neuroscience (FPN), the Faculty of Health, Medicine and Life Sciences (FHML), or the School of Business and Economics (SBE). Both assessors must hold a PhD degree.

A detailed guide on master thesis research projectinternship and the master's thesis can be found on the student-intranet.

Each specialisation has its own internship/research project coordinator:

- *RM Cognitive Neuroscience:*

Lars Hausfeld, Cognitive Neuroscience (FPN), Phone: (0) 43 38 84521,
55 Oxfordlaan, Room S.1.018, Email: lars.hausfeld@maastrichtuniversity.nl

- *RM Fundamental Neuroscience:*

Pilar Martínez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042,
40 Universiteitssingel, Room 2.574, Email: p.martinez@maastrichtuniversity.nl

- *RM Neuropsychology:*

Michael Schwartze, Neuropsychology and Psychopharmacology (FPN),
Phone (043) 38 82802, 40 Universiteitssingel, Room A2.765,
Email: michael.schwartze@maastrichtuniversity.nl
For the clinical part:
Ieke Winkens, Neuropsychology and Psychopharmacology (FPN),
Phone (043) 38 84512, 40 Universiteitssingel, Room A2.759,
Email: fpn-np-internship@maastrichtuniversity.nl

- RM Clinical Psychology:

Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487,
40 Universiteitssingel, Room 2.767, Email: nicole.geschwind@maastrichtuniversity.nl

- RM Drug Development and Neurohealth:

Jacco Briedé, Toxicogenomics, Phone (043)3881094,
50 Universiteitssingel, Room 4.114, Email: j.briede@maastrichtuniversity.nl
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand and apply:
- conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.
- In a correct and transparent manner GenAI or LLM's, like ChatGPT

Prerequisites

The master thesis research projectinternship cannot be started until:

- at least 5460 credits have been attained during the programme;
- the above mentioned 5460 credits must include the courses Advanced Statistics I and II.

Master's Thesis Research Project Graded

Faculty of Psychology and Neuroscience

PSY5120

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
10.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Paper(s), Assignment(s), Research

Assessment methods:
Final paper, Participation, Attendance, Oral exam, Observation

Keywords:
research project, research, master's thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a master thesis research projectinternship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their master thesis research projectinternship abroad. Students start their masterthesis research projectinternship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their master thesis research projectinternship and orally defending their thesis.

The master thesis research projectinternship can be completed at Maastricht University or at external research institutes. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors must be a member of the Faculty of Psychology and Neuroscience (FPN), the Faculty of Health, Medicine and Life Sciences (FHML), or the School of Business and Economics (SBE). Both assessors must hold a PhD degree.

A detailed guide on master thesis research projectinternship and the master's thesis can be found on the student-intranet.

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- *RM Fundamental Neuroscience:*

Pilar Martínez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042,
40 Universiteitssingel, Room 2.574, Email: p.martinez@maastrichtuniversity.nl

- *RM Neuropsychology:*

Michael Schwartze, Neuropsychology and Psychopharmacology (FPN),
Phone (043) 38 82802, 40 Universiteitssingel, Room A2.765,
Email: michael.schwartze@maastrichtuniversity.nl
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- RM Clinical Psychology:

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40 Universiteitssingel, Room 2.767, Email: nicole.geschwind@maastrichtuniversity.nl

- RM Drug Development and Neurohealth:

Jacco Briedé, Toxicogenomics, Phone (043)3881094,
50 Universiteitssingel, Room 4.114, Email: j.briede@maastrichtuniversity.nl
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand and apply:
- conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.
- In a correct and transparent manner GenAI or LLM's, like ChatGPT

Prerequisites

The master thesis research projectinternship cannot be started until:

- at least 5460 credits have been attained during the programme;
- the above mentioned 5460 credits must include the courses Advanced Statistics I and II.

Master's Thesis Research Project Ungraded

Faculty of Psychology and Neuroscience

PSY5121

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
25.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Paper(s), Assignment(s), Research

Assessment methods:
Final paper, Participation, Attendance, Oral exam, Observation

Keywords:
research project, research, master's thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a master thesis research projectinternship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their master thesis research projectinternship abroad. Students start their masterthesis research projectinternship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their master thesis research projectinternship and orally defending their thesis.

The master thesis research projectinternship can be completed at Maastricht University or at external research institutes. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors must be a member of the Faculty of Psychology and Neuroscience (FPN), the Faculty of Health, Medicine and Life Sciences (FHML), or the School of Business and Economics (SBE). Both assessors must hold a PhD degree.

A detailed guide on master thesis research projectinternship and the master's thesis can be found on the student-intranet.

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- RM Drug Development and Neurohealth:

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50 Universiteitssingel, Room 4.114, Email: j.briede@maastrichtuniversity.nl
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand and apply:
- conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.
- In a correct and transparent manner GenAI or LLM's, like ChatGPT

Prerequisites

The master thesis research projectinternship cannot be started until:

- at least 5460 credits have been attained during the programme;
- - the above mentioned 5460 credits must include the courses Advanced Statistics I and II.

Master's Thesis Research Project Graded

Faculty of Psychology and Neuroscience

PSY5122

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
10.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Paper(s), Assignment(s), Research

Assessment methods:
Final paper, Participation, Attendance, Oral exam, Observation

Keywords:
research project, research, master's thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a master thesis research projectinternship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their master thesis research projectinternship abroad. Students start their masterthesis research projectinternship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their master thesis research projectinternship and orally defending their thesis.

The master thesis research projectinternship can be completed at Maastricht University or at external research institutes. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors must be a member of the Faculty of Psychology and Neuroscience (FPN), the Faculty of Health, Medicine and Life Sciences (FHML), or the School of Business and Economics (SBE). Both assessors must hold a PhD degree.

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- *RM Fundamental Neuroscience:*

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Ieke Winkens, Neuropsychology and Psychopharmacology (FPN),
Phone (043) 38 84512, 40 Universiteitssingel, Room A2.759,
Email: fpn-np-internship@maastrichtuniversity.nl

- RM Clinical Psychology:

Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487,
40 Universiteitssingel, Room 2.767, Email: nicole.geschwind@maastrichtuniversity.nl

- RM Drug Development and Neurohealth:

Jacco Briedé, Toxicogenomics, Phone (043)3881094,
50 Universiteitssingel, Room 4.114, Email: j.briede@maastrichtuniversity.nl
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand and apply:
- conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.
- In a correct and transparent manner GenAI or LLM's, like ChatGPT

Prerequisites

The master thesis research projectinternship cannot be started until:

- at least 5460 credits have been attained during the programme;
- - the above mentioned 5460 credits must include the courses Advanced Statistics I and II.

Master's Thesis Research Project Ungraded

Faculty of Psychology and Neuroscience

PSY5123

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
9.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Paper(s), Assignment(s), Research

Assessment methods:
Final paper, Participation, Attendance, Oral exam, Observation

Keywords:
research project, research, master's thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a master thesis research projectinternship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their master thesis research projectinternship abroad. Students start their masterthesis research projectinternship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their master thesis research projectinternship and orally defending their thesis.

The master thesis research projectinternship can be completed at Maastricht University or at external research institutes. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors must be a member of the Faculty of Psychology and Neuroscience (FPN), the Faculty of Health, Medicine and Life Sciences (FHML), or the School of Business and Economics (SBE). Both assessors must hold a PhD degree.

A detailed guide on master thesis research projectinternship and the master's thesis can be found on the student-intranet.

Each specialisation has its own internship/research project coordinator:

- *RM Cognitive Neuroscience:*

Lars Hausfeld, Cognitive Neuroscience (FPN), Phone: (0) 43 38 84521,
55 Oxfordlaan, Room S.1.018, Email: lars.hausfeld@maastrichtuniversity.nl

- *RM Fundamental Neuroscience:*

Pilar Martínez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042,
40 Universiteitssingel, Room 2.574, Email: p.martinez@maastrichtuniversity.nl

- *RM Neuropsychology:*

Michael Schwartze, Neuropsychology and Psychopharmacology (FPN),
Phone (043) 38 82802, 40 Universiteitssingel, Room A2.765,
Email: michael.schwartze@maastrichtuniversity.nl
For the clinical part:
Ieke Winkens, Neuropsychology and Psychopharmacology (FPN),
Phone (043) 38 84512, 40 Universiteitssingel, Room A2.759,
Email: fpn-np-internship@maastrichtuniversity.nl

- RM Clinical Psychology:

Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487,
40 Universiteitssingel, Room 2.767, Email: nicole.geschwind@maastrichtuniversity.nl

- RM Drug Development and Neurohealth:

Jacco Briedé, Toxicogenomics, Phone (043)3881094,
50 Universiteitssingel, Room 4.114, Email: j.briede@maastrichtuniversity.nl
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand and apply:
- conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.
- In a correct and transparent manner GenAI or LLM's, like ChatGPT

Prerequisites

The master thesis research projectinternship cannot be started until:

- at least 5460 credits have been attained during the programme;
- the above mentioned 5460 credits must include the courses Advanced Statistics I and II.

Clinical Internship

Faculty of Psychology and Neuroscience

PSY5104

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
15.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Assignment(s), Research, Patient contact

Assessment methods:
Final paper, Participation, Attendance, Observation

Keywords:
Clinical research, clinical practice, clinical training, psychodiagnostics, patient contact

Full course description

Students specialising in **Clinical Psychology** or in **Neuropsychology** may choose to conduct a 13-week clinical internship in an approved setting. The clinical internship can be conducted in conjunction with the master thesis research projectinternship or separately. Students are required to submit an additional (clinical) research proposal and scientific report (the minor's thesis) based on client/patient-based investigations performed during the clinical internship. The aims of the clinical internship are twofold. Firstly, the internship is meant to provide experience in conducting research in a clinical setting; a small-scale research project culminates in the minor's thesis. Secondly, the internship provides an introduction to the organisation and practice of mental health care, as well as basic experience in clinical diagnosis and therapeutic interventions. To this end, students will be supervised and assessed by a mental health professional with respect to their clinical skills. A clinical activities report is written and assessed by the faculty supervisor. Both parts (clinical internship and clinical activities report) should be assessed sufficiently to obtain the (15) credits. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the clinical internship and minor's thesis will be assigned 20 credits, and the master thesis research projectinternship and master's thesis will be assigned 30 credits.

A detailed guide on clinical internships and the minor's thesis can be found on the student-intranetwww.askpsy.nl > FPN Research Master Students > Internships. Although it is not a requirement of the research master's programme, students who wish to meet Dutch requirements for admission to advanced clinical training programmes are advised to extend their clinical internship by at least two weeks.

- RM Clinical Psychology Internship Coordinator:
Nicole Geschwind, Clinical Psychological Science (FPN),
Phone (043) 38 81487, 40 Universiteitssingel East,
Room A2.767, Email: Nicole.geschwind@maastrichtuniversity.nl

- RM Neuropsychology Internship Coordinator:
Ieke Winkens, Neuropsychology and Psychopharmacology (FPN)
Phone (043) 38 84512, 40 Universiteitssingel East,
Room A2.759, Email: i.winkens@maastrichtuniversity.nl

The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand the work environment of the clinical psychologist. This internship gives students the opportunity to practice clinical skills in a real-life setting and to design and conduct a small-scale clinical research project. Students are able to apply GenAI or LLM's, like ChatGPT in a correct and transparent manner.

Prerequisites

The clinical internship cannot be started until:
• At least 54 credits have been attained during the programme;
• The above mentioned 54 credits must include the courses Advanced Statistics I and II, and, for students following the Psychopathology specialisation, all Clinical Skills (I–IV) training must be included and for students following the
Neuropsychology specialisation the following skills training courses must have been completed:
- Neuropsychological Assessments;
- Basic Cognitive Psychological Skills;
- Neuropsychology in practice.

Additional requirements can apply to students who did not obtain a Bachelor’s degree in Psychology and/or a bachelor’s degree at Maastricht University

Research Proposal Minor's Thesis

Faculty of Psychology and Neuroscience

PSY5108

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
1.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Assignment(s), Research, Patient contact

Assessment methods:
Final paper, Participation, Attendance, Observation

Keywords:
Clinical research, clinical practice, clinical training, psychodiagnostics, patient contact

Full course description

Students specialising in **Clinical Psychology** or in **Neuropsychology** may choose to conduct a 13-week clinical internship in an approved setting. The clinical internship can be conducted in conjunction with the master thesis research projectinternship or separately. Students are required to submit an additional (clinical) research proposal and scientific report (the minor's thesis) based on client/patient-based investigations performed during the clinical internship. The aims of the clinical internship are twofold. Firstly, the internship is meant to provide experience in conducting research in a clinical setting; a small-scale research project culminates in the minor's thesis. Secondly, the internship provides an introduction to the organisation and practice of mental health care, as well as basic experience in clinical diagnosis and therapeutic interventions. To this end, students will be supervised and assessed by a mental health professional with respect to their clinical skills. A clinical activities report is written and assessed by the faculty supervisor. Both parts (clinical internship and clinical activities report) should be assessed sufficiently to obtain the (15) credits. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the clinical internship and minor's thesis will be assigned 20 credits, and the master thesis research projectinternship and master's thesis will be assigned 30 credits.

A detailed guide on clinical internships and the minor's thesis can be found on the student-intranetwww.askpsy.nl > FPN Research Master Students > Internships. Although it is not a requirement of the research master's programme, students who wish to meet Dutch requirements for admission to advanced clinical training programmes are advised to extend their clinical internship by at least two weeks.

- RM Clinical Psychology Internship Coordinator:
Nicole Geschwind, Clinical Psychological Science (FPN),
Phone (043) 38 81487, 40 Universiteitssingel East,
Room A2.767, Email: Nicole.geschwind@maastrichtuniversity.nl

- RM Neuropsychology Internship Coordinator:
Ieke Winkens, Neuropsychology and Psychopharmacology (FPN)
Phone (043) 38 84512, 40 Universiteitssingel East,
Room A2.759, Email: i.winkens@maastrichtuniversity.nl

The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand the work environment of the clinical psychologist. This internship gives students the opportunity to practice clinical skills in a real-life setting and to design and conduct a small-scale clinical research project. Students are able to apply GenAI or LLM's, like ChatGPT in a correct and transparent manner.

Prerequisites

The clinical internship cannot be started until:
• At least 54 credits have been attained during the programme;
• The above mentioned 54 credits must include the courses Advanced Statistics I and II, and, for students following the Psychopathology specialisation, all Clinical Skills (I–IV) training must be included and for students following the
Neuropsychology specialisation the following skills training courses must have been completed:
- Neuropsychological Assessments;
- Basic Cognitive Psychological Skills;
- Neuropsychology in practice.

Additional requirements can apply to students who did not obtain a Bachelor’s degree in Psychology and/or a bachelor’s degree at Maastricht University

Clinical Activities Report

Faculty of Psychology and Neuroscience

PSY5111

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
0.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Assignment(s), Research, Patient contact

Assessment methods:
Final paper, Participation, Attendance, Observation

Keywords:
Clinical research, clinical practice, clinical training, psychodiagnostics, patient contact

Full course description

Students specialising in **Clinical Psychology** or in **Neuropsychology** may choose to conduct a 13-week clinical internship in an approved setting. The clinical internship can be conducted in conjunction with the master thesis research projectinternship or separately. Students are required to submit an additional (clinical) research proposal and scientific report (the minor's thesis) based on client/patient-based investigations performed during the clinical internship. The aims of the clinical internship are twofold. Firstly, the internship is meant to provide experience in conducting research in a clinical setting; a small-scale research project culminates in the minor's thesis. Secondly, the internship provides an introduction to the organisation and practice of mental health care, as well as basic experience in clinical diagnosis and therapeutic interventions. To this end, students will be supervised and assessed by a mental health professional with respect to their clinical skills. A clinical activities report is written and assessed by the faculty supervisor. Both parts (clinical internship and clinical activities report) should be assessed sufficiently to obtain the (15) credits. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the clinical internship and minor's thesis will be assigned 20 credits, and the master thesis research projectinternship and master's thesis will be assigned 30 credits.

A detailed guide on clinical internships and the minor's thesis can be found on the student-intranetwww.askpsy.nl > FPN Research Master Students > Internships. Although it is not a requirement of the research master's programme, students who wish to meet Dutch requirements for admission to advanced clinical training programmes are advised to extend their clinical internship by at least two weeks.

- RM Clinical Psychology Internship Coordinator:
Nicole Geschwind, Clinical Psychological Science (FPN),
Phone (043) 38 81487, 40 Universiteitssingel East,
Room A2.767, Email: Nicole.geschwind@maastrichtuniversity.nl

- RM Neuropsychology Internship Coordinator:
Ieke Winkens, Neuropsychology and Psychopharmacology (FPN)
Phone (043) 38 84512, 40 Universiteitssingel East,
Room A2.759, Email: i.winkens@maastrichtuniversity.nl

The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand the work environment of the clinical psychologist. This internship gives students the opportunity to practice clinical skills in a real-life setting and to design and conduct a small-scale clinical research project. Students are able to apply GenAI or LLM's, like ChatGPT in a correct and transparent manner.

Prerequisites

The clinical internship cannot be started until:
• At least 54 credits have been attained during the programme;
• The above mentioned 54 credits must include the courses Advanced Statistics I and II, and, for students following the Psychopathology specialisation, all Clinical Skills (I–IV) training must be included and for students following the
Neuropsychology specialisation the following skills training courses must have been completed:
- Neuropsychological Assessments;
- Basic Cognitive Psychological Skills;
- Neuropsychology in practice.

Additional requirements can apply to students who did not obtain a Bachelor’s degree in Psychology and/or a bachelor’s degree at Maastricht University

Master's Thesis

Faculty of Psychology and Neuroscience

PSY5103

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
14.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Paper(s), Assignment(s), Research

Assessment methods:
Final paper, Participation, Attendance, Oral exam, Observation

Keywords:
research project, research, master's thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a master thesis research projectinternship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their master thesis research projectinternship abroad. Students start their masterthesis research projectinternship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their master thesis research projectinternship and orally defending their thesis.

The master thesis research projectinternship can be completed at Maastricht University or at external research institutes. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors must be a member of the Faculty of Psychology and Neuroscience (FPN), the Faculty of Health, Medicine and Life Sciences (FHML), or the School of Business and Economics (SBE). Both assessors must hold a PhD degree.

A detailed guide on master thesis research projectinternship and the master's thesis can be found on the student-intranet.

Each specialisation has its own internship/research project coordinator:

- *RM Cognitive Neuroscience:*

Lars Hausfeld, Cognitive Neuroscience (FPN), Phone: (0) 43 38 84521,
55 Oxfordlaan, Room S.1.018, Email: lars.hausfeld@maastrichtuniversity.nl

- *RM Fundamental Neuroscience:*

Pilar Martínez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042,
40 Universiteitssingel, Room 2.574, Email: p.martinez@maastrichtuniversity.nl

- *RM Neuropsychology:*

Michael Schwartze, Neuropsychology and Psychopharmacology (FPN),
Phone (043) 38 82802, 40 Universiteitssingel, Room A2.765,
Email: michael.schwartze@maastrichtuniversity.nl
For the clinical part:
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Phone (043) 38 84512, 40 Universiteitssingel, Room A2.759,
Email: fpn-np-internship@maastrichtuniversity.nl

- RM Clinical Psychology:

Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487,
40 Universiteitssingel, Room 2.767, Email: nicole.geschwind@maastrichtuniversity.nl

- RM Drug Development and Neurohealth:

Jacco Briedé, Toxicogenomics, Phone (043)3881094,
50 Universiteitssingel, Room 4.114, Email: j.briede@maastrichtuniversity.nl
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand and apply:
- conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.
- In a correct and transparent manner GenAI or LLM's, like ChatGPT

Prerequisites

The master thesis research projectinternship cannot be started until:

- at least 5460 credits have been attained during the programme;
- the above mentioned 5460 credits must include the courses Advanced Statistics I and II.

Master's Thesis

Faculty of Psychology and Neuroscience

PSY5109

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
10.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Paper(s), Assignment(s), Research

Assessment methods:
Final paper, Participation, Attendance, Oral exam, Observation

Keywords:
research project, research, master's thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a master thesis research projectinternship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their master thesis research projectinternship abroad. Students start their masterthesis research projectinternship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their master thesis research projectinternship and orally defending their thesis.

The master thesis research projectinternship can be completed at Maastricht University or at external research institutes. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors must be a member of the Faculty of Psychology and Neuroscience (FPN), the Faculty of Health, Medicine and Life Sciences (FHML), or the School of Business and Economics (SBE). Both assessors must hold a PhD degree.

A detailed guide on master thesis research projectinternship and the master's thesis can be found on the student-intranet.

Each specialisation has its own internship/research project coordinator:

- *RM Cognitive Neuroscience:*

Lars Hausfeld, Cognitive Neuroscience (FPN), Phone: (0) 43 38 84521,
55 Oxfordlaan, Room S.1.018, Email: lars.hausfeld@maastrichtuniversity.nl

- *RM Fundamental Neuroscience:*

Pilar Martínez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042,
40 Universiteitssingel, Room 2.574, Email: p.martinez@maastrichtuniversity.nl

- *RM Neuropsychology:*

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- RM Clinical Psychology:

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40 Universiteitssingel, Room 2.767, Email: nicole.geschwind@maastrichtuniversity.nl

- RM Drug Development and Neurohealth:

Jacco Briedé, Toxicogenomics, Phone (043)3881094,
50 Universiteitssingel, Room 4.114, Email: j.briede@maastrichtuniversity.nl
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand and apply:
- conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.
- In a correct and transparent manner GenAI or LLM's, like ChatGPT

Prerequisites

The master thesis research projectinternship cannot be started until:

- at least 5460 credits have been attained during the programme;
- the above mentioned 5460 credits must include the courses Advanced Statistics I and II.

Master’s Thesis Oral Inquiry

Faculty of Psychology and Neuroscience

PSY5124

Year:

1 Sep 2025 **31 Aug 2026**

Credits:

0.0

Coordinator:

Teaching methods:

Assessment methods:

Keywords:

Full course description

Course objectives

Recommended reading

Minor’s Thesis

Faculty of Psychology and Neuroscience

PSY5105

Year:
1 Sep 2025 **31 Aug 2026**

Credits:
4.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Assignment(s), Research, Training(s), Patient contact

Assessment methods:
Final paper, Participation, Attendance, Observation

Keywords:
Clinical research, clinical practice, clinical training, psychodiagnostics, patient contact

Full course description

Students specialising in **Clinical Psychology** or in **Neuropsychology** may choose to conduct a 13-week clinical internship in an approved setting. The clinical internship can be conducted in conjunction with the master thesis research projectinternship or separately. Students are required to submit an additional (clinical) research proposal and scientific report (the minor’s thesis) based on client/patient-based investigations performed during the clinical internship. The aims of the clinical internship are twofold. Firstly, the internship is meant to provide experience in conducting research in a clinical setting; a small-scale research project culminates in the minor’s thesis. Secondly, the internship provides an introduction to the organisation and practice of mental health care, as well as basic experience in clinical diagnosis and therapeutic interventions. To this end, students will be supervised and assessed by a mental health professional with respect to their clinical skills. A clinical activities report is written and assessed by the faculty supervisor. Both parts (clinical internship and clinical activities report) should be assessed sufficiently to obtain the (15) credits. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the clinical internship and minor’s thesis will be assigned 20 credits, and the master thesis research projectinternship and master’s thesis will be assigned 30 credits.

A detailed guide on clinical internships and the minor's thesis can be found on the student-intranetwww.askpsy.nl > FPN Research Master Students > Internships. Although it is not a requirement of the research master's programme, students who wish to meet Dutch requirements for admission to advanced clinical training programmes are advised to extend their clinical internship by at least two weeks.

- RM Clinical Psychology Internship Coordinator:
Nicole Geschwind, Clinical Psychological Science (FPN),
Phone (043) 38 81487, 40 Universiteitssingel East,
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- RM Neuropsychology Internship Coordinator:
Ieke Winkens, Neuropsychology and Psychopharmacology (FPN)
Phone (043) 38 84512, 40 Universiteitssingel East,
Room A2.759, Email: i.winkens@maastrichtuniversity.nl

The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand the work environment of the clinical psychologist. This internship gives students the opportunity to practice clinical skills in a real-life setting and to design and conduct a small-scale clinical research project. Students are able to apply GenAI or LLM's, like ChatGPT in a correct and transparent manner.

Prerequisites

The clinical internship cannot be started until:
• At least 54 credits have been attained during the programme;
• The above mentioned 54 credits must include the courses Advanced Statistics I and II, and, for students following the Psychopathology specialisation, all Clinical Skills (I–IV) training must be included and for students following the
Neuropsychology specialisation the following skills training courses must have been completed:
- Neuropsychological Assessments;
- Basic Cognitive Psychological Skills;
- Neuropsychology in practice.

Additional requirements can apply to students who did not obtain a Bachelor’s degree in Psychology and/or a bachelor’s degree at Maastricht University