First year courses

Research Master Specialisation Neuropsychology year 1

Faculty of Psychology and Neuroscience

Advanced Statistics II

Full course description

The course consists of seven units. The first three 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 betweensubjects part of a split-plot ANOVA, and how to obtain both using regression analysis; c) the surprising consequences of including covariates into repeated measures ANOVA; and d) the choice between different methods of analysis for randomised versus non-randomised group comparisons. Subsequently, a further three units are devoted to mixed (multilevel) regression for nested designs and longitudinal studies. This mixed regression starts with a unit on marginal models for repeated measures as an alternative to repeated measures ANOVA in cases of missing data or 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 model for repeated measures as a method to include individual effects in marginal 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 interpersonal and intrapersonal outcome variation. The random intercept model will also be applied to a cluster randomised trial, i.e. an RCT where organisations like schools or companies instead of individuals are randomised. The third and last unit on mixed regression covers random slope models for longitudinal data (individual differences in change over time), single trial analysis (individual differences in stimulus effects) and multicentre trials (RCT within each of a number of organisations). Finally, the topic of optimal design, sample size and power calculations is introduced in a seventh unit.

Course objectives

Knowledge of: Repeated measures ANOVA for within-subject and split-plot (between x within) designs, including factorial designs and covariates in repeated measures ANOVA; Mixed (multilevel) linear regression with random effects and autocorrelation; Optimal design and sample size calculations for experimental and observational studies.

Prerequisites

Good understanding of descriptive and inferential statistics at the elementary and intermediate level, including t-tests, factorial ANOVA and multiple linear regression. Skilled in the use of SPSS for statistical data analyses.

Recommended reading

Lecture handouts and a suitable book chapter or article per unit.

PSY4107 Period 4 4 Feb 2019 7 Jun 2019 Print course description ECTS credits: 3.0 Instruction language: English Coordinator:

• <u>G.J.P. van Breukelen</u>

Teaching methods: Assignment(s), Lecture(s), Training(s) Assessment methods: Attendance, Written exam Keywords: Within-subject designs, repeated measures ANOVA, mixed (multilevel) regression, marginal versus random effects models, optimal design, sample size, power. Faculty of Psychology and Neuroscience

Neuroanatomy

Full course description

The aim of this practical training is to become 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, students 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.

Course objectives

Knowledge of: Limbic system, basal ganglia, plastinated human brains, brain dissection, microscopical slices.

Recommended reading

Papers from scientific journals and book chapters from books are provided.

PSY4108 Period 3

7 Jan 2019 1 Feb 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• J.H.H.J. Prickaerts

Teaching methods: Lecture(s), Skills, Work in subgroups Assessment methods: Attendance, Written exam Keywords: Neuroanatomy, limbic system, basal ganglia. Faculty of Psychology and Neuroscience

Biopsychology

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? What is the specific role of second messengers in these processes? Additionally, the students will deal with the biological mechanisms of neurogenesis and cell differentiation, and how this may be linked to behaviour. Next, the students will discuss the role of hormones in behaviour and cognition and discuss questions such as how do hormones determine our gender, and why do males tend to be more aggressive than females? With respect to specific cognitive functions, descriptions will be given about processes underlying the effect of acute stress on memory. Students will discuss how the brain regulates memory and can even improve cognitive performance under stress. Finally, the students will discuss aspects associated with the physiological processes of motivation and addiction.

Course objectives

Knowledge of: Electrochemical processes in neurons, second messenger systems, hormones and gender differences, biology of acute stress, effects of stress on cognition, neurobiology of motivation.

Recommended reading

Journal articles, book chapters, research reviews.

PSY4411 Period 3

7 Jan 2019 1 Feb 2019 Print course description ECTS credits: 4.0 Instruction language: English Coordinator:

• <u>A. Blokland</u>

Teaching methods: Lecture(s), PBL, Presentation(s) Assessment methods: Attendance, Final paper, Presentation Keywords: action potentials, second messengers, neurotransmitters, depression, cognition, Alzheimer, neurogenesis Faculty of Psychology and Neuroscience

Executive Control

Full course description

A key element in the current understanding of behavioural organisation is cognitive control. At present, a redefinition of related concepts (such as inhibition, working memory and executive functioning) is taking place, based on insights from cognitive neuroscience. Based on data from imaging studies, the behavioural models of cognitive control are being restructured. Throughout the course, emphasis will be on mechanisms of attention, working memory, cognitive shifting, preparation for action, sensorimotor integration, behavioural planning and monitoring. Various experimental approaches are evaluated and discussed in the light of recent literature. Experts in the field of executive and motor control research will present their current work, and students will be able to discuss their own papers and topics with them.

Course objectives

Knowledge of: Motor and cognitive control (executive functions) and brain structures involved in these types of control.

Recommended reading

Journal article, book chapters.

PSY4413 Period 4 4 Feb 2019 5 Apr 2019 Print course description ECTS credits: 4.0

Instruction language: English Coordinator:

• E.F.P.M. Vuurman

Teaching methods: Lecture(s), PBL, Presentation(s) Assessment methods: Attendance, Presentation, Written exam Keywords: motor control, Cognitive Control, executive functions Faculty of Psychology and Neuroscience

Neuropsychiatric Disorders

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 late onset psychosis, Gilles de la Tourette, pediatric delirium and anxiety disorder. 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: basic and advanced knowledge; 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 experts in the field and will provide an excellent learning experience for students who want to focus on working within neuropsychiatry.

Course objectives

Knowledge of: Neuropsychiatry, biopsychosocial theories of neuropsychiatric disorders, neurobiologic mechanisms, gene environment interactions, behavioural and cognitive problems, neurotransmitters, neuroimaging, scientific and clinical developments, etiology, treatment, clinical practice, late onset psychosis, Tourette, Pediatric delirium and anxiety.

Recommended reading

Recent state-of-the-art publications and literature will be provided by the several experts.

PSY4414 Period 5 8 Apr 2019 7 Jun 2019

Print course description

ECTS credits: 3.0 Instruction language: English Coordinator:

• I.H.G.B. Ramakers

Teaching methods: Assignment(s), Lecture(s), Paper(s), Presentation(s), Work in subgroups, PBL Assessment methods: Attendance, Final paper, Presentation Keywords: neuropsychiatric disorders, brain mechanisms, biological theories, psychosocial theories, Research, treatment Faculty of Psychology and Neuroscience

Neuropsychopharmacology

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.

Course objectives

Knowledge of: Neurobiology of drugs and mental disorders.

Recommended reading

Journal articles, book chapters.

PSY4415 Period 6 10 Jun 2019 5 Jul 2019 Print course description ECTS credits: 3.0 Instruction language: English Coordinator:

• J.G. Ramaekers

Teaching methods: PBL Assessment methods: Attendance, Final paper, Presentation Keywords: drug action, psychopharmacology of CNS disorders, behavioural toxicity Faculty of Psychology and Neuroscience

Neuropsychology in Practice: From Test Results to Report and Advice

Full course description

The aim of this skills training is to 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. The skillstraining 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.

Course objectives

Knowledge of: Clinical neuropsychology, assessment, diagnostic techniques, test results, cognitive dysfunctioning, neuropsychiatric disorders, acquired brain injury, Alzheimers disease, dementia, stroke, emotional consequences, behavioural disorders.

Recommended reading

Journal articles, book chapters.

PSY4423 Period 5 8 Apr 2019 7 Jun 2019 <u>Print course description</u> ECTS credits: 2.0 Instruction language:

English Coordinators:

- C.M. van Heugten
- <u>R.W.H.M. Ponds</u>

Teaching methods: Assignment(s), Lecture(s), Paper(s), Presentation(s), Skills Assessment methods: Attendance, Presentation Keywords: clinical neuropsychology, assessment, cognitive dysfunctioning, emotional problems, behavioural problems Faculty of Psychology and Neuroscience

Practical Training: SPSS II

Full course description

This practical training forms part of the PSY4107 Advanced Statistics II course. The practical consists of six sessions in the computer rooms in which SPSS procedures for repeated measures and multilevel data are practised. The goal is to understand how proper analyses of such data can be done using SPSS.

Course objectives

Knowledge of: How to run with SPSS: repeated measures ANOVA for within-subject and split-plot (between x within) designs, including factorial designs and covariates; How to run SPSS for: mixed (multilevel) linear regression with random effects and autocorrelation.

Prerequisites

Good understanding of descriptive and inferential statistics at the elementary and intermediate level, including t-tests, factorial ANOVA and multiple linear regression. Skilled in the use of SPSS for statistical data analyses.

Recommended reading

Field A (2009). Discovering statistics with SPSS (3rd ed.). London: Sage;

The mandatory assignments on EleUM.

PSY4117 Period 4 4 Feb 2019 7 Jun 2019 Print course description ECTS credits: 0.0

Instruction language: English Coordinator:

• <u>G.J.P. van Breukelen</u>

Teaching methods: Training(s) Assessment methods: Attendance Keywords: Within-subject designs, repeated measures ANOVA, mixed (multilevel) regression, marginal versus random effects models. Faculty of Psychology and Neuroscience

Colloquia

Full course description

Colloquia are presented per specialisation (CN, NE, FN, NP and PP) by senior researchers from the UM faculties or visiting guest lecturers. 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, prepared and chaired by the lecturer (the UM host may fill this role for guest lecturers). A total of ten colloquia will be offered during the first year.

Course objectives

Knowledge of: Key research domains from different specialisations, interdisciplinary research, interacting with students from different specialisations. PSY4100 Period 3 7 Jan 2019 5 Jul 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator: • R. Schreiber Teaching methods:

Lecture(s) Assessment methods: Attendance Keywords: Interdisciplinary knowledge. Faculty of Psychology and Neuroscience

Neuropsychological Assessments

Full course description

Neuropsychological assessment runs parallel to the courses Brain Damage and Behavioural Disorders. The core elements in mastering this skill involves the clinical data gathering process which results in interpreting 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 7week period, students are trained in neuropsychological history taking, observing patient behaviour, cognitive testing and interpreting cognitive and behavioural data. Finally, each student writes a comprehensive neuropsychological report based on a simulated clinical case.

Course objectives

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

Prerequisites

introductory knowledge on psychodiagnostics and related psychometrics

Recommended reading

Lezak. M.D., Howieson, M.D., Bigler, E.D., & Tranel, D. (2012). Neuropsychological Assessment. New York: Oxford University Press; R.D. Vanderploeg (2000). Clinician's Guide to Neuropsychological Assessment. New Jersey: Lawrence Erlbaum Associates.

PSY4433 Period 1 3 Sep 2018 26 Oct 2018 <u>Print course description</u> ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>S.Z. Stapert</u>

Teaching methods: Assignment(s), Lecture(s), Paper(s), Patientcontact, Skills, Training(s), Work in subgroups Assessment methods: Attendance, Final paper Keywords: Neuropsychological assessment, cognitive disorders, brain disease, brain injury, test taking, interviewing, observations, psychometry Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology Faculty of Psychology and Neuroscience

Scientific Writing

Full course description

The course is delivered in a series of one lecture and four tutorials, during which students produce and revise a short research proposal or research article. The lecture aims to cover the ethical issues surrounding the production of scientific texts (for example, plagiarism and non-biased writing). In tutorials students apply the principles in the linguistic sense and discover how these apply to their own writing. In particular, the 'doors and windows' (abstracts, introductions, hypotheses and discussions) of scientific papers are analysed for their linguistic and stylistic content. In the tutorials, students develop the language awareness and critical skills required to review their own work as well as that of their peers. Individualised feedback on parallel block assignments is given at the end of the course by the instructor.

Course objectives

Knowledge of: Principles of scientific writing, conventions in scientific writing, the structure of scientific texts, ethics in scientific writing, plagiarism, editing skills, language in scientific writing, academic writing style, coherence in scientific writing, reporting sources.

Recommended reading

Literature is provided in the course materials.

PSY4110 Period 5 8 Apr 2019 7 Jun 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• P.P.C. Wilms van Kersbergen

Teaching methods: Assignment(s), Lecture(s), Paper(s), Research, Skills, Training(s), Work in subgroups Assessment methods: Attendance, Final paper Keywords: Scientific writing, Research proposal, empirical research article, literature review, peer review, language awareness. Faculty of Psychology and Neuroscience

Ageing

Full course description

This course covers a broad range of topics in the field of Cognitive Ageing. There is an initial focus on the normal ageing process since a thorough knowledge is considered essential before issues in abnormal ageing can be addressed. Important questions covered include: What is ageing? 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, Alzheimer's disease, and other types of dementia), intervention strategies, and methodological issues in ageing research.

Course objectives

Knowledge of: Physical ageing, evolutionary theories of ageing, neural aging, amyloid cascade hypothesis, temporal lobe dysfunction, frontal lobe dysfunction, processing-speed theory, white matter decline, decline of cognitive control, inhibitory-deficit hypothesis, sensory ageing, default-mode network dysfunction, parietal lobe dysfunction, mild cognitive impairment, Alzheimer's disease, vascular dementia, successful ageing, reserve theories, emotional ageing, fronto-temporal dementia, semantic dementia.

Recommended reading

E-reader

PSY4416 Period 2 29 Oct 2018 21 Dec 2018 Print course description ECTS credits: 4.0 Instruction language: English Coordinator:

• M.P.J. van Boxtel

Teaching methods: Lecture(s), PBL Assessment methods: Attendance, Written exam Keywords: physical, neural, Cognitive, and emotional ageing, dementia, neurodegeneration Faculty of Psychology and Neuroscience

Stress, the Brain and Depression

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 emphasise 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 mutual interactions between stress and the human brain in explaining and defining enhanced susceptibility for stress-related psychopathology.

Course objectives

Knowledge of: Brain mechanisms in stress, biochemistry of depression, genes and depression, stress and psychopathology, theories of stress, genes and depression.

Recommended reading

Journal articles and book chapters on EleUM.

PSY4417 Period 4 4 Feb 2019 5 Apr 2019 Print course description ECTS credits: 3.0 Instruction language: English Coordinator:

• <u>C.R. Markus</u>

Teaching methods: Lecture(s), Paper(s), Presentation(s), PBL Assessment methods: Written exam, Attendance Keywords: stress, brain, depression, psychopharmacology Faculty of Psychology and Neuroscience

Basic Cognitive Psychological Skills

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. An overview of the techniques and tests currently used to evaluate performance in a number of cognitive domains (such as language, perception, attention and executive functions), are also presented to students in this course.

Course objectives

Knowledge of: Psychological testing, data preparation, data analysis, report writing.

Recommended reading

Field, A. (2009). Discovering statistics using SPSS (4th ed.). London: Sage.

PSY4434 Period 2 29 Oct 2018 21 Dec 2018 Print course description ECTS credits: 3.0 Instruction language: English Coordinator:

• E.F.P.M. Vuurman

Teaching methods: Assignment(s), Lecture(s), PBL Assessment methods: Attendance, Final paper Keywords: Field experiment, applied behavioural testing, data reduction and analysis techniques, report writing Faculty of Psychology and Neuroscience

Advanced Statistics I

Full course description

The course consists of six units. In the first four units, participants 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, simple slope analysis, dummy coding, centring covariates, different coding schemes, collinearity and residuals checks and data transformation. The distinction between confounders and mediators in regression and ANCOVA is also discussed, forming a bridge from regression to structural equations modelling (SEM). The latter 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.

Course objectives

Knowledge of: 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, path analysis, structural equation modeling, confirmatory factor analysis, structural models with latent variables.

Recommended reading

Diamantopoulos, A. (1994). Modelling with LISREL: A guide for the uninitiated. Journal of Marketing Management, 10, 105-136; Field, A. (2009). Discovering statistics using SPSS (3rd ed.). London: Sage; Howell, D.C. (2007). Statistical methods for psychology (6th ed.). Belmont (CA): Thomson/ Wadsworth; Kleinbaum, D.G., Kupper, L.L., Muller, K.E., & Nizam, A. (1998). Applied regression analysis and other multivariable methods (3rd ed.). Pacific Grove (CA): Brooks/Cole.

PSY4106 Period 1 3 Sep 2018 21 Dec 2018 Print course description ECTS credits: 3.0 Instruction language: English Coordinator:

• J. Schepers

Teaching methods: Assignment(s), Lecture(s), Skills, Training(s) Assessment methods: Attendance, Written exam Keywords: Univariate analysis of variance, multivariatie analysis of variance, regression analysis, structural equation modeling. Faculty of Psychology and Neuroscience

Psychopharmacology

Full course description

Students will become acquainted with current topics in psychopharmacology, i.e. mechanisms of medicinal drugs and research and development of new medicinal drugs. Topics will also include testing new drugs in animal models and the use of healthy volunteers and patients in new drug studies, in order to cover the cycle of new medicine development from bench to bedside. The students will perform an experimental study in which the effects of a drug will be evaluated. The data will be collected, analyzed and presented during this course.

Course objectives

Students become acquainted with current topics in psychopharmacology, i.e. how current knowledge of neuropsychiatric disease processes relates to existing medicinal drugs and research and development of new medicinal drugs. Testing new drugs in animal models, healthy volunteers and patients covers the cycle of new medicine development from bench to bedside.

PSY4335 Period 6 10 Jun 2019 5 Jul 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• <u>P. van Ruitenbeek</u>

Teaching methods: Lecture(s), Presentation(s) Assessment methods: Attendance, Presentation Keywords: Psychopharmacology. Faculty of Psychology and Neuroscience

Brain Damage

Full course description

Students are introduced to the fields of Behavioural Neurology and Neuropsychology: What do pathological conditions in brain structure and function tell us about the relationship between brain and behaviour? Much of what we know about cognitive processes and affective functioning comes from close observation of patients with damage to the central nervous system. This course reviews mechanisms of the relationship between brain and behaviour that are the basis of neuropsychological dysfunctions in people who suffer from brain damage. Students acquire knowledge about the causes and neurobiological effects of brain lesions, and become acquainted with the aetiology and taxonomy of common neurological and neuropsychological syndromes. Functional disturbances that occur after focal or diffuse lesions in different cortical areas, in connecting tracts, in limbic and other subcortical brain structures 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 function. This knowledge is essential for an understanding of the principles of neuropsychological rehabilitation, which can be used to support or even improve residual function after brain damage and to ameliorate the life quality of neurological patients.

Course objectives

Knowledge of: 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 neurospychology, neuropsychological assessment, cognitive rehabilitation.

Prerequisites

Understanding at Batchelor level of the hierarchical organisation of brain functions, basic brain anatomy and physiology.

Recommended reading

Journal articles, book chapters.

PSY4407 Period 1 3 Sep 2018 26 Oct 2018 <u>Print course description</u> ECTS credits: 4.0 Instruction language: English Coordinator:

• <u>S.A. Kotz</u>

Teaching methods: Lecture(s), PBL Assessment methods: Attendance, Written exam Keywords: Neuropsychology, history of neuropsychology, brain disease, brain injury, functional neuroanatomy, neurology, Neuropsychological assessment, rehabilitation, brain plasticity Faculty of Psychology and Neuroscience

Behavioural Disorders

Full course description

The course covers the range of cognitive and behavioural problems that accompany the most common neuropsychiatric and neurological disorders (i.e. psychosis, schizophrenia, ADHD, autism and acquired brain injuries). The course provides insight into the underlying neurobiological and psychological mechanisms, and intervention possibilities from a behavioural and pharmacological perspective. Finally, the course touches on the principle of vulnerability, protective/risk factors and psychopharmacology in the aetiology of behavioural disorders.

Course objectives

Knowledge of: Neuropsychological assessment and- intervention, psychological mechanism, neurobiology, functional neuroanatomy, imaging, psychopharmacology, epidemiology, developmental-, psychiatric- and neurological disorders, neuropsychiatric syndromes.

Recommended reading

Research and review articles, case studies, book chapters.

PSY4408 Period 1 3 Sep 2018 26 Oct 2018 Print course description ECTS credits: 4.0 Instruction language: English Coordinator:

• <u>M. Schwartze</u>

Teaching methods: Lecture(s), PBL Assessment methods: Attendance, Written exam Keywords: Behavioural disorders, Development, neuropsychiatry, acquired brain injury, Neuropsychology, intervention Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology Faculty of Psychology and Neuroscience

Arousal and Attention

Full course description

This course familiarizes students with key concepts and controversies in the study of arousal and alertness in attention and cognitive performance, with an emphasis on the role of 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 be too 'hyper' to effectively focus their attention (e.g. ADHD, anxiety disorders). The nature and 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 neurotransmitters involved, in addition to a critical discussion of the classic Arousal Theory. Throughout the course, psychopharmacological studies will be presented that illustrate the role of different neurotransmitters in arousal and attention.

Course objectives

Knowledge of: Arousal Theory, inverted-U model, Yerkes-Dodson law, Ascending Reticular Activating System, Cognitive Energetic Model, Additive Factors Method, Posner's attentional networks, orienting attention, cueing paradigm, Corbetta's model of attentional control, alerting, sustained attention, vigilance, noradrenergic locus coeruleus activity, clonidine, Signal Detection Theory, executive attention, prefrontal dopaminergic activity, methylphenidate, Borbely's model of sleep regulation, caffeine, neurocognitive theory of insomnia, benzodiazepines, flip-flop mechanism of sleep-wake regulation, antihistamines.

Recommended reading

Journal articles, book chapters.

PSY4409 Period 2 29 Oct 2018 21 Dec 2018 Print course description ECTS credits: 4.0 Instruction language: English Coordinator:

• E.A.T. Evers

Teaching methods: Lecture(s), PBL Assessment methods: Attendance, Written exam

Keywords:

Arousal, alertness, attention networks, brainstem arousal systems, sleep-wake regulation Faculty of Psychology and Neuroscience

Practical Training: SPSS I and Lisrel

Full course description

In order to make practical use of the statistical models that form the topic of the Advanced Statistics course, researchers must make use of statistical software. This course will utilise the traditional SPSS program, but also the specialised LISREL software. LISREL is a statistical program that allows structural equations models to be tested.

Course objectives

Defining contrasts, building regression models, doing multivariate analyses, transforming data, testing simple slopes, creating and testing SEM models

Recommended reading

Handouts given during practicals.

PSY4119 Period 1 3 Sep 2018 21 Dec 2018 Print course description ECTS credits: 0.0 Instruction language: English Coordinator:

• J. Schepers

Teaching methods: Assignment(s), Training(s) Assessment methods: Attendance Keywords: SPSS, LISREL, statistical software. Faculty of Psychology and Neuroscience

Neuropsychological Rehabilitation

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 evidence-based 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. Forms of complex behavioural treatment will also be discussed.

Course objectives

Knowledge of: Clinical neuropsychology, treatment, rehabilitation, cognitive dysfunctioning, emotional problems, behavioural disorders, acquired brain injury, Alzheimers disease, neuropsychiatric disorders, randomised clinical trials, treatment effects, outcome measurement.

Recommended reading

Jounral articles, book chapters.

PSY4424 Period 5 8 Apr 2019 5 Jul 2019 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• C.M. van Heugten

Teaching methods: Assignment(s), Lecture(s), Presentation(s), Skills Assessment methods: Attendance, Final paper Keywords: rehabilitation, treatment, acquired brain damage, effectiveness Faculty of Psychology and Neuroscience

Psychiatric Epidemiology

Full course description

The course will provide 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, and

Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology the use of systematic reviews and meta-analysis for building cumulative knowledge.

Course objectives

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

Recommended reading

Rothman, K. J., Greenland, S., & Lash, T. L. (2012). Modern epidemiology (3rd ed.). Lippincott Williams & Wilkins.

PSY4371 Period 6 10 Jun 2019 5 Jul 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• <u>W. Viechtbauer</u>

Teaching methods: Assignment(s), Lecture(s), PBL, Skills, Training(s), Work in subgroups Assessment methods: Attendance, Final paper Keywords: Epidemiology, Methodology, statistics, experimental studies, observational studies, diagnostic studies, systematic reviews, meta-analysis Faculty of Psychology and Neuroscience

Research Grant Writing Workshop

Full course description

During this workshop students will learn why and how to apply for research grants. The need for acquiring funding for research, the opportunities for, and availability of grant application funding will be discussed. Several researchers who have experience in applying for different types of grants 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. These skills will be practiced during the workshop. Students will subsequently choose a topic (provided by senior researchers) on which they will write a research proposal during the second-year Research Grant Writing Course (see description of PSY5112).

Course objectives

Knowledge of: Opportunities for funding, how grants can be acquired, grant writing skills.

PSY4112 Period 6 10 Jun 2019 5 Jul 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinators:

- <u>S. Köhler</u>
- <u>R.L.H. Handels</u>

Teaching methods: Assignment(s), Lecture(s) Assessment methods: Attendance, Final paper Keywords: Funding possibilities, grant applications, proposal writing. Faculty of Psychology and Neuroscience

Human Neuroimaging

PSY4435 Period 5 8 Apr 2019 7 Jun 2019 Print course description ECTS credits: 3.0 Instruction language: English Coordinator:

• P.L.J. Stiers

Second year courses

Research Master Specialisation Neuropsychology year 2

Faculty of Psychology and Neuroscience

Cognitive Development

Full course description

The focus of the course is on childhood and adolescence, and on cognitive rather than emotional development. Behavioral changes and underlying brain changes will be discussed. The aim is to learn more about scientific views on normal cognitive development and the methodological difficulties in demonstrating these views empirically. Although the focus is on normal development, development is often studied in the context of abnormal development. Hence, repeated excursions into disorders of cognitive development will be made. Examples of topics that are discussed during the course are general cognitive ability, executive function, brain maturation, cognitive stimulation and training, and time perception.

Course objectives

Knowledge of:Theoretical and methodological issues in studies of cognitive development from childhood to adolescence.

PSY5411 Period 1 3 Sep 2018 26 Oct 2018 <u>Print course description</u> ECTS credits: 3.0 Instruction language: English Coordinator:

• <u>E.H.H. Keulers</u>

Teaching methods: Paper(s), PBL, Work in subgroups Assessment methods: Attendance, Final paper, Presentation Keywords: child neuropsychology, individual differences, Cognitive development Faculty of Psychology and Neuroscience

Neuropsychological Assessment in Children

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, language, 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, neurological disorders, radiology, interview, test results,

Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology scientific literature, etc.

Course objectives

Knowledge of: Multiple disability, mental retardation, specific impairments, assessing differential deficits, congenital brain disorders, developmental amnesia, cerebral visual impairment, attention, clinical report writing.

PSY5431 Period 1 3 Sep 2018 26 Oct 2018 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• E.H.H. Keulers

Teaching methods: Assignment(s), Lecture(s), Paper(s), PBL, Presentation(s), Skills, Work in subgroups Assessment methods: Attendance, Final paper Keywords: multiple disability, neuropediatrics, specific impairment, neuropsychological methods, congenital disorders, Magnetic Resonance Imaging Faculty of Psychology and Neuroscience

Research Grant Writing Course

Full course description

In this course, students will apply what they have learned during the Research Grant Writing Workshop (PSY4112). Students will work together (groups of max. 5) to write a research proposal on their selected topic, including an original research hypothesis, experimental design and methods. This proposal should promote interdisciplinarity; therefore students are encouraged to think across boundaries of different scientific fields. A 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. The resulting proposals will be presented during a symposium by way of a poster or an oral presentation.

Course objectives

Knowledge of how to: Review literature, formulate a research hypothesis, design a research study, write a research proposal, present the proposal at a symposium (oral or poster).

Prerequisites

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

PSY5112 Period 1 3 Sep 2018 26 Oct 2018 Print course description ECTS credits: 3.0 Instruction language: English Coordinators:

• <u>S. Köhler</u>

• R.L.H. Handels

Teaching methods: Work in subgroups Assessment methods: Attendance, Final paper, Presentation Keywords: Research proposal, Interdisciplinary, hypothesis, design, methods, research symposium, peer review. Faculty of Psychology and Neuroscience

Brain, Learning and Memory

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. 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 both in terms of neurobiology and cognition. The influences of drugs on information processing and memory are also discussed in depth.

Course objectives

Knowledge of: The role of the hippocampus in memory functions, the role of other limbic structures in learning and memory, the role of neurotransmitters in learning and memory. The use and critical evaluation of animal models in learning and memory research.

Recommended reading

Literature will be made available on ELeUM.

PSY5414

Period 1 3 Sep 2018 26 Oct 2018 Print course description ECTS credits: 3.0 Instruction language: English Coordinator:

• <u>P. van Ruitenbeek</u>

Teaching methods: Assignment(s), Lecture(s), Paper(s), Presentation(s), PBL Assessment methods: Attendance, Final paper Keywords: prefrontal cortex, hippocampus, limbic system, neurotransmitters, Working memory, short-term memory, long-term memory, acquisition, consolidation, retrieval, cognition enhancing drugs Master's Programme

Research Internship

Faculty of Psychology and Neuroscience

Research Internship Graded

Full course description

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

The internship 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 research internships and the master's thesis can be found on AskPsy > Curriculum > Internships.

Each specialisation has its own internship coordinator:

- RM Cognitive Neuroscience:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl

- RM Neuroeconomics: Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@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:

Esther Keulers, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 82932, 40 Universiteitssingel East, Room 2.755,

Email: esther. keulers @maastrichtuniversity.nl

- RM Psychopathology: Nicole Geschwind, Clinical Psychological Science (FPN),

Phone (043) 38 81487, 40 Universiteitssingel East,

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

Course objectives

Knowledge of:

Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

Prerequisites

The research internship cannot be started until:

 \Box At least 60 credits have been attained during the programme;

□ The above mentioned 60 credits must include the courses;

Advanced Statistics I and II.

PSY5120 Year 1 Sep 2018 31 Aug 2019 Print course description ECTS credits: 10.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: internship, research, master's thesis Faculty of Psychology and Neuroscience

Research Internship Ungraded

Full course description

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

The internship 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 research internships and the master's thesis can be found on AskPsy > Curriculum > Internships.

Each specialisation has its own internship coordinator:

- RM Cognitive Neuroscience:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl

- RM Neuroeconomics: Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@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:

Esther Keulers, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 82932, 40 Universiteitssingel East, Room 2.755,

Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology Email: esther.keulers@maastrichtuniversity.nl

- RM Psychopathology: Nicole Geschwind, Clinical Psychological Science (FPN),

Phone (043) 38 81487, 40 Universiteitssingel East,

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

Course objectives

Knowledge of:

Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

Prerequisites

The research internship cannot be started until:

 \Box At least 60 credits have been attained during the programme;

 \Box The above mentioned 60 credits must include the courses;

Advanced Statistics I and II.

PSY5121 Year 1 Sep 2018 31 Aug 2019 Print course description ECTS credits: 25.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: internship, research, master's thesis Faculty of Psychology and Neuroscience

Research Internship Graded

Full course description

The second part of the second year of the research master's programme is devoted to conducting a

research internship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their research internship abroad. Students start their internship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their internship research project.

The internship 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 research internships and the master's thesis can be found on AskPsy > Curriculum > Internships.

Each specialisation has its own internship coordinator:

• RM Cognitive Neuroscience:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl

• RM Neuroeconomics:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@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:

Esther Keulers, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 82932, 40 Universiteitssingel, Room 2.755,

Email: esther.keulers@maastrichtuniversity.nl

• RM Psychopathology:

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

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.

Prerequisites

The research internship cannot be started until:

- At least 60 credits have been attained during the programme;
- The above mentioned 60 credits must include the courses Advanced Statistics I and II.

PSY5122 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 10.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: Internship, research, master's thesis Faculty of Psychology and Neuroscience

Research Proposal

Full course description

The second part of the second year of the research master's programme is devoted to conducting a research internship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their research internship abroad. Students start their internship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their internship research project. The internship can be undertaken 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 (NE). Both assessors need to have a PhD degree. A detailed guide on research internships and the master's thesis can be found on EleUM > Students Research Master Faculty of Psychology and Neuroscience > internships. - RM Cognitive Neuroscience Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Neuroeconomics Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Fundamental Neuroscience Internships Coordinator: Pilar Martinez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042, 50 Universiteitssingel West, Room 1.112, Email: p.martinez@maastrichtuniversity.nl - RM Neuropsychology Internships Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email:

caroline.vanheugten@maastrichtuniversity.nl - RM Psychopathology Internships Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl

Course objectives

Knowledge of: Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

PSY5107 Year 1 Sep 2018 31 Aug 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation

Keywords: internship, Research, master's thesis. Faculty of Psychology and Neuroscience

Research Internship Ungraded

Full course description

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

The internship 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 research internships and the master's thesis can be found on AskPsy > Curriculum > Internships.

Each specialisation has its own internship coordinator:

- RM Cognitive Neuroscience:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl

- RM Neuroeconomics: Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@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:

Esther Keulers, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 82932, 40 Universiteitssingel East, Room 2.755,

Email: esther.keulers@maastrichtuniversity.nl

- RM Psychopathology: Nicole Geschwind, Clinical Psychological Science (FPN),

Phone (043) 38 81487, 40 Universiteitssingel East,

Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology Room 2.767, Email: nicole.geschwind@maastrichtuniversity.nl

Course objectives

Knowledge of:

Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

Prerequisites

The research internship cannot be started until:

 $\hfill\square$ At least 60 credits have been attained during the programme;

□ The above mentioned 60 credits must include the courses;

Advanced Statistics I and II.

PSY5123 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 9.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: internship, research, master's thesis

Clinical Internship

Faculty of Psychology and Neuroscience

Clinical Internship

Full course description

Students specialising in Psychopathology 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 research internship or separately. Students are required to submit an additional 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. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the internship and minor's thesis will be assigned 20 credits, and the research internship and thesis will be assigned 30 credits. A detailed guide on clinical internships and the minor's thesis can be found on EleUM > 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 Psychopathology Internship Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl - RM Neuropsychology Internship Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl

Course objectives

Knowledge of: 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.

Prerequisites

The clinical internship cannot be started until:

• At least 60 credits have been attained during the programme;

• The above mentioned 60 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;
- Psychophysiological 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

PSY5104 Year 29 Oct 2018 31 Aug 2019 Print course description

ECTS credits: 15.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Patientcontact, Research, Skills, Training(s), Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: clinical research, clinical practice, clinical training, Psychodiagnostics, patient contact. Faculty of Psychology and Neuroscience

Research Proposal

Full course description

Students specialising in Psychopathology 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 research internship or separately. Students are required to submit an additional 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. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the internship and minor's thesis will be assigned 20 credits, and the research internship and thesis will be assigned 30 credits. A detailed guide on clinical internships and the minor's thesis can be found on EleUM > 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 Psychopathology Internship Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl - RM Neuropsychology Internship Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl

Course objectives

Knowledge of: 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.

Prerequisites

The clinical internship cannot be started until:

• At least 60 credits have been attained during the programme;

• The above mentioned 60 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;
- Psychophysiological 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

PSY5108 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Patientcontact, Research, Skills, Training(s), Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: Clinical research, clinical practice, clinical training, Psychodiagnostics, patient contact Faculty of Psychology and Neuroscience

Clinical Activities Report

PSY5111 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 0.0 Instruction language: Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology English Coordinator:

• <u>G.C. Kraag</u>

Thesis

Master's Thesis

Faculty of Psychology and Neuroscience

Master's Thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a research internship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their research internship abroad. Students start their internship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their internship research project. The internship can be undertaken 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 (NE). Both assessors need to have a PhD degree. A detailed guide on research internships and the master's thesis can be found on EleUM > Students Research Master Faculty of Psychology and Neuroscience > internships. - RM Cognitive Neuroscience Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Neuroeconomics Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Fundamental Neuroscience Internships Coordinator: Pilar Martinez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042, 50 Universiteitssingel West, Room 1.112, Email: p.martinez@maastrichtuniversity.nl - RM Neuropsychology Internships Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email:

caroline.vanheugten@maastrichtuniversity.nl - RM Psychopathology Internships Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl

Course objectives

Knowledge of: Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

Prerequisites

The research internship cannot be started until:

 \Box At least 60 credits have been attained during the programme;

Advanced Statistics I and II.

PSY5103 Year 1 Sep 2018 31 Aug 2019 Print course description ECTS credits: 14.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: internship, Research, master's thesis. Faculty of Psychology and Neuroscience

Master's Thesis

PSY5109 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 10.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Minor's Thesis

Faculty of Psychology and Neuroscience

Minor's Thesis

Full course description

Students specialising in Psychopathology 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 research internship or separately. Students are required to submit an additional 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. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the internship and minor's thesis will be assigned 20 credits, and the research internship and thesis will be assigned 30 credits. A detailed guide on clinical internships and the minor's thesis can be found on EleUM > 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 Psychopathology Internship Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl - RM Neuropsychology Internship Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl

Course objectives

Knowledge of: 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.

Prerequisites

The clinical internship cannot be started until:

• At least 60 credits have been attained during the programme;

• The above mentioned 60 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;
- Psychophysiological 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

PSY5105 Year 29 Oct 2018 31 Aug 2019

Print course description

ECTS credits: 4.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Patientcontact, Research, Skills, Training(s), Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: clinical research, clinical practice, clinical training, Psychodiagnostics, patient contact. Master's Programme

Research Internship

Faculty of Psychology and Neuroscience

Research Internship Graded

Full course description

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

The internship 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 research internships and the master's thesis can be found on AskPsy > Curriculum > Internships.

Each specialisation has its own internship coordinator:

- RM Cognitive Neuroscience:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl

- RM Neuroeconomics: Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@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:

Esther Keulers, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 82932, 40 Universiteitssingel East, Room 2.755,

Email: esther.keulers@maastrichtuniversity.nl

- RM Psychopathology: Nicole Geschwind, Clinical Psychological Science (FPN),

Phone (043) 38 81487, 40 Universiteitssingel East,

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

Course objectives

Knowledge of:

Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

Prerequisites

The research internship cannot be started until:

□ At least 60 credits have been attained during the programme;

□ The above mentioned 60 credits must include the courses;

Advanced Statistics I and II.

PSY5120 Year 1 Sep 2018 31 Aug 2019 Print course description ECTS credits: 10.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods:

Attendance, Final paper, Observation, Participation Keywords: internship, research, master's thesis Faculty of Psychology and Neuroscience

Research Internship Ungraded

Full course description

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

The internship 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 research internships and the master's thesis can be found on AskPsy > Curriculum > Internships.

Each specialisation has its own internship coordinator:

- RM Cognitive Neuroscience:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl

- RM Neuroeconomics: Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@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:

Esther Keulers, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 82932, 40 Universiteitssingel East, Room 2.755,

Email: esther. keulers @maastrichtuniversity.nl

- RM Psychopathology: Nicole Geschwind, Clinical Psychological Science (FPN),

Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology Phone (043) 38 81487, 40 Universiteitssingel East,

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

Course objectives

Knowledge of:

Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

Prerequisites

The research internship cannot be started until:

□ At least 60 credits have been attained during the programme;

□ The above mentioned 60 credits must include the courses;

Advanced Statistics I and II.

PSY5121 Year 1 Sep 2018 31 Aug 2019 Print course description ECTS credits: 25.0 Instruction language: English Coordinator:

• G.C. Kraag

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: internship, research, master's thesis Faculty of Psychology and Neuroscience

Research Internship Graded

Full course description

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

Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology programme by writing a thesis based on their internship research project.

The internship 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 research internships and the master's thesis can be found on AskPsy > Curriculum > Internships.

Each specialisation has its own internship coordinator:

• RM Cognitive Neuroscience:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl

• RM Neuroeconomics:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@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:

Esther Keulers, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 82932, 40 Universiteitssingel, Room 2.755,

Email: esther.keulers@maastrichtuniversity.nl

• RM Psychopathology:

Nicole Geschwind, Clinical Psychological Science (FPN),

Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology 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

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.

Prerequisites

The research internship cannot be started until:

- At least 60 credits have been attained during the programme;
- The above mentioned 60 credits must include the courses Advanced Statistics I and II.

PSY5122 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 10.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: Internship, research, master's thesis Faculty of Psychology and Neuroscience

Research Proposal

Full course description

The second part of the second year of the research master's programme is devoted to conducting a research internship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their research internship abroad. Students start their internship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their internship research project. The internship can be undertaken 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 (NE). Both assessors need to have a PhD degree. A detailed guide on research internships and the master's thesis can be found on EleUM > Students Research Master Faculty of Psychology and Neuroscience > internships. - RM Cognitive Neuroscience Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Neuroeconomics Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Fundamental Neuroscience Internships Coordinator: Pilar Martinez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042, 50 Universiteitssingel West, Room 1.112, Email: p.martinez@maastrichtuniversity.nl - RM Neuropsychology Internships Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email:

caroline.vanheugten@maastrichtuniversity.nl - RM Psychopathology Internships Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl

Course objectives

Knowledge of: Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

PSY5107 Year 1 Sep 2018 31 Aug 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation

Keywords: internship, Research, master's thesis. Faculty of Psychology and Neuroscience

Research Internship Ungraded

Full course description

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

The internship 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 research internships and the master's thesis can be found on AskPsy > Curriculum > Internships.

Each specialisation has its own internship coordinator:

- RM Cognitive Neuroscience:

Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl

- RM Neuroeconomics: Amanda Kaas, Cognitive Neuroscience (FPN),

Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@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:

Esther Keulers, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 82932, 40 Universiteitssingel East, Room 2.755,

Email: esther.keulers@maastrichtuniversity.nl

- RM Psychopathology: Nicole Geschwind, Clinical Psychological Science (FPN),

Phone (043) 38 81487, 40 Universiteitssingel East,

Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology Room 2.767, Email: nicole.geschwind@maastrichtuniversity.nl

Course objectives

Knowledge of:

Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

Prerequisites

The research internship cannot be started until:

 $\hfill\square$ At least 60 credits have been attained during the programme;

□ The above mentioned 60 credits must include the courses;

Advanced Statistics I and II.

PSY5123 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 9.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: internship, research, master's thesis

Clinical Internship

Faculty of Psychology and Neuroscience

Clinical Internship

Full course description

Students specialising in Psychopathology 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 research internship or separately. Students are required to submit an additional 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. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the internship and minor's thesis will be assigned 20 credits, and the research internship and thesis will be assigned 30 credits. A detailed guide on clinical internships and the minor's thesis can be found on EleUM > 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 Psychopathology Internship Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl - RM Neuropsychology Internship Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl

Course objectives

Knowledge of: 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.

Prerequisites

The clinical internship cannot be started until:

• At least 60 credits have been attained during the programme;

• The above mentioned 60 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;
- Psychophysiological 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

PSY5104 Year 29 Oct 2018 31 Aug 2019 Print course description

ECTS credits: 15.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Patientcontact, Research, Skills, Training(s), Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: clinical research, clinical practice, clinical training, Psychodiagnostics, patient contact. Faculty of Psychology and Neuroscience

Research Proposal

Full course description

Students specialising in Psychopathology 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 research internship or separately. Students are required to submit an additional 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. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the internship and minor's thesis will be assigned 20 credits, and the research internship and thesis will be assigned 30 credits. A detailed guide on clinical internships and the minor's thesis can be found on EleUM > 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 Psychopathology Internship Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl - RM Neuropsychology Internship Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl

Course objectives

Knowledge of: 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.

Prerequisites

The clinical internship cannot be started until:

• At least 60 credits have been attained during the programme;

• The above mentioned 60 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;
- Psychophysiological 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

PSY5108 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Patientcontact, Research, Skills, Training(s), Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: Clinical research, clinical practice, clinical training, Psychodiagnostics, patient contact Faculty of Psychology and Neuroscience

Clinical Activities Report

PSY5111 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 0.0 Instruction language: Research Master Cognitive and Clinical Neuroscience Specialisation Neuropsychology English Coordinator:

• <u>G.C. Kraag</u>

Thesis

Master's Thesis

Faculty of Psychology and Neuroscience

Master's Thesis

Full course description

The second part of the second year of the research master's programme is devoted to conducting a research internship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their research internship abroad. Students start their internship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their internship research project. The internship can be undertaken 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 (NE). Both assessors need to have a PhD degree. A detailed guide on research internships and the master's thesis can be found on EleUM > Students Research Master Faculty of Psychology and Neuroscience > internships. - RM Cognitive Neuroscience Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Neuroeconomics Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Fundamental Neuroscience Internships Coordinator: Pilar Martinez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042, 50 Universiteitssingel West, Room 1.112, Email: p.martinez@maastrichtuniversity.nl - RM Neuropsychology Internships Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email:

caroline.vanheugten@maastrichtuniversity.nl - RM Psychopathology Internships Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl

Course objectives

Knowledge of: Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.

Prerequisites

The research internship cannot be started until:

 \Box At least 60 credits have been attained during the programme;

Advanced Statistics I and II.

PSY5103 Year 1 Sep 2018 31 Aug 2019 Print course description ECTS credits: 14.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Research, Skills, Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: internship, Research, master's thesis. Faculty of Psychology and Neuroscience

Master's Thesis

PSY5109 Year 29 Oct 2018 31 Aug 2019 Print course description ECTS credits: 10.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Minor's Thesis

Faculty of Psychology and Neuroscience

Minor's Thesis

Full course description

Students specialising in Psychopathology 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 research internship or separately. Students are required to submit an additional 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. For Psychopathology and Neuropsychology students who choose to undertake a clinical internship, the internship and minor's thesis will be assigned 20 credits, and the research internship and thesis will be assigned 30 credits. A detailed guide on clinical internships and the minor's thesis can be found on EleUM > 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 Psychopathology Internship Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81487, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl - RM Neuropsychology Internship Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl

Course objectives

Knowledge of: 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.

Prerequisites

The clinical internship cannot be started until:

• At least 60 credits have been attained during the programme;

• The above mentioned 60 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;
- Psychophysiological 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

PSY5105 Year 29 Oct 2018 31 Aug 2019

Print course description

ECTS credits: 4.0 Instruction language: English Coordinator:

• <u>G.C. Kraag</u>

Teaching methods: Assignment(s), Paper(s), Patientcontact, Research, Skills, Training(s), Working visit(s) Assessment methods: Attendance, Final paper, Observation, Participation Keywords: clinical research, clinical practice, clinical training, Psychodiagnostics, patient contact.