

**1-YEAR MASTER
2013-2014**

Index

Overview [cognitive] Master	3
Health and Social Psychology	5
Psychology and Law	15
Work and Organisational Psychology	22
Overview (biological) master	43
Developmental Psychology	45
Cognitive Neuroscience	53
Neuropsychology	63

Overview [cognitive] master

Period	Health and Social Psychology: Specialisation Coordinator: Karlijn Massar		
Period 0 02-09-2013 - 06-09-2013	Introduction week PSY 4950 PBL Training for non-UM Students* (- credits)		
Period 1 09-09-2013 - 25-10-2013	PSY4001 Self-Control (5 credits): Hugo Alberts <i>Practical training:</i> PSY4101 Increasing Self-control Through Practice (- credits): Hugo Alberts	PSY4004 Manipulation (5 credits): Fraukje Mevissen <i>Practical training:</i> PSY4104 Manipulation Strategies (- credits): Fraukje Mevissen	
Period 2 28-10-2013 - 20-12-2013	PSY4002 Bad Habits (5 credits): Katrijn Houben <i>Practical training:</i> PSY4102 Make your own IAT! (- credits): Katrijn Houben	PSY4003 Planning Behaviour Change Programmes (5 credits): Gerjo Kok <i>Practical training:</i> PSY4103 Applying Theories (- credits): Rob Ruiter	
28 weeks	PSY4092 Research Proposal, PSY4090 Research Internship and PSY4091 Master's Thesis (40 credits): Sandra Mulkens		
Period	Psychology and Law: Specialisation Coordinator: Kim van Oorsouw		
Period 0 02-09-2013 - 06-09-2013	Introduction week PSY 4950 PBL Training for non-UM Students* (- credits)		
Period 1 09-09-2013 - 25-10-2013	PSY4011 Forensic Psychology (4 credits): Kim van Oorsouw	PSY4012 Eyewitnesses and Victims (4 credits): Tom Smeets	<i>Practical training:</i> PSY4015 Psychology and Law in Action (4 credits): Kim van Oorsouw
Period 2 28-10-2013 - 20-12-2013	PSY4013 Perpetrators and Defendants (4 credits): Ewout Meijer	PSY4014 Experts and Their Decisions (4 credits): Harald Merckelbach	
28 weeks	PSY4092 Research Proposal, PSY4090 Research Internship and PSY4091 Master's Thesis (40 credits): Sandra Mulkens		
Period	Work and Organisational Psychology: Specialisation Coordinator: Herco Fonteijn		
Periode 0	Introduction week		

02-09-2013 - 06-09-2013	PSY 4950 PBL Training for non-UM Students* (- credits)		
Period 1 09-09-2013 – 25-10-2013	PSY4021 Work Psychology (5 credits): Fred Zijlstra <i>Practical training:</i> PSY4121 Research in Field Settings (- credits): Fred Zijlstra	PSY4022 Human Resources (5 credits): Margje van de Wiel <i>Practical training:</i> PSY4122 What is it like to be a Work and Organisational Psychologist? (- credits) Katharina Vornholt, Margje van de Wiel	
Period 2 28-10-2013 - 20-12-2013	PSY4023 Organisation and Cognition (5 credits): Herco Fonteijn <i>Practical training:</i> PSY4123 Surveys in Organisations (- credits): Ute Hulsheger PSY4124 Conflict Management (- credits): Herco Fonteijn	PSY4024 Human Performance (5 credits): Robert van Doorn <i>Practical training:</i> PSY4125 Data Analyses (- credits): Robert van Doorn	
28 weeks	PSY4094 Research Methods for Work and Organisational Psychologists (- credits): Robert van Doorn PSY4093 Research Proposal, PSY4095 Research Internship and PSY4091 Master's Thesis (30 credits): Robert van Doorn AND PSY4096 Professional Skills Report and PSY4097 Activity Report (10 credits): Sjir Uitdewilligen		

**Students from Erasmus Rotterdam receive an exemption from the PBL training.*

Health and Social Psychology

Overeating, excessive drinking, drug abuse, risk taking in traffic, discrimination, environmental pollution, and unsafe sex are all considered as examples of unhealthy and undesirable behaviour. The Health and Social Psychology Master's specialisation studies the nature and origin of such 'bad habits' from a multidisciplinary perspective. Students investigate questions such as: What is the contribution of the media and social comparison processes to a distorted body image? Why do adolescents take more risks than adults? What is the role of significant others and the social norms in the willingness to practice safe sex? Are impulsive children more likely to become obese? Students learn to analyse the underlying mechanisms of (un)healthy and (anti)social behaviour, using recent theories and models from various psychological disciplines. This knowledge can be used to systematically develop interventions, with the aim to change these bad habits and to promote healthy and pro-social behaviour. During their internship, students conduct their own research, either inside or outside of the Faculty.

Title	Self-Control
Period	1
Code	PSY4001
ECTS credits	5
Organisational unit	Clinical Psychological Science
Coordinator	Hugo Alberts
Descriptions	<p>Students will consider questions such as: Why do some people eat too much? Why is it so hard for some people to control their alcohol consumption? Why do some people lose their temper easily? It is well established that many people struggle with calories, cigarettes, emotions and laziness every day and that people can vary enormously in their ability to succeed in self-regulation or self-control. Some common examples which illustrate a lack of self-control include too much eating or drinking, not being able to control emotions or impulsively buying new shoes. There are often negative consequences of these types of behaviour and these demonstrate how important it is that people are able to control themselves, therefore an understanding of the process of self-control is key to this course.</p> <p>Students study basic processes of self-control such as the self-regulation of affect and emotion, autonomous regulation, the role of thinking (beliefs) and mindfulness. In addition, attention is paid to possible ways to improve self-control abilities and circumvent failure.</p>
Goals	Knowledge of: Self-determination, ego-depletion, self-awareness, mindfulness-based regulation, ironic processes of mental control.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Group assignment(s) Lecture(s) Paper(s) Patient contact PBL Presentation(s) Work in subgroups
Assessment methods	Final papers Presentation Written exam
Key words	self-control, self-regulation

Practicum bij PSY4001 Self- Control = PSY4101 Practical training: Increasing Self-Control through Practice

Title	Practical training: Increasing Self-Control through Practice
Period	2
Code	PSY4101
ECTS credits	-
Organisational unit	Experimentele klinische psychologie
Coordinator	Hugo Alberts
Descriptions	The practical training includes working on an everyday self-control issue. Students work on these issues in sessions where they act with a fellow student as either a therapist or as a client. The aim is for students to utilise the cognitive behavioural treatment protocol in an attempt to reduce their most uncomfortable self-control deficit. The therapy is designed as a case study which students must then present during a symposium.
Goals	Knowledge of: Therapeutic interventions, cognitive behavioural therapy, communication skills, self-control techniques.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignment(s) Lecture(s) Paper(s) Patient contact Presentation(s) Skills
Assessment methods	Final paper Presentation
Key words	therapy, cognitive behavioural therapy, self-control techniques, self-control improvement

Title	Manipulation
Period	1
Code	PSY4004
ECTS credits	5
Organisational unit	Work and Social Psychology
Coordinator	Fraukje Mevissen
Descriptions	<p>This course focuses on techniques and strategies to influence or ‘manipulate’ other people’s opinions, judgments and behaviour. What factors are likely to instigate change and how can their influence be explained? A common distinction in manipulation techniques or strategies is the distinction between strategies requiring systematic processing and strategies requiring heuristic processing. Systematic processing is related to persuasion; a receiver carefully examines a persuasive message and if the arguments are relevant and strong (s)he may decide to adopt the message.</p> <p>In the case of heuristic processing, the receiver is more likely to be influenced by the form of a message rather than its content. An example of when a person is not motivated to carefully examine a message or situation occurs in the following scenario: a receiver is known to be more likely influenced if the manipulator is attractive or if the manipulator looks similar to the receiver.</p> <p>Both forms of influence are discussed during this course. Other topics in this course are ‘knee jerk psychology’ (direct manipulation techniques), the manipulative power of everyday and media role models, evaluative conditioning (associating neutral stimuli with positive attributes), and social mimicry.</p> <p>Students also study the influence of mood on persuasion (are you more subjective to a persuasive message in a good or in a bad mood, and if so, why?) and consider why some people are more sensitive to persuasive messages than others. In addition to the lectures and PBL-groups, there will be several practical assignments, and students must write two papers that form part of the final grade.</p>
Goals	<p>Knowledge of:</p> <p>Social influence, information processing, dual process models, implicit and explicit attitudes, attitude change, food labels, designing a persuasive food label, persuasion, persuasion techniques, manipulation tricks, building resistance to social influence, overcoming resistance to social influence, self-affirmation, role models, social comparison, regulatory focus, persuasion by association, evaluative conditioning, experimental design, social imitation, mimicry, chameleon effect.</p>
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	<p>Assignment(s)</p> <p>Lecture(s)</p> <p>Paper(s)</p> <p>PBL</p> <p>Presentation(s)</p> <p>Work in subgroups</p>

Assessment methods	Attendance Written exam
Key words	persuasion, attitude change, social influence, resistance, role models, mimicry

Practicum bij PSY4004 Manipulation = PSY4104 Practical training: Manipulation Strategies

Title	Practical training: Manipulation Strategies
Period	1
Code	PSY4104
ECTS credits	-
Organisational unit	Work and Social Psychology
Coordinator	Fraukje Mevissen
Descriptions	During the practical training, students will work on four assignments (individually or in small groups). Each student will design a unique persuasive message for the first assignment. The second assignment requires pairs of students to study a manipulation strategy and present their outcomes to fellow students. The third assignment requires that students write a research proposal in which they describe an experiment using evaluative conditioning. Finally, in the fourth assignment, students review the proposal of a fellow student.
Goals	Knowledge of: Presenting, academic writing, reviewing, social influence, information processing, dual process models, implicit and explicit attitudes, attitude change, eco labels, designing a persuasive eco label, persuasion, persuasion techniques, manipulation tricks, evaluative conditioning, experimental design.
Instruction language	EN
Prerequisites	
Recommended literature	Students must perform their own literature search for these assignments.
Teaching methods	Assignment(s) Paper(s) PBL Presentation(s) Skills Work in subgroups
Assessment methods	Final paper Presentation
Key words	writing, presenting, persuasive message, manipulation techniques, experimental design

Title	Bad Habits
Period	2
Code	PSY4002
ECTS credits	5
Organisational unit	Clinical Psychological Science
Coordinator	Katrijn Houben
Descriptions	<p>At the end of the course, students will have acquired knowledge of relevant theories and models to explain the origin, nature and maintenance of 'bad habits'. Students will be able to analyse a 'bad habit' using a multidisciplinary perspective.</p> <p>Students will study theories, models, and empirical research which are on the borderline between social and clinical psychology. Students will study explanations and predictions of behaviour, and in particular unhealthy and unwanted behaviours and cognitions. The approach to assessing bad habits is multidisciplinary in that it uses recent views from social psychology, social cognition, clinical psychology and cognitive experimental psychology. Emphasis is put on understanding, explaining and predicting bad habits. Several recent theoretical views are used to explain how (un)healthy and (un)wanted behaviours develop and endure. Students review various types of bad habits in the broad sense of the word and learn how these are acquired. Students use examples such as excessive drinking or eating, a lack of self-control in general, and (a lack of) self-serving cognitions in order to study the role of automatic and controlled processes in cognition and behaviour.</p>
Goals	<p>Knowledge of:</p> <p>Implicit measures, bad habits, theory of planned behaviour, social influences on eating behaviour, ambivalent attitudes, addiction, self-serving biases, social and clinical psychology, cognitive psychology.</p>
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	ambivalent attitudes, implicit measures, addiction, self-serving biases, force of habits, planned behavioural change, social influences on eating behaviour

Practicum bij PSY4002 Bad Habits = PSY4102 Practical training: Make your own IAT!

Title	Practical training: Make your own IAT!
Period	2
Code	PSY4102
ECTS credits	-
Organisational unit	Clinical Psychological Science
Coordinator	Katrijn Houben
Descriptions	In this practical training students conduct a small experiment in groups of 3 to 4. They program their own Implicit Association Test (IAT), test participants, conduct analyses and give a presentation. Through hands-on experience and by using a paradigm that is frequently used in this field, students gain a profound understanding of the IAT.
Goals	Knowledge of: Implicit measures, Implicit Association Test, data analysis, research design, research presentation.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Presentation Lecture(s) Research Skills Work in subgroups
Assessment methods	Attendance Presentation
Key words	Implicit measures, Implicit Association Test, research design, data analysis, presentation skills

Title	Planning Behaviour Change Programmes
Period	2
Code	PSY4003
ECTS credits	5
Organisational unit	Work and Social Psychology
Coordinator	Gerjo Kok
Descriptions	Health and social psychologists in the field, apply state-of-the-art theories and research to health, ecology, discrimination and safety problems in real-life settings. This course introduces a process for creating behavioural change programmes (Intervention Mapping) for these problems. Students are guided through a series of steps that will assist them in applying psychological theories in developing behavioural change interventions. Steps include: a needs assessment and identification of the goals of the programme; selecting intervention methods and translating methods into applications and programmes; and planning for implementation and evaluation of the programme. Participants study the theoretical background of each step and work in small groups to create a (fictive) behaviour change programme for a health problem. Lectures introduce the various steps and provide illustrative examples of Intervention Mapping applications. The practical training 'Applying Theories' is integrated into Work and Social Psychology.
Goals	Knowledge of and skills: Be able to explain the rationale for a systematic approach to intervention development, describe an ecological approach to intervention development, explain and apply the types of logic models that can be used to conceptualise various phases of programme development, list and apply the steps and processes of Intervention Mapping, explain and apply core processes for developing theory- and evidence-based interventions.
Instruction language	EN
Prerequisites	
Recommended literature	Bartholomew, L.K., Parcel, G.S, Kok, G., Gottlieb, N.H. & Fernández, M.E., 2011. Planning health promotion programs: An intervention mapping approach, 3rd ed. San Francisco: Jossey-Bass
Teaching methods	Lecture(s) Paper(s) Training(s) Work in subgroups
Assessment methods	Attendance Final paper Participation Written exam
Key words	Behaviour change, applying theories, Intervention Mapping, social psychology, health psychology

Practicum bij PSY4003 Planning Behaviour Change Programmes =
PSY4103 Practical training: Applying Theories

Title	Practical training: Applying Theories
Period	2
Code	PSY4103
ECTS credits	-
Organisational unit	Work and Social Psychology
Coordinator	Rob Ruiter
Descriptions	The practical training provides strategies for finding appropriate theories and empirical data. Core processes for Intervention Mapping include accessing scientific literature from the behavioural sciences to explain a given problem in order to develop theory- and evidence-based interventions.
Goals	Knowledge of: The rationale for core processes: literature, theories and additional research, the issue-related, concept-related and general theories approaches to theory finding.
Instruction language	EN
Prerequisites	
Recommended literature	Buunk, A.P. & Van Vugt, M. (2008). Applying social psychology; from problems to solutions. London: Sage.
Teaching methods	Assignment(s) Lecture(s) Paper(s) Training(s) Work in subgroups
Assessment methods	Attendance Final paper Participation
Key words	applying theories, Intervention mapping, PATH

Psychology and Law

Questions such as: How reliable are eyewitness testimonies? and Do serious criminals have a brain dysfunction which makes them permanently dangerous to society? are typical in the psychology and law (PsyLaw) specialisation. Psychologists with a background in PsyLaw ask questions that have direct relevance to the legal arena, and conduct research in order to address these questions.

The aim of this programme is to familiarise students with typical themes in the PsyLaw domain. For example, students will learn how to analyse the reliability of eyewitness testimonies. This is achieved by studying memory from various perspectives. Students also look at methods of testing and how tests can be used to detect malingerers or to predict recidivism risk.

Although the theoretical part of the PsyLaw specialisation is offered in English, students should be aware that many examples and illustrations are drawn from the Dutch judicial system. For example, the Dutch legal system utilises the TBS system (mandatory psychiatric treatment on behalf of the state). Moreover, legal decisions are made by professional judges rather than juries. Several important Dutch cases will be discussed that have had an impact on the field of Dutch PsyLaw. In the practical part of this specialisation (PsyLaw in Action), students visit Dutch court hearings and forensic settings. Although great care is taken to translate all relevant written and audio materials into English, and alternative English assignments are provided, some of the practical part (e.g., Police visit, TBS system) of the PsyLaw specialisation may prove difficult to follow for those students who are completely unfamiliar with the Dutch language.

Title	Forensic Psychology
Period	1
Code	PSY4011
ECTS credits	4
Organisational unit	Clinical Psychological Science
Coordinator	Kim van Oorsouw
Descriptions	<p>This course will focus on the development, assessment and treatment of criminal behaviour. During this course students learn more about how (neuro)biological and environmental factors and mental (Axis I) disorders and personality (Axis II) disorders contribute to criminal behaviour.</p> <p>Some children display problematic behaviour at an early age or grow up in an environment that is considered a more likely predictor of the development of a career in crime. Others start displaying criminal behaviour in adulthood. Perpetrators frequently suffer from mental disorders. Murderers, for example, are often psychopaths, but may also suffer from schizophrenia. The course covers whether there are reliable ways to distinguish between different types of offenders. Questions covered include: What is known about the psychophysiology and the assessment of psychopathy? and What about other mental disorders?</p> <p>It is known that not all offenders suffer from a mental disorder. Once a crime has been committed, perpetrators often try to evade responsibility by feigning amnesia. Consequently, there are instruments that can help to assess whether an offender actually suffers from a disorder or whether they are malingering. After an assessment has been made, the trier-of-fact decides on punishment: imprisonment, treatment in a forensic institution or both. This course covers questions and topics related to the following questions: How can the best sanction be determined? What are the effects of detention and/or treatment in a forensic institution? How do we know whether someone is ready to leave a forensic hospital?</p>
Goals	Develop knowledge of: Causes of criminal behaviour, axis 1 and axis 2 disorder, assessment of criminal responsibility, risk assessment, purposes of punishment and treatment.
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	forensic psychology, mental disorders, psychopathy, criminal responsibility assessment, TBS (Mandatory psychiatric treatment)

Title	Eyewitnesses and Victims
Period	1
Code	PSY4012
ECTS credits	4
Organisational unit	Clinical Psychological Science
Coordinator	Tom Smeets
Descriptions	<p>This course provides contemporary insights into the psychology of eyewitnesses and victims. For example, questions will be posed such as: How well are eyewitnesses and victims able to recall the offence they experienced? Can they accurately retrieve specific details of the offence when being questioned by the police? Are witnesses and victims subsequently able to identify the culprit from a line-up? How should these line-ups best be administered? Which neurobiological processes in the brain are responsible for storing emotional events during times of stress? This course will also deal with the consequences for people who experience traumatic events i.e., Can people cope with trauma? Who is vulnerable to stress-related disorders? Can traumatic experiences cause permanent brain damage? Are claims of repression and subsequent recovery of traumatic experiences valid, or can they (sometimes) reflect false memories? What do all of the above questions imply for the courtroom? Are the testimonies provided by young children as reliable as those of adults? These and other issues will be addressed during the course.</p> <p>By the end of the course students will: be familiar with current issues and controversies in eyewitness research and the psychology of victims; be familiar with the important terminology of Forensic Psychology (e.g., posttraumatic stress disorder, false memories, sequential line-ups, Ribot's law, etc.); be able to give descriptions of typical methods and experimental work in these disciplines; and have insight into the problems that arise from court decisions which hinge upon testimonies from eyewitness and/or victims.</p>
Goals	<p>Knowledge of: Estimator variables, system variables, co-witness effects, post-identification feedback, output order effects, reliability of testimonies. Line-up identification procedures, retrieval-induced forgetting, traumatic memories, stress, HPA-axis, neurobiology of learning and memory, resilience, acute and posttraumatic stress disorder, hippocampal atrophy, repression, recovered memories. False memories and behavioural consequences, forgot-it-all-along effect, coaching, truth-telling and lying in children, Ribot's law, posttraumatic amnesia, disturbed memory related to ICU-treatment.</p>
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam

Key words	eyewitnesses, victimology, trauma, memory
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Title	Perpetrators and Defendants
Period	2
Code	PSY4013
ECTS credits	4
Organisational unit	Clinical Psychological Science
Coordinator	Ewout Meijer
Descriptions	<p>This course covers the issue of perpetrators and defendants. The two are not synonymous; not all perpetrators of crime are apprehended and put to trial, and not all defendants are guilty of the crime of which they are accused. During this course students will learn more about the psychology and behaviour of offenders of serious crimes. Knowledge of the psychology of the offender can be of great help during the different stages of criminal prosecution. In the first phase, the investigative phase, the police can use this knowledge to help apprehend the unknown offender. When a suspect has been arrested, forensic psychological knowledge is useful in planning the interrogation. For example: How can we avoid false confessions? How can we detect deceitful behaviour? What should the police do when a suspect seems too psychologically disturbed to be interviewed at all?</p> <p>In the second phase of criminal prosecution, the defendant is sentenced. In this stage, forensic psychologists may advise the court whether the defendant is to be held fully responsible for his or her offence. A judgment of diminished responsibility may lead to a shorter prison sentence and/or mandatory forensic psychiatric treatment. An example of a topic that forensic psychologists deal with are crimes allegedly committed while the offender was sleepwalking (“It wasn’t me, I was sleeping”). Students will learn how a forensic psychologist can evaluate such a claim, and determine how likely it is that the defendant was truly sleepwalking. Another aspect for consideration is genetic makeup; Is there such a thing as a gene predisposing an individual to commit murder? And if so, does this diminish criminal responsibility?</p> <p>At the end of this course students will have gained knowledge about current issues and controversies connected to the psychology of offenders.</p>
Goals	Knowledge of: Filicide, false confessions, deception, somnambulism, profiling, behavioural genetics.
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Lecture(s) Presentation(s) PBL
Assessment methods	Attendance Presentation Written exam
Key words	filicide, false confessions, deception, somnambulism, profiling, behavioural genetics

Title	Experts and their Decisions
Period	2
Code	PSY4014
ECTS credits	4
Organisational unit	Clinical Psychological Science
Coordinator	Harald Merckelbach
Descriptions	Some have argued that the story behind miscarriages of justice is, in fact, the story of expert errors and mis-judgments. Experts do indeed play an important role in judicial decision making; the law expects them to reach their decisions on the basis of scientifically grounded principles. Consider the handwriting expert who has to decide whether a ransom note was written by the defendant. Or the child psychologist who has to decide whether a child should stay with an emotionally labile mother. This course addresses questions from a psychological point of view including: Should we trust the expertise of these professionals? How can their decisions be optimised? Psychometrics and decision making and other issues typically thought to be the province of court experts are discussed at length: How do experts reason about the causality underlying, for example, accidents? Can modern techniques like fMRI assist experts in drawing conclusions on issues such as criminal responsibility of defendants? What about defendants who feign all kinds of psychiatric symptoms? How can the expert detect these? This course tackles these and related questions.
Goals	Knowledge of: Decisions making styles, biases, debiasing, signal detection theory, Receiver Operating Characteristics, expectancy effects, psychopharmacology, drugs and crimes, neuro-imaging and criminal responsibility, malingering, witness preparation, Elaboration Likelihood Model.
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Lecture(s) PBL Presentation(s)
Assessment methods	Attendance Presentation Written exam
Key words	expert witnesses, diagnostic accuracy, decision making, biases, malingering

Title	Practical training: Psychology and Law in Action
Period	1, 2
Code	PSY4015
ECTS credits	4
Organisational unit	Clinical Psychological Science
Coordinator	Kim van Oorsouw
Descriptions	Psychology and Law in Action offers students the opportunity to become familiar with the practical aspect of psychology and law. Students will acquire hands-on experience with the administration of instruments frequently used by experts in the legal field, including use of tools to measure suggestibility and malingering. Furthermore, lectures will be given by professionals working in the legal field. The basics of criminal proceedings in court will be outlined with an accompanying visit to a court hearing. In addition, field trips to different legal settings will be organised (e.g., forensic institution, jail). Students will spend a substantial amount of time in administrating tests and on reading relevant literature. At the end of the practical training, students are expected to act as an expert witness in a mock criminal law case and must submit a written expert report.
Goals	Knowledge of: Administration and application of tests; testing relevant for legal arena; working field of psychology and law; visit psychology and law settings.
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Assignment(s) Lecture(s) Paper(s) PBL Skills Training(s) Work in subgroups Working visit(s)
Assessment methods	Attendance Computer test Final paper Presentation
Key words	measurement of malingering, excursions, assessment, court hearing

Work and Organisational Psychology

This specialisation focuses on people at work in organisations. It combines theoretical knowledge of the cognitive aspects of work, personnel and organisational psychology. Relevant questions in this domain are: How to design jobs so that people can work optimally and without putting their health and well-being at risk? Why do people work, what motivates them? How can industrial accidents be prevented? What determines team effectiveness? How can someone's ability to cooperate or to make decisions be evaluated? Which factors improve the quality of work life for the elderly? How should air traffic controllers be selected? Which job conditions help prevent burn-out? How can innovations be stimulated? These questions illustrate some of the issues that are studied in the field of work and organisational psychology (WOP). Work and organisational psychologists look at various domains, like the services, the healthcare or the aviation sector. Students who complete this programme have knowledge of the major content areas of WOP with an emphasis on applied cognitive psychology. They learn how to apply techniques of job and task analysis; they learn how to determine standards of effectiveness and how to measure and evaluate human performance; they learn how to design and evaluate employee selection tests and organisational interventions; and they acquire the necessary skills for data collection and analysis and are able to conduct applied psychological research.

Title	Work Psychology
Period	1
Code	PSY4021
ECTS credits	5
Organisational unit	Work and Social Psychology
Coordinator	Fred Zijlstra
Descriptions	<p>This course focuses on people at work in organisations. It will provide answers to key questions such as Why do people work? and How do people work? These questions will be addressed by discussing theories of work behaviour, and also of job satisfaction, commitment, work and health, the influence of technology on work, and so on. Using the knowledge gained, there will also be discussion about how jobs can (or should) be changed, to optimise an individual's performance and the well-being of the post holder. Furthermore, theories regarding emotional aspects of work will be discussed. At the end of this course students should be able to provide answers to questions such as: Does job satisfaction increase performance? Does increased performance determine increased job satisfaction? Is working in teams more effective than working alone?</p>
Goals	<p>Knowledge of: Psychological meaning of work, job commitment, job design, health and well-being, consequences of technology, changes in work.</p>
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Lecture(s) PBL
Assessment methods	Written exam
Key words	work behaviour, job design, job satisfaction, health, well-being, work and technology

Practicum bij PSY4021 Work Psychology = PSY4121 Practical training: Research in Field Setting

Title	Practical training: Research in Field Settings
Period	1
Code	PSY4121
ECTS credits	-
Organisational unit	Work and Social Psychology
Coordinator	Fred Zijlstra
Descriptions	In this practical training, students will use methods and instruments that are designed to assess work demands and their effects on workers. A report must be compiled describing findings and experiences.
Goals	Knowledge of: Methods and instruments, research, task analysis.
Instruction language	EN
Prerequisites	
Recommended literature	Literature of PSY4021.
Teaching methods	Assignment(s) Lecture(s) Research Skills Training(s) Work in subgroups Working visit(s)
Assessment methods	Attendance Observation Participation Paper
Key words	task analysis, assessing job demands

Title	Human Resources
Period	1
Code	PSY4022
ECTS credits	5
Organisational unit	Work and Social Psychology
Coordinator	Margje van de Wiel
Descriptions	<p>People are considered as the core of organisations. They set the goals, plan, design, organise and carry out the work and run the business. To gain competitive advantage, organisations need to find, develop, and retain the best possible employees. In this course, students will reflect upon psychological research and theories that may contribute to human resource management practices in organisations. The practices discussed in this course are job analysis, selection and recruitment, training, performance appraisal and management, professional and career development, talent management and employee relations. Students will learn that, use of a strategic approach to human resource management, means that the practices listed above need to be coordinated to achieve organisational goals, since they form sequential, but interdependent steps in employing personnel in an organisation. The organisational goals therefore need to be translated into criteria for employee behaviour, attitudes, and performance. Subsequently, instruments need to be selected or developed to measure whether the criteria are met. This course discusses methods for setting and testing these criteria and for improving organisational performance. In this way students learn to reflect on the usefulness of Human Resource Management (HRM) practices.</p> <p>The course aims to connect research, theory and practice. Therefore, students must apply their knowledge in specific problems and complete assignments whilst using and discussing real-life examples of HRM practices. In addition, students gain insight into the field of Work and Organisational Psychology and HRM by interviewing professionals in the field in their practical training and by visiting an HRM consultancy. In this visit, they gain hands-on experience with assessment instruments and techniques used in selection processes and for personnel development.</p>
Goals	<p>Knowledge of: Human resource management practices, job analysis, personnel selection, assessment, recruitment, training, training evaluation, performance appraisal, performance management, organisational citizenship behaviour, counterproductive work behaviour, continuous professional development, workplace learning, career development, career success, employability, employee relations, talent management, retention.</p>
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Assignment(s) Lecture(s) PBL Presentation(s)

	Working visit(s)
Assessment methods	Final paper Written exam
Key words	human resource management practices, job analysis, selection and recruitment, training, performance appraisal and management, professional and career development, employee relations

Practica bij PSY4022 Human resources = PSY4122 Practical training: What is it like to be a Work and Organisational Psychologist?

Title	Practical training: What is it like to be a Work and Organisational Psychologist?
Period	1
Code	PSY4122
ECTS credits	-
Organisational unit	Work and Social Psychology
Coordinator	Katharina Vornholt, Margje van de Wiel
Descriptions	Students familiarise themselves with the profession of a work and organisational psychologist by studying literature and documents on the competences required in work and organisational psychology and by interviewing a subject matter expert (SME) about his or her job. Based on these documents and the job analysis literature, students prepare the interview, analyse the data and report their findings in a job description and job/person specification. Students also reflect on their own interviewing skills. The whole process is described in a report. Students briefly present their findings in an interactive session, and share with each other information on a variety of jobs that they may aspire to in the field of work and organisational psychology.
Goals	Knowledge of and practical experience with: Job analysis, job description, person specification, interviewing, the work of work and organisational psychologists.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Paper(s) Presentation(s) Training(s)
Assessment methods	Attendance Final paper
Key words	job analysis, interviewing , job description, person specification, work and organisational psychology

Title	Organisation and Cognition
Period	2
Code	PSY4023
ECTS credits	5
Organisational unit	Work and Social Psychology
Coordinator	Herco Fonteijn
Descriptions	<p>To what extent can cognitive constructs and theories help us understand organisational behaviour? This course will focus on the interface of cognitive and organisational psychology and on two major perspectives which organisations and their members appear to take. By using an interpretive perspective, organisations and their members try to understand how organisational realities are constructed. This perspective allows us to make sense of events and, eventually, to set new goals or adapt existing goals. A second perspective focuses on how people and organisations select actions that lead to current (organisational) goals. This perspective is exemplified by behavioural decision research.</p> <p>Issues that will be addressed include: entrepreneurial cognition leadership, and strategic decision making; power, leadership and organisational justice; team cognition and team performance; creativity, innovation and knowledge management; trust, conflict and negotiation; and change management, organisational culture and cross cultural differences. Selected problems will provide student with insight into the field of aviation (e.g. low-fare market strategies, cockpit crew resource management, union disputes, cultural differences and airline alliances).</p>
Goals	<p>Knowledge of: Entrepreneurial behaviour, entrepreneurial cognition, strategic decision making, strategic management, power, leadership, complexity leadership, social identity theory, self-categorisation, team behaviour, transactive memory, team composition, team mental models, knowledge management, innovation, creativity, group creativity, multi-level analysis, survey methods, conflict management, negotiation, negotiator cognition, trust, organisational justice, organisational culture, cross cultural differences, change management.</p>
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles.
Teaching methods	Assignment(s) Lecture(s) PBL Presentation(s) Skills Training(s)
Assessment methods	Presentation Written exam
Key words	strategy, leadership, power, team cognition, negotiation, change management.

Practica bij PSY4023 Organisation and Cognition:*PSY4123 Practical training: Surveys in Organisations**PSY4124 Practical training: Conflict Management*

Title	Practical training: Surveys in Organisations
Period	2
Code	PSY4123
ECTS credits	-
Organisational unit	Work and Social Psychology
Coordinator	Ute Hulsheger
Descriptions	Setting-up and administering surveys, as well as analysing and interpreting the collected data, are inherent parts of the job of a work and organisational psychologist. Within this practical training course, students will become acquainted with these skills. Specifically, the following issues will be addressed: How do I set-up a questionnaire? How do I create and select items? How do I enter data in SPSS? How do I prepare data analysis? What are the first steps in analysing the data? Working on practical examples, students will receive hands-on advice in designing questionnaires and preparing data analysis with SPSS.
Goals	Knowledge of: Methods for constructing and analysing surveys. Skills required for constructing and analysing surveys using SPSS.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignment(s) Presentation(s) Training(s)
Assessment methods	Attendance
Key words	item and survey construction, survey analysis, SPSS

Title	Practical training: Conflict Management
Period	2
Code	PSY4124
ECTS credits	-
Organisational unit	Work and Social Psychology
Coordinator	Herco Fonteijn
Descriptions	In this course students will become familiarised with various complementary theoretical and empirical studies on conflict management and negotiation. Consequently, this practical training course consists of exercises that confront students with organisational conflicts and provide experience with methods for resolving them. Through several role-playing exercises students will be given opportunities to: examine ways of managing task-related conflict; to heighten awareness of personal responses when other people's motives are in question; to experience how personal attitudes can obstruct the negotiation process and uncover deeper issues beneath surface facts; and to recognise and avoid unproductive communicative behaviour.
Goals	Knowledge of: Conflict management and negotiation techniques and skills in applying them.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignment(s) Presentation(s) Work in subgroups
Assessment methods	Attendance
Key words	conflict management, negotiation, role playing

Title	Human Performance
Period	2
Code	PSY4024
ECTS credits	5
Organisational unit	Work and Organisational Psychology
Coordinator	Robert van Doorn
Descriptions	This course focuses on the factors that affect how employees perform in their work environment. Students will study topics belonging to three related themes. The first theme covers motivation and differentiates between implicit and explicit aspects of motivation. It includes the setting and achievement of goals as the influential aspects of performance motivation. The second theme concerns effort regulation; the mental motivation that fuels the amount of motivation invested in work. This theme also focuses on the often neglected difference between static and dynamic performance. The third theme deals with the occurrence of mistakes and possible accidents in a work context. The handling and prevention of these incidents are studied in terms of hazards and risk perception, and in the context of safety issues and the construct climate. In addition to learning how to study and explain these issues, students will develop an understanding that most research includes recommendations for improvement of the interaction between humans and their direct work environment in an organisational context.
Goals	Knowledge of: Implicit motives, motivation, self-efficacy, social cognitive theory, goal setting theory, effort, mental resources, uni- and multidimensional resource models, self-regulation of emotion and effort allocation, static and dynamic performance, repeated measures approach, general mental ability, personality, risk, hazard, risk perception, risky decision making, risk taking, homeostasis theory, errors, accidents, accident investigation, safety, safety climate, person-centered and multilevel constructs.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters
Teaching methods	Lecture(s) Paper(s) PBL Research Skills
Assessment methods	Written exam
Key words	motives and motivation, goal setting, effort regulation, dynamic performance, risks, risk perception, safety , safety climate

Practicum bij PSY4024 Human Performance = PSY4125 Practical training; Data analyses

Title	Practical training: Data Analyses
Period	2
Code	PSY4125
ECTS credits	0
Organisational unit	Work and Organisational Psychology
Coordinator	Robert van Doorn
Descriptions	<p>Students will study existing datasets and will characterise the presented variables in terms of measurement scales. They will also formulate hypotheses regarding possible relationships between variables and will suggest appropriate tests. Students will report these ideas in concise, clear and comprehensive English.</p> <p>The practical training course provides preparation for an advanced training course in the third period, during which the same datasets are analysed via statistical tests (and is thus intended as part of the internship preparation).</p>
Goals	<p>Knowledge of: Description of variables, measurement scales, hypothesis formulation, relationships between variables, statistical tests</p>
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, books.
Teaching methods	Assignment(s) Lecture(s) Paper(s)
Assessment methods	Attendance Final paper
Key words	methodology and statistical knowledge, hypothesis formulation

Title	Research Methods for Work and Organisational Psychologists
Period	3
Code	PSY4094
ECTS credits	-
Organisational unit	Work and Social Psychology
Coordinator	Robert van Doorn
Descriptions	The second part of the one-year master's programme (from period 3 onwards), is devoted to arranging and conducting a research internship. Students commence their internship with the writing of a research proposal. To help students write their proposal and prepare them for the research internship, they must attend a series of lectures and practical assignments that will familiarise them with research methods and statistical techniques in work and organisational psychology research. In addition, they will learn more about gaining access to organisations and about planning their research project.
Goals	Knowledge of: Observational methods, survey methods, experimentation, self-reports, questionnaire design and analysis, various statistical techniques, such as anova, regression (mediation and moderation analyses), multilevel analysis, and meta-analysis.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles.
Teaching methods	Assignment(s) Lecture(s) Research
Assessment methods	Attendance Participation
Key words	methodology, statistics, setting up a research project

Internships

Universeel voor vrijwel alle Master specialisaties. **Uitzondering hierop is: WOP.**

Title	Research Proposal, Research Internship and Master's Thesis
Period	3-6
Code	PSY4092, PSY4090, and PSY4091
ECTS credits	40 (5, 25, and 10, respectively). The total research internship will be assigned 40 credits: 30 credits for the research activities, including the research proposal (5 credits; graded pass/fail) and the practical execution of the internship (25 credits; graded assessment), and 10 credits (graded assessment) for the master's thesis.
Organisational unit	Clinical Psychological Science
Coordinator	Sandra Mulkens
Descriptions	<p>The second part of the one-year master's programme (from period 3 onwards), is devoted to arranging and conducting a research Internship. Students explore a research issue within their specialisation. As a result of the many international research contacts that faculty members have established, a number of students conduct their research internship abroad. Students start their internship with the writing of a research proposal. Students complete the master's programme by writing a thesis based on their internship.</p> <p>The internship can be undertaken at Maastricht University, at external research institutes or at other practically oriented institutions. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors is a (senior) researcher at the Faculty of Psychology and Neuroscience (FPN). The other assessor might be a (senior) researcher at, for example, the institute where the student collected their data.</p> <p>Information about research internships offered by faculty members can be found on EleUM > FPN Master Students > internships/stages. This site also provides a detailed guide with practical information about the criteria for the research internship and the master's thesis.</p> <p>Each track has its own Internships Coordinator:</p> <p><i>Psychology and Law:</i> Kim van Oorsouw, Phone (043) 38 84050, 40 Universiteitssingel East, Room 3.767, Email: k.vanoorsouw@maastrichtuniversity.nl</p> <p><i>Health and Social Psychology:</i> Sandra Mulkens, Phone (043) 38 84052, 40 Universiteitssingel East, Room 3.755, Email: s.mulkens@maastrichtuniversity.nl</p> <p><i>Work and Social Psychology:</i> Robert van Doorn, Phone (043) 38 81926, 40 Universiteitssingel East, Room 4.731, Email: r.vandoorn@maastrichtuniversity.nl</p> <p><i>Developmental Psychology:</i> Hans Stauder, Phone (043) 38 81933, 55 Oxfordlaan, Room 2.009, Email: h.stauder@maastrichtuniversity.nl</p>

	<p><i>Cognitive Neuroscience</i>: Amanda Kaas, Phone (043) 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl</p> <p><i>Neuropsychology</i>: Caroline van Heugten, Phone (043) 38 84 213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl</p> <p>As mentioned above, research internships can also be undertaken abroad. For possible internships abroad, please contact the Research Internship Coordinator (see below).</p> <p>For practical information about international research internships (e.g. scholarship, visa), please contact the International Relations Office (IRO), Phone (043) 38 81920, 40 Universiteitssingel East, Room 1.768, Email: international-fpn@maastrichtuniversity.nl</p>
Goals	Knowledge of: Conducting a supervised empirical research project and summarising their research in the form of a master's thesis.
Instruction language	EN
Prerequisites	At least 2 of the 4 compulsory theoretical courses of the Master's track must be completed.
Recommended literature	
Teaching methods	Assignment(s) Paper(s) Patient contact Research Skills Working visit(s)
Assessment methods	Attendance Final paper Observation Participation
Key words	internship, research, master's thesis

Speciaal voor WOP-studenten, de volgende combinatie + SAP-codering:

Title	Research Proposal, Research Internship and Master's Thesis
Period	3-6
Code	PSY4093, PSY4090, and PSY4091
ECTS credits	40 (5, 25, and 10, respectively)
Organisational unit	Clinical Psychological Science
Coordinator	Sandra Mulkens

PLUS:

Title	Research Methods for Work and Organisational Psychologists
Period	3
Code	PSY4094
ECTS credits	-
Organisational unit	Work and Social Psychology
Coordinator	Robert van Doorn

Part I

Title	Research Proposal, Research Internship and Master's Thesis
Period	3-6
Code	PSY4093, PSY4095 and PSY4091
ECTS credits	30 (5, 15, 10 respectively)
Organisational unit	Work and Organisational Psychology
Coordinator	Robert van Doorn
Descriptions	<p>The second part of the one-year master's programme (from period 3 onwards), is devoted to arranging and conducting a research internship and training in professional skills.</p> <p>For the research internship students explore a research issue within their specialisation. Students start their internship with the writing of a research proposal. Students complete the master's programme by writing a thesis on research undertaken during their internship.</p> <p>The internship can be completed at Maastricht University or at an external host institution. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors is a (senior) researcher at the Faculty of Psychology and Neuroscience (FPN). The other assessor might be a (senior) researcher at, for example, the institute where the student collected their data.</p> <p>Information about research internships offered by external institutes or faculty members can be found on EleUM > Students Faculty of Psychology and Neuroscience > internships. This site also provides a detailed guide with practical information about the criteria for the research internship and the master's thesis.</p>
Goals	Knowledge of: Conducting a supervised empirical research project and summarising the research results in the form of a master's thesis.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignment(s) Paper(s) Research Skills Working visit(s)
Assessment methods	Attendance Final paper Observation Participation
Key words	internship, research, master's thesis

Part II

Title	Professional Skills Report and Activity Report
Period	From period 3 onwards
Code	PSY4096, PSY4097
ECTS credits	10 (8, and 2 respectively)
Organisational unit	Work and Organisational Psychology
Coordinator	Sjir Uitdewilligen
Descriptions	<p>This course offers students an opportunity to practice professional skills in either a simulated or a real-life setting. It intends to stimulate further development of the primary competences of a work and organisational psychologist (e.g., competences related to needs analysis, goal setting, assessment, development and intervention design, evaluation, and communication). To achieve this, a series of assignments and workshops is scheduled over an eight-week period commencing in January. Assignments and workshops focus on needs assessment, document analysis, goal setting, reporting, interviewing, and presenting. In addition, activities highlight 21st century skills required to enhance employability of graduates in a world that seeks new ways of working. Students may opt to engage in an eight-week practical internship as an alternative for the skills training. This practical internship can either be scheduled at the beginning of the semester (starting in January), or at the end of the semester, (starting in May). Prior to the start of a practical internship, students will submit a brief proposal listing details of the host institution and activities that will be performed. The coordinator will approve the proposal subject to the listed activities meeting the goals of the course. Students may also opt to seek complementary training as part of the professional skills course, e.g., training related to psychological assessment. Whether students opt for a practical internship, or for a series of professional skills training activities, they are required to submit a final activity report. In the activity report, students reflect on how their professional skills have improved. The report should also contain evidence to demonstrate that the student has worked on the compulsory assignments. A detailed guide on practical internships can be found on EleUM > Students Master Faculty of Psychology and Neuroscience.</p>
Goals	<p>Knowledge of: The work environment of a work and organisational psychologist. Further development of professional skills (needs analysis, document analysis, goal setting, assessment, intervention design, presenting, reporting, self-direction, digital literacy).</p>
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	<p>Assignment(s) Paper(s) Client contact Skills Training(s) Working visit(s)</p>

Assessment methods	Attendance Final paper Observation Participation
Key words	professional training, professional practice, practical research, client contact

Title	Psychodiagnostics Registration
Period	6
Code	PSY4925
ECTS credits	-
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Petra Hurks, Sven Stapert
Descriptions	<p>The success of a treatment or decision depends on the correct identification of the problematic situation: the diagnosis. Psychodiagnostics is the branch of psychology that evaluates individual problematic situations with psychological assessments. These assessments are used in judgment and in decision making processes that have important consequences. Examples include personnel selection processes, neurological evaluations and educational career decisions.</p> <p>To promote the quality of the psychodiagnostics profession, the Dutch Institute of Psychologists (NIP) has introduced a register for psychodiagnostics (i.e., the BAPD). In order to become registered, students are required to master the fundamental knowledge and skills that are rooted in the accepted psychodiagnostic principles. The registration is awarded by the NIP. The student receives a NIP certificate with their Master's Diploma. The graduate is also incorporated in a public register that is managed by the NIP. Additional information about NIP registration and regulations can be found at: www.psynip.nl Or on EleUM in the 'Community' tab under 'Internships'.</p>
Goals	<p>Knowledge of: The registration is intended for students who aim for a career in a clinically oriented discipline of psychology or who plan to attend the Dutch postgraduate training programme for health care psychology (GZ-psychology).</p>
Instruction language	NL
Prerequisites	<p>The registration can be obtained for the FPN specialisations <i>Developmental Psychology, Neuropsychology, Health and Social Psychology, Psychology and Law and Work and Organisational Psychology</i>. Registration is on the condition that students have completed a practical internship and have composed three case reports, students who graduate in one of these master's specialisations and have a FPN Bachelor's Degree in Psychology - including the compulsory theoretical courses defined by the NIP (e.g., the course Psychodiagnostics) - will obtain the registration upon graduation. Students who graduate in one of the above specialisations and fulfil the requirements of the training period, but who hold a Bachelor's Degree in (I) Psychology issued by another university or (II) any other field can potentially only obtain the registration through the NIP. This last-mentioned group of students should contact the FPN Examination Board in a timely manner, to discuss the alternatives.</p>
Recommended literature	
Teaching methods	<p>Patient contact Skills Training(s)</p>

Assessment methods	Final paper Observation Participation
Key words	psychodiagnostics, clinical test use, health care psychologist

Overview of the (Biological) Master's Degree

Period	Developmental Psychology: Specialisation Coordinator: Lisa Jonkman		
Period 0 02-09-2013 - 06-09-2013	Introduction Week PSY 4950 PBL training for non-UM students* (- credits)		
Period 1 09-09-2013 - 25-10-2013	PSY4031 Infancy (4 credits): Hans Stauder	PSY4032 Perception, Attention and Motor Development (4 credits): Lisa Jonkman	<i>Practical training:</i> PSY4033 Measuring Attention and Executive Functions in Behavioural Paradigms (2 credits): Lisa Jonkman or PSY4034 EEG and ERP (2 credits) Fren Smulders
Period 2 28-10-2013 - 20-12-2013	PSY4035 Development of Cognition and Language (4 credits): Hans Stauder	PSY4036 Social Emotional Development (4 credits): Harry Smit	<i>Practical training:</i> PSY4037 Psychological Test (2 credits): Hans Stauder
28 weeks	PSY4092 Research Proposal, PSY4090 Research Internship and PSY4091 Master's Thesis (40 credits): Sandra Mulkens		
Period	Cognitive Neuroscience: Specialisation Coordinator: Milene Bonte		
Period 0 02-09-2013 - 06-09-2013	Introduction week PSY 4950 PBL training for non-UM students* (- credits)		
Period 1 09-09-2013 - 25-10-2013	PSY4051 Auditory and Higher Order Language Processing (4 credits): Bernadette Jansma	PSY4052 Perception and Attention (4 credits): Peter De Weerd	<i>Practical training:</i> PSY4034 EEG and ERP (2 credits): Fren Smulders
Period 2 28-10-2013 - 20-12-2013	PSY4054 Neuroimaging: Functional MRI (4 credits): Elia Formisano	PSY4055 The Cognitive Neuroscience of Sensory and Motor Systems (4 credits): Joel Reithler, Amanda Kaas	<i>Practical training:</i> PSY4056 fMRI (2 credits): Elia Formisano
28 weeks	PSY4092 Research Proposal, PSY4090 Research Internship and PSY4091 Master's Thesis (40 credits): Sandra Mulkens		
Period	Neuropsychology: Rob Markus		
Period 0 02-09-2013 - 06-09-2013	Introduction Week PSY 4950 PBL Training for Non-UM Students* (- credits)		
Period 1 09-09-2013 -	PSY4061 Brain Damage (4 credits):	PSY4062 Behavioural Disorders (4 credits):	<i>Practical training:</i> PSY4063 Neuropsychologic

25-10-2013	Martin van Boxtel	Kim Kuypers	al Assessment (2 credits): Sven Stapert
Period 2 28-10-2013 - 20-12-2013	PSY4064 Arousal and Attention (4 credits): Annemiek Vermeeren	PSY4067 Ageing (4 credits): Arjan Blokland	<i>Practical training:</i> PSY4066 Basic Cognitive Psychological Skill (2 credits): Eric Vuurman
28 weeks	PSY4092 Research Proposal, PSY4090 Research Internship and PSY4091 Master's Thesis (40 credits): Sandra Mulkens OR: PSY4080 Research Proposal, PSY4081 Research Internship and PSY4082 Master's Thesis: Caroline van Heugten + PSY4083 Clinical Internship, PSY4084 Supervision and PSY4085 Clinical Activities Report (Master's NP - clinical option): Caroline van Heugten		

**Students from Erasmus Rotterdam receive an exemption for PBL training*

Developmental Psychology

Developmental psychology is the study of the development of behaviour and cognitive functions from infancy to adulthood. In this specialisation, there is a particular focus on understanding how the development of certain behaviours and cognitive functions relates to a person's biological constitution and to the development of their brain. Students are familiarised with current developmental theories and research findings from different fields and become acquainted with various diagnostic instruments and research tools, such as event-related brain potentials (ERPs).

Students learn about the biological and environmental requirements that are needed to develop functions such as perception, language, (social) cognition, emotion, attention and motor abilities. The programme addresses both typical and atypical development such as in ADHD, Autism, Tourette or Williams Syndrome.

Title	Infancy
Period	1
Code	PSY4031
ECTS credits	4
Organisational unit	Cognitive Neuroscience
Coordinator	Hans Stauder
Descriptions	<p>In no other period during our development do our brain and behaviour change so fundamentally and quickly as they do during infancy. This poses particular methodological constraints on the design of experiments and the selection of participants, whose ages are typically expressed in weeks. An additional challenge in infancy research is the limitation posed on communication. Questioning and instructions are of no use in infancy research and so there is reliance on indirect measurement methods like habituation paradigms or brain imaging methods. Nevertheless, many fascinating findings have emerged in recent years concerning often unexpected cognitive capacities of infants.</p> <p>The course commences by addressing specific problems in infancy research and covers the methods used to meet or resolve these problems. Next, biological and behavioural aspects of pre- and post natal development are discussed, in particular concerning their consequences for later cognitive development. The study of object recognition and object permanence is shown to play a fundamental role in cognitive development during infancy. Individual differences and critical periods are illustrated by a number of developmental disorders. Finally, the early development of social cognition and consciousness is addressed.</p>
Goals	Knowledge of: Biological and psychological development from conception to four years of age, methods and techniques in infant research.
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	critical period, object permanence, face processing, joint attention

Title	Perception, Attention and Motor Development
Period	1
Code	PSY4032
ECTS credits	4
Organisational unit	Cognitive Neuroscience
Coordinator	Lisa Jonkman
Descriptions	<p>Although perception, attention and motor function undergo the most spectacular changes during infancy, development proceeds throughout the course of an individual's entire lifespan. In the course, students will become acquainted with theories and experimental findings related to the development of these functions, with an emphasis on biological and physiological models. Knowledge about the way in which brain development is linked to the development of specific cognitive functions is crucial for determining the constraints of development theories. During the course, it will become evident to students that perception and motor development are closely related to attention development. Developmental disorders in perception, attention or motor functions can have divergent consequences, depending on the age at which they start. The consequences for brain development and the speed of the development of other functions are different, for instance, if a person is born deaf or if a person becomes deaf at a later age. During the course, a number of common childhood disorders associated with deviant development of perception, attention or motor functions will be discussed. The focus here is on neuropsychological and neurobiological theories on the origins of these developments. Other specific topics are the development of 'bottom-up' versus 'top-down' attention processes and the role of eye-movements, the development of executive functions and frontal cortex, the development of perceptual-motor functions, ADHD, Gilles de la Tourette and possible intervention and rehabilitation methods (both pharmacological as well as cognitive).</p>
Goals	<p>Knowledge of: Life-span cognitive development, neurobiological theories on cognitive development, constructivism, maturationalism, visual perception development, eye-movement development, attention development, executive control development, frontal lobe development, motor control development, development of action-perception integration, structural brain development, ADHD, Gilles de la Tourette, fronto-striatal circuits, dopaminergic and noradrenergic hypothesis for ADHD.</p>
Instruction language	EN
Prerequisites	
Recommended literature	Research articles, book chapters.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	childhood, adolescence, attention, visual perception, executive control, motor development, ADHD

Title	Practical training: Measuring Attention and Executive Functions in Behavioural Paradigms
Period	1
Code	PSY4033
ECTS credits	2
Organisational unit	Cognitive Neuroscience
Coordinator	Lisa Jonkman
Descriptions	Students will perform several attention and executive function tasks that are frequently applied in clinical and non-clinical developmental settings. The group data will be gathered and given to the students so that they can perform statistical analyses on the data. Each student formulates a research question based on the literature. All research questions will focus on themes within the field of childhood development of attention and executive control and associated disorders such as Autism Spectrum Disorder or ADHD. At the end of the course, students will present and discuss their findings in both group meetings and in a written report.
Goals	Knowledge of: Experimental paradigms to measure attention and executive functions, how to define a valid research question, apply statistics to developmental data and interpret results, write a research paper.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Assignment(s) Paper(s) Presentation(s) Research Skills Training(s) Work in subgroups
Assessment methods	Attendance Final paper
Key words	attention, executive functions, childhood development, experimental psychology, writing

1. PSY4034 EEG and ERP is gelijk aan de RM module PSY4221 EEG and ERP (CN, NE, FN, NP);
2. PSY4034 EEG and ERP wordt aangeboden in de Master CN en DP.

Title	Practical training: EEG and ERP
Period	1
Code	PSY4034
ECTS credits	2
Organisational unit	Cognitive Neuroscience
Coordinator	Fren Smulders
Descriptions	<p>Electroencephalography (EEG) and Event Related Potentials (ERP) offer a combination of precise measurements for the time course of brain processes. These are low cost, non-invasive measurements and are widely available. For these reasons they make a unique contribution to cognitive neuroscience. Scientific interest in EEG and ERP is growing, and results have been increasingly integrated with other neuro-imaging techniques during the last few decades. Lectures and basic literature provide an introduction for students to the basics of EEG and ERP research, EEG and ERP terminology and the possibilities and limitations within EEG and ERP. One topic that students will learn is how to set up an experimental paradigm that is suitable for EEG and ERP measurements. Students also study practical measurement issues, such as electrode placement and types of artefacts. Finally, students must interpret the resulting data. Successful measurement requires an understanding of the basics of EEG and ERP signal analysis techniques, such as artefact management, spectral analysis, filtering, ERP averaging, time-frequency analysis etc. Students also receive hands-on training in smaller groups in running an ERP experiment, including electrode application, minimising artefacts, and health and safety in the lab. A number of simple experimental paradigms will be utilised; these provide interesting and reliable results. Data processing will include a number of common EEG analyses, e.g. analyses in the time and frequency domain.</p>
Goals	<p>Knowledge of: Basic EEG/ERP paradigms, EEG recording systems, measurement settings, electrode application, data quality verification, analogue-digital conversion, basic EEG / ERP components, interpreting topographical plots, neural origins of EEG, time domain analysis, frequency domain analysis, time-frequency analysis, filtering, ocular artefact control, muscle artefact control, choice of reference, re-referencing.</p>
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, handbooks.
Teaching methods	Lecture(s) Paper(s) Skills Training(s) Work in subgroups
Assessment methods	Attendance Final paper
Key words	Electroencephalography (EEG), Event-related potentials (ERP), electrophysiology, measurement, analysis of brain

	potentials.
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Title	Development of Cognition and Language
Period	2
Code	PSY4035
ECTS credits	4
Organisational unit	Cognitive Neuroscience
Coordinator	Hans Stauder
Descriptions	This course will provide an introduction to changes that underlie normal and abnormal development of the child's cognitive system. This development is described from one year of age and concentrates on changes in thinking and language and interdependencies due in part to changes in brain structures. Two questions are important in a developmental approach: which changes take place as a child gets older and how do these changes occur? These questions seek to identify the nature of the changes. For example, by looking at the changes that take place if children learn mental addition and subtraction. If differences in behaviour between two age groups are indeed identified and specified in terms of their underlying competence, this may suggest what lies behind these changes. This leads to the next question, which relates to the mechanisms that influence behaviour. Developmental mechanisms are especially relevant to complex symbolic skills such as reading and arithmetic that can be conceived as cascaded processes which generally span a long period of time and consist of many components. The study of these mechanisms and their basis in the brain is complex and addresses many methodological issues that will be also discussed in the course. During the course students will also look at more specific examples of age related changes in cognition and language, for instance, number representation, word learning, visual-spatial working memory, explicit long term memory, dyslexia and other developmental disorders.
Goals	Knowledge of: Functional development based on cortical development, mental number line development, mental arithmetic, visuospatial working memory, long-term explicit memory, word spurt, development of reading, bilingualism, early onset schizophrenia.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	cognitive development, language development, brain development, memory, number knowledge, word-learning

Title	Social Emotional Development
Period	2
Code	PSY4036
ECTS credits	4
Organisational unit	Cognitive neuroscience
Coordinator	Harry Smit
Descriptions	Emotions are an essential part of our life. In every generation, humans develop the skills to express the most subtle of emotions and learn to recognise and understand emotions, moods and the thoughts of others. They enter into extremely complex social and emotional interactions with other people. This course will discuss scientific studies about how social emotional life develops. Social emotional development will be studied at four levels. Firstly on the genetic level: students will analyse the role of genes in social emotional development through the study of psychopathologies. Examples include the syndrome of Rett and Williams, autism and psychopathy. Secondly is the level of brain mechanisms (e.g. the role of structures like the amygdala in the development of social cognition). Thirdly is the neuropsychological level: How do cognitive functions (as represented in a theory of mind) and emotional expressions (like blushing) develop and how is their development mediated by brain structures? Lastly, is the level of evolutionary psychology: Why have specific developmental patterns been selected during the course of evolution? Since social emotional development is not only of theoretical interest, the course also deals with practical implications of theories about social emotional development.
Goals	Knowledge of: Theories of development, cause and object of emotion; genetics; laws of Mendel; model of Ledoux; syndrome of Rett and Williams; imitation; mirror neurons; theory of mind, empathy, instrumental helping; altruism; theories of moral development, moral emotions; autism, extreme male brain; temperament; aggression, psychopathy.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	theory of mind, empathy, moral development, autism, aggression, psychopathy

Title	Practical training: Psychological Tests
Period	2
Code	PSY4037
ECTS credits	2
Organisational unit	Cognitive Neuroscience
Coordinator	Hans Stauder
Descriptions	This practical training course is concerned with psychological tests which are used to assess cognitive development and functioning of children at various ages. More specifically, students will learn basic skills for administering and interpreting mental capacity tests for children and will increase their reflection on these skills. For example, students can gain experience in administering the WISC and SON tests and in interpreting child behaviour using Bayley Scales of Infant Development (BSID-II-NL).
Goals	Knowledge of: Administering, interpreting and constructing mental capacity tests.
Instruction language	EN
Prerequisites	
Recommended literature	User's guides of the mental capacity tests, selected papers.
Teaching methods	Assignment(s) Lecture(s) Paper(s) Skills
Assessment methods	Final paper
Key words	Cognitive capacity tests, IQ tests, WISC, SON, BSID.

Cognitive Neuroscience

This teaching programme covers relevant topics of Cognitive Neuroscience (CN) and reflects on the research expertise of the Cognitive Neuroscience Group. Students learn about CN theories and about how to measure and interpret human brain activity, using imaging techniques to observe (fMRI, EEG/MEG) and modulate (TMS) the brain 'at work'.

Cognitive Neuroscience unravels the neural mechanisms that are at work whenever we hear, see, think, talk, attend to others, or move, in other words, the mechanisms underlying human perception, cognition and behaviour.

Title	Auditory and Higher Order Language Processing
Period	1
Code	PSY4051
ECTS credits	4
Organisational unit	Cognitive Neuroscience
Coordinator	Bernadette Jansma
Descriptions	Although the human visual system has been studied extensively in cognitive neuroscience, so far only little is known about the auditory and speech system: How do we segregate the sound of a Ferrari from the background sounds of other running car engines, or the voice of a friend from that of many others in a crowd? How is auditory information integrated with other senses such as vision or touch? In the last few years cognitive neuroscience research has set a number of milestones in our understanding about how our brain manages these tasks. This knowledge is crucial because hearing and communicating with the environment and with others is one of the most essential human cognitive skills. This course aims to develop students' knowledge about the human auditory and speech system. The course starts with basic neural anatomy and considers how this might constrain but also assist auditory processing. Students learn about the basics of speech segregation and perception. Bottom-up and top-down processes are addressed. Finally, the course discusses how the human mind selects relevant auditory, visual and linguistic information in order to communicate.
Goals	Knowledge of: The basic cognitive and neural principles of auditory and speech processing; critical thinking with regard to research in the domain of auditory/speech processing; and employment of event-related potential (ERP) and fMRI studies.
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	auditory processing, language comprehension, language production, cross modal integration

Title	Perception and Attention
Period	1
Code	PSY4052
ECTS credits	4
Organisational unit	Cognitive Neuroscience
Coordinator	Peter De Weerd
Descriptions	<p>The objective of the course is to present the current neuro-cognitive theories and experimental methods in the field of visual perception and attention. This will be achieved via discussion of a set of core papers in this field.</p> <p>Vision is a complex cognitive process which provides us with a richer stream of information than any other sense. The primate visual cortex is composed of at least 30 highly interconnected functionally specialised regions. The regions where visual information first enters the cortex are called early visual areas. Neurons in these areas have relatively simple properties, and their small receptive fields are arranged to form retinotopic maps of the environment on the cortex. Higher level visual processing occurs in a ventral and dorsal stream, each of which is composed of regions specialised for representation of more complex visual content (including motion, faces and places).</p> <p>This network of functionally specialised perceptual regions can adapt to the task that the organism is faced with. This is the case, for example, when looking for someone in a crowd and attending to one face at a time. There are many kinds of attention, but attention can be generally described as involving some type of information selection.</p> <p>In this course, neural mechanisms underlying prototypical examples of low and high level perception will be studied, as well as neural mechanisms underlying selective attention. The course will discuss both historically important papers, as well as more recent research in visual perception and attention, involving different empirical methods including psychophysics, neurophysiology, functional brain imaging and evoked potentials, with an emphasis on neurophysiology.</p>
Goals	<p>Knowledge of: Visual system (structure and function), low-level and high-level visual perception, visual attention, animal models perception and attention, neurophysiology and related methods, neurophysiology/psychophysics data analysis methods.</p>
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	visual system, illusions, perception, attention, neurophysiology, monkey.

1. **PSY4034 EEG and ERP** is gelijk aan de RM module **PSY4221 EEG and ERP** (CN, NE, FN, NP);
2. **PSY4034 EEG and ERP** wordt aangeboden in de Master **CN** en **DP**.

Title	Practical training: EEG and ERP
Period	1
Code	PSY4034
ECTS credits	2
Organisational unit	Cognitive Neuroscience
Coordinator	Fren Smulders
Descriptions	<p>Electroencephalography (EEG) and Event Related Potentials (ERP) offer a combination of precise measurements for the time course of brain processes. These processes are low cost, non-invasive and are widely available. For these reasons they make a unique contribution to Cognitive Neuroscience. Scientific interest in EEG and ERP is growing, and results have been increasingly integrated with other neuro-imaging techniques during the last couple of decades.</p> <p>Lectures and basic literature will be used to introduce students to the basics of EEG and ERP research, EEG and ERP terminology and the possibilities and limitations within EEG and ERP. One topic that students will cover is learning how to set up an experimental paradigm that is suitable for EEG and ERP measurements. Students will also encounter some practical measurement issues, such as electrode placement and types of artefacts. Finally, students will learn the methods of how to interpret the resulting data. Successful measurement requires an understanding of the basics of EEG and ERP signal analysis techniques, such as artefact management, spectral analysis, filtering, ERP averaging, time-frequency analysis etc. Students will also receive hands-on training in smaller groups in running an ERP experiment, this includes electrode application, minimising of artefacts, and health and safety in the lab. A number of simple experimental paradigms will be used that produce interesting and reliable results. Data processing will include a number of common EEG analyses, e.g. analyses in the time and frequency domain.</p>
Goals	<p>Knowledge of:</p> <p>Basic EEG/ERP paradigms, EEG recording systems, measurement settings, electrode application, data quality verification, analogue-digital conversion, basic EEG / ERP components, interpreting topographical plots, neural origins of EEG, time domain analysis, frequency domain analysis, time-frequency analysis, filtering, ocular artefact control, muscle artefact control, choice of reference, re-referencing.</p>
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, handbooks.
Teaching methods	<p>Lecture(s)</p> <p>Paper(s)</p> <p>Skills</p> <p>Training(s)</p> <p>Work in subgroups</p>
Assessment methods	<p>Attendance</p> <p>Final paper</p>
Key words	Electroencephalography (EEG), event-related potentials

	(ERP), electrophysiology, measurement, analysis of brain potentials.
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Title	Neuroimaging: Functional MRI
Period	2
Code	PSY4054
ECTS credits	4
Organisational unit	Cognitive Neuroscience
Coordinator	Elia Formisano
Descriptions	<p>The investigation of human brain functions using a range of imaging methods (such as electro- and magneto-encephalography, Positron Emission Tomography and Magnetic Resonance Imaging) represents the most influential development in Cognitive Neuroscience in the last years. In this course, students will learn about the essential facts of functional Magnetic Resonance Imaging (fMRI). fMRI presents clear advantages over the other methods, particularly in terms of increased spatial resolution. Since its invention in 1992, fMRI has led to major advances in understanding the neural mechanisms that underlie higher levels of human mental activity and has established a strong link between cognitive psychology and neuroscientific research. The other Cognitive Neuroimaging programmes confront student with several applications of fMRI in specific cognitive domains (visual perception and attention, sensorimotor integration, auditory perception). In this course, however, students will gain a deeper knowledge of fundamental and methodological aspects of fMRI.</p> <p>The tasks will address questions such as: How can the fMRI signal be related to neural activity? How are functional images obtained with an MRI scanner? What do I need for performing a good fMRI measurement? How are “activation maps” created? Some of the tasks are directly linked to a practical part of the course and are intended to provide the necessary theoretical framework for the design, analysis, measurement and interpretation of results in fMRI investigations. Practical sessions on acquisition and analysis of fMRI data of cognitive functions such as auditory and visual processing will be integrated in to the group meetings.</p>
Goals	<p>Knowledge of: Nuclear Magnetic Resonance, Magnetic Resonance Imaging, functional MRI, physical basis (f)MRI, neurophysiologic basis fMRI, neuronal firing, local field potentials, blood oxygenation level dependent contrast, fMRI design, blocked designs, event related designs, fMRI analysis, motion correction, spatial and temporal filtering, univariate statistics, general linear models, single-subject statistics, multi-subject statistics, correction for multiple comparisons, false discovery rate, brain comparison and normalisation, Talairach transformation.</p>
Instruction language	EN
Prerequisites	
Recommended literature	<p>Huettel, S.A., Song, A.W., & McCarthy, G. (2009). Functional Magnetic Resonance Imaging. (2nd ed.). Sunderland, MA: Sinauer, Associates, Inc. Publishers;</p> <p>Jezzard, P., Matthews, P.M., & Smith, S.S. (2001). Functional MRI: An introduction to methods. Oxford, UK: Oxford</p>

	University Press; Journal articles, book chapters.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	functional neuroimaging, Magnetic Resonance Imaging, experimental design, analysis methods.

Title	The Cognitive Neuroscience of Sensory and Motor Systems
Period	2
Code	PSY4055
ECTS credits	4
Organisational unit	Cognitive Neuroscience
Coordinator	Joel Reithler, Amanda Kaas
Descriptions	<p>Every day activities such as riding a bicycle, typing a summary and drinking a cup of coffee require the continuous interaction of brain systems that serve sensory perception and systems that control the body's muscles. In other words, most of the things people do require sensorimotor integration. In this course, several important aspects of sensorimotor integration in the brain will be studied, particularly in the context of visual perception. Since sensory perception (visual as well as auditory) is covered extensively in other courses, the main focus here will be on the motor system and in the transformation and processing of sensory information for motor control. Initially, basic processes are covered, such as types of motor control (since visual perception takes time, how should individuals use past information to control future actions?), the representations used by primary and secondary motor areas (which parameter is under ultimate control: muscle contractions, joint angles or whole movements?) and coordinate transformations (how to get from incoming visual information, coded with respect to our current eye position, to motor commands, coded with respect to our current body posture). Later in the course, the focus will shift to higher level issues such as motor learning, action selection and decision making, and predicting the actions of others. All topics will be discussed in the context of cognitive neuroscience research so that students learn how these topics can be investigated both with classical behavioural experiments and with modern techniques such as functional Magnetic Resonance Imaging.</p>
Goals	<p>Knowledge of: Processing involved in sensorimotor coordination, neural mechanisms behind sensorimotor integration, brain anatomy of action representations, neuro-behavioural correlates of motor learning, relevant research methods.</p>
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	sensorimotor coordination, reference frames, coordinate transformations, mirror neuron system

*Is tekstueel gelijk aan RM module PSY4227. Echter, 1 klein verschil:
in Master is dit een practical training; in de RM een skills training*

Title	Practical training: fMRI
Period	2
Code	PSY4056
ECTS credits	2
Organisational unit	Cognitive Neuroscience
Coordinator	Elia Formisano
Descriptions	<p>The primary goal of this course is to provide hands-on experience in experimental design, acquisition and analysis of fMRI experiments. In the first tutorial, each student group will separately formulate an experimental question/hypothesis to be tested with fMRI and will select an appropriate experimental design. In a subsequent meeting, each group will give an oral presentation to the other groups. The proposal will comprise of an fMRI study. All studies are to be discussed and evaluated; at the end of the meeting one study is selected.</p> <p>In the group meetings and independent study, all students are involved in implementing the experimental set-up required for performing the selected study (e.g. selection and preparation of stimuli, implementation of the design) and participating in the fMRI measurements. During the latter course meetings, all students must perform the statistical analysis of the datasets. Assistance and prior preparation, especially in the implementation stage (stimulus programming) and data analysis stage (preparation of data in usable format for analysis in Brain Voyager QX), is provided by the tutors. Finally, students describe and discuss their findings in an individually written report.</p>
Goals	<p>Knowledge of: Experimental design, hypothesis formulation, operationalisation, fMRI blocked designs, fMRI event related designs, parameters for MRI scanning, MR safety and procedures, fMRI measurements, pre-processing fMRI data, statistical analysis fMRI data, results interpretation.</p>
Instruction language	EN
Prerequisites	
Recommended literature	<p>Huettel, S.A., Song, A.W., & McCarthy, G. (2009). Functional Magnetic Resonance Imaging. (2nd ed.). Sunderland, MA: Sinauer, Associates, Inc.;</p> <p>Jezzard, P., Matthews, P.M., & Smith, S.S. (2001). Functional MRI: An introduction to methods. Oxford, UK: Oxford; University Press; Journal articles, book chapters.</p>
Teaching methods	<p>Lecture(s) Presentation(s) Research Skills Work in subgroups Working visit(s)</p>
Assessment methods	<p>Attendance Final paper</p>

Key words	functional MRI, experimental design, fMRI data acquisition, fMRI data analysis
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Neuropsychology

The Neuropsychology specialisation focuses on understanding cognitive and emotional-affective behaviour starting from the perspective of brain structure and function. This focus on brain x's behavioural interactions is carried out on a continuum ranging from normal behaviour to disturbed or pathological psychiatric dysfunctions in children, adolescents and adults. The programme provides sound theoretical knowledge and insight in to Neuropsychology and helps students acquire the methodological skills and practical experience that are essential for either a clinical or research career in the broad domain of Neuropsychology.

Title	Brain Damage
Period	1
Code	PSY4061
ECTS credits	4
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Martin van Boxtel
Descriptions	Students are introduced to the fields of Behavioural Neurology and Neuropsychology via questions such as: What do the effects of pathological conditions on brain structure and/or 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 certain behaviours that form 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 forms an essential basis for an understanding of the principles of neuropsychological rehabilitation, which can be used to support or even improve residual function after brain damage and can ameliorate the life quality of neurological patients.
Goals	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 neuropsychology, neuropsychological assessment, cognitive rehabilitation.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Lecture(s) PBL Skills
Assessment methods	Attendance Written exam
Key words	neuropsychology, history of neuropsychology, brain disease, neuroanatomy, neurology, neuropsychological assessment, rehabilitation, brain plasticity

Is gelijk aan RM module PSY4408.

Title	Behavioural Disorders
Period	1
Code	PSY4062
ECTS credits	4
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Kim Kuypers
Descriptions	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.
Goals	Knowledge of: Neuropsychological assessment and- intervention, psychological mechanism, neurobiology, functional neuroanatomy, imaging, psychopharmacology, epidemiology, developmental-, psychiatric- and neurological disorders, neuropsychiatric syndromes.
Instruction language	EN
Prerequisites	
Recommended literature	Research and review articles, case studies, book chapters.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	behavioural disorders, development, neuropsychiatry, acquired brain injury, neuropsychology, intervention, psychopharmacology

Is tekstueel gelijk aan Research master module PSY4433. Echter, één klein verschil: in de Master is dit een practical training; in de RM een skills training.

Title	Practical training: Neuropsychological Assessment
Period	1
Code	PSY4063
ECTS credits	2
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Sven Stapert
Descriptions	<p>The Neuropsychological Assessment training runs in parallel to the Brain Damage and Behavioural Disorders course. The core elements of this practical skills training involves the clinical data gathering process. This provides the cognitive, emotional and behavioural data which can be interpreted in order to support neurological or neuropsychiatric diagnosis. The skills training commences with an introductory lecture which covers both the principles and methods of interpretation of neuropsychological assessment.</p> <p>During a 7-week 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.</p>
Goals	<p>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.</p>
Instruction language	EN
Prerequisites	introductory knowledge on psychodiagnostics and related psychometrics
Recommended literature	<p>Lezak. M.D. , Howieson, M.D., Bigler, E.D., & Tranel, D. (2012). Neuropsychological assessment. New York: Oxford University Press;</p> <p>R.D. Vanderploeg (2000). Clinician's Guide to Neuropsychological assessment. New Jersey: Lawrence Erlbaum Associates.</p>
Teaching methods	<p>Assignment(s) Lecture(s) Paper(s) Patient contact Skills Training(s) Work in subgroups</p>
Assessment methods	<p>Attendance Final paper Participation</p>
Key words	neuropsychological assessment, cognitive disorders, brain disease, brain injury, test taking, interviewing, observations, psychometry

Title	Arousal and Attention
Period	2
Code	PSY4064
ECTS credits	4
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Annemiek Vermeeren
Descriptions	This course familiarises 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.
Goals	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.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	arousal, alertness, attention networks, brainstem arousal systems, sleep-wake regulation

Title	Ageing
Period	2
Code	PSY4067
ECTS credits	4
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Arjan Blokland
Descriptions	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.
Goals	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.
Instruction language	EN
Prerequisites	
Recommended literature	E-reader.
Teaching methods	Lecture(s) PBL
Assessment methods	Attendance Written exam
Key words	cognitive, neural, and physical ageing, dementias

Is tekstueel gelijk aan RM module PSY4434. Echter, 2 kleine verschillen:

1. in Master is dit een practical training; in de RM een skills training;
2. in Master 2 ECTS credits; in de RM 3 ECTS credits.

Title	Practical training: Basic Cognitive Psychological Skills
Period	2
Code	PSY4066
ECTS credits	2
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Eric Vuurman
Descriptions	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 learn how to interpret the results. Students conclude the course by writing a paper in APA format describing the experiment. 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.
Goals	Knowledge of: Psychological testing, data preparation, data analysis, report writing.
Instruction language	EN
Prerequisites	
Recommended literature	Field, A. (2009). Discovering statistics using SPSS (3 rd ed.). London: Sage.
Teaching methods	Assignment(s) Lecture(s) PBL
Assessment methods	Attendance Final paper
Key words	field experiment, applied behavioural testing, data reduction and analysis techniques, report writing

Internships

Universeel voor vrijwel alle Master specialisaties. **Uitzondering hierop is: WOP.**

Title	Research Proposal, Research Internship and Master's Thesis
Period	3-6
Code	PSY4092, PSY4090, and PSY4091
ECTS credits	40 (5, 25, and 10, respectively). The total research internship will be assigned 40 credits: 30 credits for the research activities, including the research proposal (5 credits; graded pass/fail) and the practical execution of the internship (25 credits; graded assessment), and 10 credits (graded assessment) for the master's thesis.
Organisational unit	Clinical Psychological Science
Coordinator	Sandra Mulkens
Descriptions	<p>The second part of the one-year master's programme (from period 3 onwards) is devoted to arranging and conducting a research internship. Students explore a research issue within their specialisation. As a result of the many international research contacts that faculty members have established, a number of students conduct their research internship abroad. Students commence their internship with the writing of a research proposal. Students complete the master's programme by writing a thesis based on their internship.</p> <p>The internship can be undertaken at Maastricht University, at external research institutes or at other practically oriented institutions. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors is a (senior) researcher at the Faculty of Psychology and Neuroscience (FPN). The other assessor might be a (senior) researcher at, for example, the institute where the student collected their data.</p> <p>Information about research internships offered by faculty members can be found on EleUM > FPN Master Students > internships/stages. This site also provides a detailed guide with practical information about the criteria for the research internship and the master's thesis.</p> <p>Each track has its own Internships Coordinator:</p> <p><i>Psychology and Law:</i> Kim van Oorsouw, Phone (043) 38 84050, 40 Universiteitssingel East, Room 3.767, Email: k.vanoorsouw@maastrichtuniversity.nl</p> <p><i>Health and Social Psychology:</i> Sandra Mulkens, Phone (043) 38 84052, 40 Universiteitssingel East, Room 3.755, Email: s.mulkens@maastrichtuniversity.nl</p> <p><i>Work and Social Psychology:</i> Robert van Doorn, Phone (043) 38 81926, 40 Universiteitssingel East, Room 4.731, Email: r.vandoorn@maastrichtuniversity.nl</p> <p><i>Developmental Psychology:</i> Hans Stauder, Phone (043) 38 81933, 55 Oxfordlaan, Room 2.009, Email: h.stauder@maastrichtuniversity.nl</p>

	<p><i>Cognitive Neuroscience</i>: Amanda Kaas, Phone (043) 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl</p> <p><i>Neuropsychology</i>: Caroline van Heugten, Phone (043) 38 84 213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl</p> <p>As mentioned above, research internships can also be undertaken abroad. For possible internships abroad, please contact the Research Internship Coordinator (see below).</p> <p>For practical information about international research internships (e.g. scholarship, visa), please contact the International Relations Office (IRO), Phone (043) 38 81920, 40 Universiteitssingel East, Room 1.768, Email: international-fpn@maastrichtuniversity.nl</p>
Goals	Knowledge of: Conducting a supervised empirical research project and summarising their research in the form of a master's thesis.
Instruction language	EN
Prerequisites	At least 2 of the 4 compulsory theoretical courses of the Master's track must be completed.
Recommended literature	
Teaching methods	Assignment(s) Paper(s) Patient contact Research Skills Working visit(s)
Assessment methods	Attendance Final paper Observation Participation
Key words	internship, research, master's thesis

Speciaal voor NP studenten, nieuwe optie, deel I en II:

De nominale plannen voor PSY4090, 4091 en 4092 blijven bestaan voor de studenten die de *research option* kiezen. Er zijn per 2012-2013 6 nieuwe PSY nummers bijgekomen voor de studenten die de *clinical option* gaan kiezen.

Article 2.2 Composition

The Neuropsychology track consists of the following theoretical parts (including the tutorial groups and practical training meetings) and the accompanying credits:

The course Brain Damage	4 credits
The course Behavioural Disorders	4 credits
The course Arousal and Attention	4 credits
The course Ageing	4 credits

Practical period 1	2 credits
Practical period 2	2 credits

Supervision of clinical skills 2 credits (only required for option 2, see below)

The track includes two variants of compulsory internships. The student chooses one of these 2 options:

1. Research variant including a research proposal (5 Ects), a research internship (25 Ects) and a master's thesis (10 Ects).
2. Clinical variant including a clinical-research proposal (2 Ects) and related clinical-research internship (12 Ects), a master's thesis (7 Ects), a clinical internship (14 Ects) and a clinical activities report (3 Ects). The clinical-research-part should be integrated and conducted in the clinical-internship part.

Deel I

Title	Research Proposal, Research Internship and Master's Thesis (Master NP clinical option)
Period	3-6
Code	PSY4080, PSY4081 and PSY4082
ECTS credits	21 (2, 12, 7 respectively)
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Caroline van Heugten
Descriptions	<p>The second part of the one-year master's programme (from period 3 onwards), is devoted to arranging and conducting a research internship and a clinical internship for students choosing the clinical option.</p> <p>For the research internship students explore a research issue within their specialisation. Students choosing the clinical option of the Master's degree in Neuropsychology will conduct their research internship in relation to a clinical topic. Students commence their internship with the writing of a research proposal. Students complete the master's programme by writing a thesis on research undertaken during their internship.</p> <p>The internship can be undertaken at the institute where the clinical internship is carried out or at Maastricht University. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors is a (senior) researcher at the Faculty of Psychology and Neuroscience (FPN). The other assessor might be a (senior) researcher at, for example, the institute where the student collected their data.</p> <p>Information about research internships offered by external</p>

	institutes or faculty members can be found on EleUM > Students Faculty of Psychology and Neuroscience > internships. This site also provides a detailed guide with practical information about the criteria for the research internship and the master's thesis.
Goals	Knowledge of: Conducting a supervised empirical research project and summarising the research results in the form of a master's thesis.
Instruction language	EN
Prerequisites	At least 2 of the 4 compulsory theoretical courses of the Master's track must be completed.
Recommended literature	
Teaching methods	Assignment(s) Paper(s) Patient contact Research Skills Working visit(s)
Assessment methods	Attendance Final paper Observation Participation
Key words	internship, research, master's thesis

Deel II:

Title	Clinical Internship, Supervision and Clinical Activities Report (Master NP clinical option)
Period	From period 2 onwards
Code	PSY4083, PSY4084 and PSY4085
ECTS credits	19 (14, 2, 3 respectively)
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Caroline van Heugten
Descriptions	<p>The second part of the one-year master's programme (from period 2 onwards) is devoted to arranging and conducting a research internship and a clinical Internship for students choosing the clinical option.</p> <p>For the clinical internship students conduct a 13-week fulltime clinical internship in an approved setting. The clinical internship can be conducted in conjunction with the research internship or separately. The aim of the clinical internship is to provide an introduction to the organisation and practice of health care, as well as basic experience in clinical diagnosis and therapeutic interventions. Students conducting a clinical internship are required to receive supervision at Maastricht University and write a clinical activities report as a result of the internship.</p> <p>A detailed guide on clinical internships can be found on EleUM > Students Master Faculty of Psychology and Neuroscience. Although not required to do so by the master's programme, students who wish to meet Dutch requirements for admission to advanced clinical training programmes are advised to fulfil the admission criteria for the GZ-opleiding.</p>
Goals	<p>Knowledge of: The work environment of the clinical psychologist. This internship gives students the opportunity to practice clinical skills in a real-life setting.</p>
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	<p>Assignment(s) Paper(s) Patient contact Skills Training(s) Working visit(s)</p>
Assessment methods	<p>Attendance Final paper Observation Participation</p>
Key words	clinical research, clinical practice, clinical training, psychodiagnostics, patient contact.

Title	Psychodiagnostics Registration
Period	6
Code	PSY4925
ECTS credits	-
Organisational unit	Neuropsychology and Psychopharmacology
Coordinator	Petra Hurks, Sven Stapert
Descriptions	<p>The success of a treatment or decision depends on the correct identification of the problematic situation: the diagnosis. Psychodiagnostics is the branch of psychology that uses psychological assessments to evaluate individual's responses to problematic situations. These assessments are used in judgment and decision processes that have important consequences. Such examples include: personnel selection processes; neurological evaluations and educational career decisions.</p> <p>To promote the quality of the psychodiagnostics profession, the Dutch Institute of Psychologists (NIP) has introduced a register for psychodiagnostics (i.e., the BAPD). To register students are required to master the fundamental knowledge and skills that are rooted in accepted psychodiagnostic principles. The registration is awarded by the NIP. The student receives a NIP certificate with their master's diploma. The name of the graduate is also incorporated in a public register that is managed by the NIP. Additional information about NIP registration and regulations can be found at: www.psynip.nl Or on EleUM in the 'Community' tab under 'Internships'.</p>
Goals	<p>Knowledge of: The registration is intended for students who aim for a career in a clinically oriented discipline of psychology or who plan to attend the Dutch postgraduate training programme for health care psychology (GZ-psychology).</p>
Instruction language	NL
Prerequisites	<p>The registration can be obtained for the FPN specialisations <i>Developmental Psychology, Neuropsychology, Health and Social Psychology, Psychology and Law and Work and Organisational Psychology</i>. Registration is on the condition that students have completed a practical internship and have composed three case reports. Students who graduate in one of the above mentioned master's specialisations and have a FPN Bachelor's Degree in Psychology - including the compulsory theoretical courses defined by the NIP (e.g., the course Psychodiagnostics) - will obtain the registration upon graduation. Students who graduate in one of the above specialisations and fulfil the requirements of the training period, but who hold a Bachelor's Degree in (I) Psychology issued by another university or (II) any other field can potentially only obtain the registration through the NIP. This latter mentioned group of students should contact the FPN Board of Examiners in a timely manner, to discuss the alternatives.</p>
Recommended literature	
Teaching methods	<p>Patient contact Skills Training(s)</p>

Assessment methods	Final paper Observation Participation
Key words	psychodiagnostics, clinical test use, health care psychologist