Overview RM in Psychopathology (PP)

Period	Research Master's in Psychopathology (PP) Year 1 (2013-2014)
Period 0, 02-09-2013 - 06-09-2013	Introduction week PSY 4950 PBL training for non-UM students*
Period 1, 09-09-2013 - 25-10-2013	**Core course: ** ** **PSY4511** Anxiety Disorders (4 credits): Arnoud Arntz **PSY4512** Mood Disorders (total of 4 credits): Frenk Peeters **PSY4106** Advanced Statistics I (total of 3 credits): Nick Broers *Practical training:* PSY4119 SPSS and Lisrel: Nick Broers
	Workshop: PSY4110 Scientific Writing (1 credit): Alice Wellum
	Skills training: **PSY4531** Research Practicum Psychometrics (total of 2 credits): Jeffrey Roelofs **PSY4532** Clinical Skills I: Interviewing Skills (2 credits): Inge Drost **PSY4534** Clinical Assessment Instruments (total of 2 credits): Nancy Nicolson
Period 2, 28-10-2013 - 20-12-2013	**Core course:** **PSY4512** Mood Disorders: Frenk Peeters **PSY4513** Stress and Trauma (4 credits): Nancy Nicolson **PSY4106** Advanced Statistics I: Nick Broers *Practical training:* PSY4119 SPSS and Lisrel: Nick Broers
	Skills training: **PSY4531** Research Practicum Psychometrics: Jeffrey Roelofs **PSY4533** Clinical Skills II: Diagnostic Test Procedures (2 credits): Petra Hurks, Dymphie in de Braek **PSY4534** Clinical Assessment Instruments: Nancy Nicolson
Christmas break	
Period 3, 06-01-2014 - 31-01-2014	**Core course:** **PSY4521** Bodily Distress Disorders (4 credits): Johan Vlaeyen **PSY4106** Advanced Statistics I (total of 3 credits): Nick Broers *Practical training:* PSY4119 SPSS and Lisrel: Nick Broers **PSY4107** Advanced Statistics II (total of 3 credits): Gerard van Breukelen *Practical training:* PSY4117 SPSS: Gerard van Breukelen
	Skills training: **PSY4108** Neuroanatomy (1 credit): Jos Prickaerts **PSY4534** Clinical Assessment Instruments: Nancy Nicolson
	PSY4100 Colloquia **(Total of 1 credit):** Milene Bonte, Arno Riedl, Jos Prickaerts, Rob Markus, Nancy Nicolson
Period 4, 03-02-2014 t/m 04-04-2014	**Core course:** **PSY4514** Developmental Psychopathology (4 credits): Peter Muris **PSY4519** Eating Disorders (4 credits): Anita Jansen **PSY4107** Advanced Statistics II: Gerard van Breukelen *Practical training:* PSY4117 SPSS: Gerard van Breukelen
	Skills training: **PSY4422** Psychophysiological Skills (1 credit) **PSY4534** Clinical Assessment Instruments: Nancy Nicolson

	PSY4100 Colloquia: Milene Bonte, Arno Riedl, Jos Prickaerts, Rob Markus, Nancy Nicolson
Period 5, 07-04-2014 t/m 06-06-2014	**Core course:** **PSY4516** Psychosis (4 credits): Jim van Os PSY4520 Mental Health and Happiness (total of 3 credits): Madelon Peters **PSY4107** Advanced Statistics II: Gerard van Breukelen *Practical training:* PSY4117 SPSS: Gerard van Breukelen
	Workshop: **PSY4335** Psychopharmacology (1 credit) **PSY4372** Functional Brain Imaging (2 credits)
	Skills training: **PSY4534** Clinical Assessment Instruments: Nancy Nicolson
	PSY4100 Colloquia: Milene Bonte, Arno Riedl, Jos Prickaerts, Rob Markus, Nancy Nicolson
Period 6, 10-06-2014 t/m 04-07-2014	**Core course:** PSY4520 Mental Health and Happiness: Madelon Peters
	Workshop: **PSY4542** The Application of Cognitive Methods in Psychopathology Research (1 credit): Katrijn Houben **PSY4112** Research Grant Writing Workshop (1 credit): Eef Theunissen **PSY4371** Psychiatric Epidemiology (1 credit): Wolfgang Viechtbauer
	Skills training: **PSY4534** Clinical Assessment Instruments: Nancy Nicolson
	PSY4100 Colloquia: Milene Bonte, Arno Riedl, Jos Prickaerts, Rob Markus, Nancy Nicolson

*Students from Erasmus Rotterdam receive an exemption for PBL training
** Electives: 5 credits, throughout year 1: Vincent van de Ven

Period	Research Master's in Psychopathology (PP) Year 2 (2014-2015)
Period 1, To be announced in 2013	**Core course:** **PSY5112** Research Grant Writing Course (3 credits): Eef Theunissen **PSY5511** Personality Disorders (4 credits): David Bernstein
	Skills training: **PSY5531** Clinical Skills III: Clinical Interview for the DSM IV (SCIDI and SCID II) (1 credit): Reinier Kreutzkamp PSY5523 Clinical Skills IV: Intervention Techniques (2 credit): Marisol Voncken
32 weeks	PSY5107 Research Proposal, PSY5102 Research Internship & PSY5103 Master's Thesis (30 credits): Sandra Mulkens
	PSY5108 Research Proposal, PSY5104 Clinical Internship & PSY5105 Minor's Thesis (20 credits): Sandra Mulkens

Colloquia

Colloquia will be offered in all RM specialisations.

Title	Colloquia
Period	3-6
Code	PSY4100
ECTS credits	1
Organisational unit	Cognitive Neuroscience (FPN), Department of Economics (SBE), Psychiatry and Neuropsychology (FHML), Neuropsychology and Psychopharmacology (FPN)
Coordinator	Milene Bonte, Arno Riedl, Jos Prickaerts, Rob Markus, Nancy Nicolson
Descriptions	Colloquia are presented per specialisation (CN, NE, FN, NP and PP) by senior researchers from the UM faculties or visiting guest lecturers. Each colloquium focuses in depth on one of a wide range of topics, with issues transcending the courses and specialisations. Each colloquium lecture will be followed by active discussion, prepared and chaired by the lecturer (the UM host may fill this role for guest lecturers). A total of nine colloquia will be offered during the first year.
Goals	Knowledge of: Key research domains from different specialisations, interdisciplinary research, interacting with students from different specialisations.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Lecture(s)
Assessment methods	Attendance
Key words	interdisciplinary knowledge

Title	**Anxiety Disorders**
Period	1
Code	PSY4511
ECTS credits	4
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Arnoud Arntz
Descriptions	This course covers the main findings and controversies related to anxiety disorders. Although treatment issues are dealt with, the emphasis of the course is on biological and psychological mechanisms that are involved in the origin and maintenance of the various anxiety disorders. In industrialised countries (USA, Canada and Western Europe), anxiety disorders are the largest group of mental disorders for which patients are referred, and without appropriate treatment the natural course is often chronic. Luckily, anxiety disorders are relatively well studied and understood, and the outcome of treatment is relatively favourable. Students will first learn what the features of normal and pathological anxiety are. A special emphasis will be placed on brain processes and the role of conscious and non-conscious processes in fear responses. As regards the aetiology of anxiety disorders, the focus will be on the role of social (life events), biological, conditioning and information processing factors. With regard to the maintenance of the disorders, the course concentrates first of all on anxiety-related aberrations in the processing of negatively valenced information. Such selective processing is studied as it relates to perception, attention, memory, reasoning and interpretation. Furthermore, students study the maintaining role of 'safety behaviours', which are attempts to prevent a feared catastrophe, with the ironic effect that anxiety is reinforced. As to biological factors, the role of the various neurotransmitters in anxiety disorders is highlighted. Students learn various experimental (laboratory) paradigms that are typically employed in the study of the cognitive psychology/biological psychology of anxiety disorders: carbon dioxide inhalation, dot-probe methodology, various tests to measure interpretation biases, etc. Lastly, biological and psychological treatments and the underlying mechanisms of change will be covered.
Goals	Knowledge of: Current theories of anxiety disorders, normal-abnormal anxiety distinction, controversies about anxiety (disorders), classification of anxiety disorders, etiology of anxiety disorders, maintenance processes of anxiety disorders, current treatment approaches.
Instruction language	EN
Prerequisites	
Recommended literature	Barlow, D.H. (2002). Anxiety and its Disorders (2nd ed.), New York & London: The Guilford Press; Journal articles, provided or suggested during the course.
Teaching methods	Lecture(s) Presentation(s) Work in subgroups
Assessment methods	Attendance

	Final paper Written exam
Key words	anxiety, anxiety disorders, phobia, obsessive compulsive disorder, posttraumatic stress disorder

Title	Mood Disorders
Period	1, 2
Code	PSY4512
ECTS credits	4
Organisational unit	Psychiatry and Neuropsychology (FHML)
Coordinator	Frenk Peeters
Descriptions	This course is intended to give the student an overview of current concepts and research in the field of mood disorders. During the course, fundamental aspects of onset and course of the most important mood disorders (major depression, bipolar disorder and dysthymia) will be addressed. Over the last couple of decades, it has become increasingly clear that mood disorders are chronic psychiatric disorders characterised by acute episodes, relapses, recurrences and residual symptomatology. Both onset and course of mood disorders are the result of complex interactions between distal (e.g. genetic and developmental) and proximal (e.g. severe life-events) risk factors. This is illustrated by discussion of mood disorders across the life span in the light of biological, psychological and social approaches. Current research strategies aimed at clarifying the role of these different aspects will be the central theme throughout the course. Based on this framework, state-of-the-art treatments for mood disorders are addressed and illustrated where possible.
Goals	Knowledge of: Epidemiology, etiology of mood disorders, course, treatment, major depression, bipolar disorder, dysthymia, diagnostic issues, kindling, scar, personality, genes, environment, gene-environment interaction, efficacy, effectiveness, cognitive behavioural therapy, interpersonal therapy, electroconvulsive therapy, gender, life stressors.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Assignment(s) Lecture(s) Presentation(s) Work in subgroups
Assessment methods	Attendance Presentation Final paper
Key words	epidemiology, aetiology, course, treatment, major depression, bipolar disorder, dysthymia

Title	**Stress and Trauma**
Period	2
Code	PSY4513
ECTS credits	4
Organisational unit	Psychiatry and Psychology (FHML)
Coordinator	Nancy Nicolson
Descriptions	This course is designed to give students an in-depth overview of key concepts and controversies in current stress research, with an emphasis on the role stress is thought to play in the aetiology, pathophysiology and course of psychiatric disorders over the lifespan. The first half of the course will focus on the interrelationship of biological and psychological processes in healthy adaptation as well as in psychopathology. In the second half, this detailed knowledge about how individuals respond to and cope with various forms of stress will be applied in order to understand aspects of posttraumatic stress disorder (PTSD): epidemiology, risk and protective factors, prevention, and evidence-based treatment options. Throughout the course, attention will be paid to how current theories about stress and trauma can be translated into testable hypotheses and feasible research designs. In addition, the generalisability and clinical relevance of findings from experimental stress exposure paradigms and studies in animal models will be considered.
Goals	Knowledge of: Conceptualisation and measurement of stress, appraisal and coping processes, sympathetic-adrenal medullary system, hypothalamic-pituitary-adrenal axis, experimental stress paradigms, long-term effects of prenatal stress and childhood adversity, gene-environment interactions, environmental sensitivity, epidemiology of trauma exposure, risk and protective factors, social support, resilience, diagnostic criteria, acute stress disorder, posttraumatic stress disorder, cognitive mechanisms, biological mechanisms, prevention, clinical trials, treatment approaches (rationale and efficacy), barriers to translating research into clinical practice, writing a research proposal and a peer review, giving a brief empirical presentation.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters, online sources.
Teaching methods	Assignment(s) Lecture(s) Paper(s) Presentation(s) Work in subgroups
Assessment methods	Attendance Final paper Presentation
Key words	stress, childhood adversity, life events, psychoneuroendocrinology, posttraumatic stress disorder

Title	Bodily Distress Disorders
Period	3
Code	PSY4521
ECTS credits	4
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Johan Vlaeyen
Descriptions	Why do a relatively large number of individuals complain about longstanding bodily complaints, and continue to seek medical care despite the absence of a medical cause of their complaints? This course focuses on the mental representations of bodily symptoms, and their effects on observable behaviours, which can be quite disabling. Interestingly, a shift in scientific focus has occurred in the last decade from stable individual traits towards more dynamic transdiagnostic psychological processes. The emphasis of this course is on the cognitive and behavioural mechanisms (e.g. conditioning, reasoning, attention, avoidance) that play a role in the aetiology and maintenance of chronic pain, shortness of breath (dyspnea), ringing in the ears, and fear of serious illnesses. Evidence-based cognitive-behavioural interventions are discussed. Because of its prototypical character, the problem of chronic pain and pain disorder will be the main focus of this course. The course starts with three introductory sessions during which a modern approach of somatoform disorders is presented, In each of the four subsequent 'meet-the-expert' sessions, a lecturer specialised in a particular somatoform disorder from a collaborating university lab is invited, and students will be given the opportunity to actively interact with the experts. If possible, a visit to one of the experts' labs will be organised. Usually, this is the lab of the research group Health Psychology at the University of Leuven (Belgium). The course ends with an interactive mini-symposium during which students present their research paper.
Goals	Knowledge of: Theoretical approaches of symptom perception and body appearance concerns, catastrophic (mis)interpretations of bodily symptoms, congenital insensitivity to pain, gate-control theory of pain, sensory-discriminative and affective dimension of interception, neural correlates of pain, pain matrix, descending modulation, theories of health anxiety, fear-avoidance model of pain, interoceptive conditioning, safety behaviours, attentional processes, stress, coping and acceptance, communal coping model, self-consciousness, self-discrepancies, air hunger, differences and communalities between pain and dyspnea, experimental pain and dyspnea induction methods, cognitive-behavioural treatment for somatoform disorders, exposure.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Lecture(s) PBL Presentation(s) Work in subgroups

	Working visit(s)
Assessment methods	Attendance Final paper Presentation
Key words	bodily complaints, chronic pain, dyspnea, tinnitus, health anxiety

Title	**Developmental psychopathology**
Period	4
Code	PSY4514
ECTS credits	4
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Peter Muris
Descriptions	The aim of this course is to introduce students to the field of developmental psychopathology, an interdisciplinary field that employs the framework of normal development to understand psychopathology as it unfolds throughout the natural lifespan. Developmental psychopathology integrates research findings from developmental and clinical psychology, behavioural genetics, neuropsychology and psychiatry into models that explain how psychopathology develops. The focus of this seminar will be to examine child psychopathology through the lens of developmental psychopathology. The sessions will cover broad conceptual and methodological issues in developmental psychopathology research, as well as genetic, environmental influences and family factors in the development of psychopathology. Additional sessions will address current theory and research in specific types of childhood psychopathology, such as anxiety, depression, conduct disorders and autism. In each of these sessions findings from developmental research will be integrated with clinical studies.
Goals	Knowledge of: Child psychopathology, oppositional-defiant disorder, conduct disorder, antisocial personality disorder, primum non nocere, bullying, KOPP-kinderen, parental rearing, Munchhausen by proxy, mental retardation, assessment, Tourette's syndrome, autism, Pica, rumination disorder, conversion disorder, childhood schizophrenia.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles.
Teaching methods	Assignment(s) Lecture(s) Work in subgroups
Assessment methods	Attendance Portfolio
Key words	developmental psychopathology, child and adolescent disorders, etiology, treatment

Title	Eating Disorders
Period	4
Code	PSY4519
ECTS credits	4
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Anita Jansen
Descriptions	Eating disorders are among the most prevalent disorders in adolescent and young adult females. Their exact aetiologies are largely unknown, although it has become evident that a range of factors influences an individual's vulnerability to eating disorders (ranging from genetic to environmental factors, like low self-esteem, dieting, body image bias, reward sensitivity and impulsivity). An initial aim of the course is to discuss influential state-of-the art theories and empirical papers about the origin or maintenance of eating disorders. The question of whether obesity is an eating disorder or not is also discussed. Secondly, special attention will be paid to experimental psychopathology research methods for testing hypotheses on the origin, maintenance and reduction of these disorders. Thirdly, the gap with clinical practice is scrutinised. What is the best treatment a patient can get? And why is it so difficult to implement the evidence-based treatments in clinical practice?
Goals	Knowledge of: 1.Clinical pictures and diagnostic criteria of eating disorders and obesity, relation between dieting and overeating, beauty ideal and eating disorders, body image bias, conditioned craving and overeating, effective treatments for eating disorders, cognitive behaviour therapy; 2. a training in writing short popular scientific articles, reviewing popular science, and working through the process of revision and submission of revised work to an editor of a journal; 3. working out a cognitive formulation and intervention for a patient with an eating disorder.
Instruction language	EN
Prerequisites	
Recommended literature	There is no recommended literature. To stimulate discussion and skills the student searches for and studies articles of interest, related to the theme under discussion.
Teaching methods	Assignment(s) Lecture(s) Paper(s) PBL
Assessment methods	Attendance Final paper
Key words	eating disorders, obesity, body image, dieting

Title	Psychosis
Period	5
Code	PSY4516
ECTS credits	4
Organisational unit	Psychiatry and Psychology (FHML)
Coordinator	Jim van Os
Descriptions	The course aims to provide the student with an overview of current thinking and unresolved issues in psychosis research. The process of psychotic disorder and psychosis transition has been the subject of intense study in the last decade. Early epidemiological approaches have been complemented with studies of cognitive mechanisms, psychopathology, neuroimaging and, finally, treatment trials. There is now evidence to suggest that the onset of psychotic disorder is the endpoint of a process of interactive aetiological forces that involve genetic background factors associated with low-grade, non-clinical expression of psychosis in the general population, environmental stressors such as cannabis use and childhood trauma and a number of cognitive vulnerabilities in the realm of neuropsychology and social cognition. In addition, it has become increasingly clear that the process of onset of psychosis is associated with neurocognitive changes and progressive sensitisation to dopaminergic stimulation, greater quantities of which may predict subsequent brain changes and poorer outcomes.
Goals	Knowledge of: A better understanding of psychosis, in particular its overlap with normal mentation; its ontogeny; diagnostic conundrums; linking brain and mind; linking genes and experience; and how to help patients.
Instruction language	EN
Prerequisites	
Recommended literature	van Os, J., and Kapur, S. Schizophrenia. Lancet, 374: 635-45, 2009; van Os, J., Kenis, G., and Rutten, B.P. The environment and schizophrenia. Nature, 468: 203-12, 2010.
Teaching methods	Assignment(s) Lecture(s) Paper(s) Presentation(s) Work in subgroups
Assessment methods	Attendance Final paper Observation Written exam
Key words	psychosis, diagnosis, treatment, aetiology, phenotype, research

PSY4106 Advanced Statistics I will be offered in all RM specialisations.

Title	Advanced Statistics I
Period	1-3
Code	PSY4106
ECTS credits	3
Organisational unit	Faculty Office (FPN)
Coordinator	Nick Broers
Descriptions	The course consists of six units. In the first four units, participants will be given an in-depth training in the following standard statistical methods: factorial ANOVA for between-subject designs, analysis of covariance (ANCOVA), multivariate ANOVA (MANOVA), discriminant analysis and multiple linear regression. Students are assumed to have background knowledge of balanced two-way factorial ANOVA and multiple regression. These methods will be briefly reviewed. The following advanced topics will then be covered: unbalanced factorial designs, contrast analysis, interaction, simple slope analysis, dummy coding, centring covariates, different coding schemes, collinearity and residuals checks and data transformation. The distinction between confounders and mediators in regression and ANCOVA is also discussed, forming a bridge from regression to structural equations modelling (SEM). The latter is an advanced multivariate method that is gaining importance in psychology but still requires special software (such as Lisrel, EQS, AMOS or Mplus). SEM is introduced in two units, starting with causal modelling and mediation analysis in cross-sectional research and then extending to longitudinal research and latent variables (factors). Special attention is given to identifying models, model equivalence, global and local goodness of fit indices, parsimony, model modification and cross-validation. Some concepts from matrix algebra are needed for SEM, and these will be briefly discussed without going into technical detail.
Goals	Knowledge of: Oneway analysis of variance, contrast analysis, unbalanced designs, multivariate analysis of variance, discriminant analysis, linear regression with interaction terms, linear regression with dummy variables, data transformations, simple slope analysis, analysis of covariance, path analysis, structural equation modeling, confirmatory factor analysis, structural models with latent variables.
Instruction language	EN
Prerequisites	
Recommended literature	Diamantopoulos, A. (1994). Modelling with LISREL: A guide for the uninitiated. Journal of Marketing Management, 10, 105-136; Field, A. (2009). Discovering statistics using SPSS (3rd ed.). London: Sage; Howell, D.C. (2007). Statistical methods for psychology (6th ed.). Belmont (CA): Thomson/ Wadsworth; Kleinbaum, D.G., Kupper, L.L., Muller, K.E., & Nizam, A. (1998). Applied regression analysis and other multivariable methods

	(3rd ed.). Pacific Grove (CA): Brooks/Cole.
Teaching methods	Assignment(s) Lecture(s) Skills Training(s)
Assessment methods	Attendance Written exam
Key words	univariate analysis of variance, multivariatie analysis of variance, regression analysis, structural equation modeling

The practical training associated with PSY4106 Advanced Statistics I is PSY4119. Practical training: SPSS and Lisrel will be offered in all RM specialisations.

Title	**Practical training: SPSS and Lisrel**
Period	1-3
Code	PSY4119
ECTS credits	-
Organisational unit	Faculty Office (FPN)
Coordinator	Nick Broers
Descriptions	In order to make practical use of the statistical models that form the topic of the Advanced Statistics course, researchers must make use of statistical software. This course will utilise the traditional SPSS program, but also the specialised LISREL software. LISREL is a statistical program that allows structural equations models to be tested.
Goals	Defining contrasts, building regression models, doing multivariate analyses, transforming data, testing simple slopes, creating and testing SEM models
Instruction language	EN
Prerequisites	
Recommended literature	Handouts given during practicals.
Teaching methods	Assignment(s) Training(s)
Assessment methods	Attendance
Key words	SPSS, LISREL, statistical software

PSY4107 Advanced Statistics II will be offered in all RM specialisations.

Title	Advanced Statistics II
Period	3-5
Code	PSY4107
ECTS credits	3
Organisational unit	Faculty Office (FPN)
Coordinator	Gerard van Breukelen
Descriptions	The course consists of seven units. The first three units cover classical repeated measures ANOVA for the one- and two-way within-subject design and the split-plot (between x within) design. Special attention is given to: a) the choice between multivariate and univariate data formats and method of analysis, and the sphericity assumption; b) the distinction between the within-subjects and between-subjects part of a split-plot ANOVA, and how to obtain both using regression analysis; c) the surprising consequences of including covariates into repeated measures ANOVA; and d) the choice between different methods of analysis for randomised versus non-randomised group comparisons. Subsequently, a further three units are devoted to mixed (multilevel) regression for nested designs and longitudinal studies. This mixed regression starts with a unit on marginal models for repeated measures as an alternative to repeated measures ANOVA in cases of missing data or within-subject covariates. Students are shown the pros and cons of various models for the correlational structure of repeated measures, such as compound symmetry and AR1. The second unit covers the random intercept model for repeated measures as a method to include individual effects in marginal models for longitudinal data (growth curves) or single trial analyses of lab data (response times, ERP, fMRI). Students learn how this can be combined with e.g. ARMA modelling to distinguish between interpersonal and intrapersonal outcome variation. The random intercept model will also be applied to a cluster randomised trial, i.e. an RCT where organisations like schools or companies instead of individuals are randomised. The third and last unit on mixed regression covers random slope models for longitudinal data (individual differences in change over time), single trial analysis (individual differences in stimulus effects) and multicentre trials (RCT within each of a number of organisations). Finally, the topic of optimal design, sample size and power calculations is introduced in a seventh unit.
Goals	Knowledge of: Repeated measures ANOVA for within-subject and split-plot (between x within) designs, including factorial designs and covariates in repeated measures ANOVA; Mixed (multilevel) linear regression with random effects and autocorrelation; Optimal design and sample size calculations for experimental and observational studies.
Instruction language	EN
Prerequisites	Good understanding of descriptive and inferential statistics at the elementary and intermediate level, including t-tests, factorial ANOVA and multiple linear regression. Skilled in the

	use of SPSS for statistical data analyses.
Recommended literature	Lecture handouts and a suitable book chapter or article.
Teaching methods	Assignment(s Lecture(s Training(s)
Assessment methods	Attendance Written exam
Key words	within-subject designs, repeated measures ANOVA, mixed (multilevel) regression, marginal versus random effects models, optimal design, sample size, power

The practical training associated with PSY4107 Advanced Statistics II is PSY4117. Practical training SPSS will be offered in all RM specialisations.

Title	Practical training: SPSS
Period	3-5
Code	PSY4117
ECTS credits	-
Organisational unit	Faculty Office (FPN)
Coordinator	Gerard van Breukelen
Descriptions	This practical training forms part of the PSY4107 Advanced Statistics II course. The practical consists of six sessions in the computer rooms in which SPSS procedures for repeated measures and multilevel data are practised. The goal is to understand how proper analyses of such data can be done using SPSS.
Goals	Knowledge of: How to run with SPSS: repeated measures ANOVA for within-subject and split-plot (between x within) designs, including factorial designs and covariates; How to run SPSS for: mixed (multilevel) linear regression with random effects and autocorrelation.
Instruction language	EN
Prerequisites	Good understanding of descriptive and inferential statistics at the elementary and intermediate level, including t-tests, factorial ANOVA and multiple linear regression. Skilled in the use of SPSS for statistical data analyses.
Recommended literature	Field A (2009). Discovering statistics with SPSS (3rd ed.). London: Sage, plus the mandatory assignments on EleUM. For the theoretical part of course PSY4107 lecture handouts and suitable book chapters and articles are used.
Teaching methods	Training(s)
Assessment methods	Attendance
Key words	within-subject designs, repeated measures ANOVA, mixed (multilevel) regression, marginal versus random effects models

Title	**Mental Health and Happiness**
Period	5,6
Code	PSY4520
ECTS credits	3
Organisational unit	Clinical Psychological Science
Coordinator	Madelon Peters (FPN)
Descriptions	This course will familiarise students with concepts and ideas from 'positive psychology'. Positive psychology was introduced by Martin Seligman around 2000 and can be viewed as a supplementary approach to clinical psychology. The positive psychological movement formulated three aims: (1) to focus on well-being and happiness instead of abnormal behaviour and psychopathology, (2) to be concerned with building positive qualities and strengths instead of repairing damage and (3) to prevent future problems instead of correcting past and present problems. The course starts with a general introduction to the field of positive psychology. The main concepts will be introduced and clarified, and an overview of the results of happiness studies will be presented. In subsequent meetings, various more specific topics will be discussed by means of lectures and group discussions. These topics include positive psychology and physical health, resilience and positive personality traits, positive psychotherapy and resilience-building interventions. The value of positive psychology as an addition to more traditional clinical psychological approaches will be discussed.
Goals	Knowledge of: Positive psychology, happiness, life satisfaction, wellbeing, resilience, determinants of happiness, genetics and neurobiology of resilience, positive emotions, optimism, strengths and virtues, positive interventions, mindfulness, self-compassion, positive health psychology.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles.
Teaching methods	Assignment(s) Lecture(s) Paper(s) Presentation(s) Work in subgroups
Assessment methods	Attendance Final paper
Key words	positive psychology, happiness, wellbeing, mental and physical health, resilience

PSY5112 Research Grant Writing Course will be offered in all RM specialisations.

Title	**Research Grant Writing Course**
Period	1
Code	PSY5112
ECTS credits	3
Organisational unit	Neuropsychology and Psychopharmacology (FPN)
Coordinator	Eef Theunissen
Descriptions	In this course, students will apply what they have learned during the Research Grant Writing Workshop (PSY4112). Students will work together (groups of max. 5) to write a research proposal on their selected topic, including an original research hypothesis, experimental design and methods. This proposal should promote interdisciplinarity; therefore students are encouraged to think across boundaries of different scientific fields. A senior researcher will guide students during this writing process. The students will write their proposal in 3 steps, and they will receive feedback from their mentor and peers. The resulting proposals will be presented during a symposium by way of a poster or an oral presentation.
Goals	Knowledge of how to: Review literature, formulate a research hypothesis, design a research study, write a research proposal, present the proposal at a symposium (oral or poster).
Instruction language	EN
Prerequisites	This course is a continuation of the Research Grant Writing Workshop (PSY4112).
Recommended literature	
Teaching methods	Work in subgroups
Assessment methods	Attendance Final paper Presentation
Key words	research proposal, interdisciplinary, hypothesis, design, methods, research symposium, peer review

Title	**Personality Disorders**
Period	1
Code	PSY5511
ECTS credits	4
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	David Bernstein
Descriptions	Personality disorders are chronic patterns of thought, emotion and behaviour that first appear in adolescence or young adulthood and cause dysfunction in relationships, work and other areas. They affect approximately 10% of the general population and are one of the most prevalent forms of psychopathology seen in mental health care settings. Over the past 30 years, there have been significant advances in the understanding of personality disorders, including their phenomenology and classification, development and aetiology. Moreover, while many personality disorder patients were traditionally thought to be untreatable, recent advances in psychotherapy and medication are showing promising indications of effectiveness in this challenging population. This course aims to provide students with an overview of theories, classification issues and treatment models of personality disorders, with an emphasis on current scientific debate. Topics include personality theories relating to personality disorders; biological models of personality disorders (e.g. genetic and neurotransmitter models); psychological models of personality disorders (e.g. modern psychodynamic, conditioning, cognitive, interpersonal, integrative models); sociological perspectives on personality disorders; classifications issues (e.g. DSM-IV diagnosis, Axis I vs. Axis II, categorical vs. dimensional models, polythetic definition, diagnostic techniques); aetiological issues; epidemiological issues; and treatment options.
Goals	Knowledge of: Personality theories; biological models of personality disorders; psychological models of personality disorders; sociological perspectives on personality disorders; classification issues; etiological issues; epidemiological issues; treatment options.
Instruction language	EN
Prerequisites	
Recommended literature	Millon, T. et al. (2004). *Personality Disorders in Modern Life* (2nd ed.). New York: Wiley; E-reader.
Teaching methods	Lecture(s) PBL Presentation(s)
Assessment methods	Attendance Presentation Written exam
Key words	personality disorders, DSM-IV, classification, aetiology, epidemiology, treatment

Skills training

Title	**Research Practicum Psychometrics**
Period	1-2
Code	PSY4531
ECTS credits	2
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Jeffrey Roelofs
Descriptions	This skills training will focus on providing students with hands-on experience of the application of psychometrics. Topics that are covered include factor analysis (both exploratory and confirmatory), reliability analysis (e.g. internal consistency, test-retest stability) and indices of validity (e.g. construct validity, predictive validity). Beyond the primary goal of learning more about how to evaluate and improve the psychometric properties of research instruments, students will also become acquainted with current research on psychopathology which is being conducted by senior staff, postdocs, and PhD students at the UM.
Goals	Knowledge of: Reliability, internal consistency, test-retest stability, validity, face-validity, construct validity, predictive validity, exploratory factor analysis, confirmatory factor analysis.
Instruction language	EN
Prerequisites	
Recommended literature	Tabachnick, B. G., and Fidell, L. S. (2007). Using Multivariate Statistics (5th ed.). Boston: Allyn and Bacon.
Teaching methods	Assignment(s) Lecture(s) Work in subgroups
Assessment methods	Attendance Final paper
Key words	factor analysis, psychometrics, reliability, validity

Title	**Clinical Skills I: Interviewing Skills**
Period	1
Code	PSY4532
ECTS credits	2
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Inge Drost
Descriptions	The aim of this skills training is to teach students basic clinical interview skills needed for interviewing patients suffering from psychopathology. After this course, students will be able to administer semi-structured interviews covering the reason for referral, chief complaint, history of the presented problem(s), mental status and the developmental and social assessment and diagnoses (DSM-IV-R). Students should become able to diagnose the presented problem(s) and to suggest the type of treatment required.
Goals	Knowledge of: Clinical assessment, interviewing skills, psychopathology, administering semi-structured interviews.
Instruction language	EN
Prerequisites	
Recommended literature	Morrison, J. (2008). The First Interview (3rd ed.). New York: The Guilford Press.
Teaching methods	Lecture(s) Paper(s) Patiëntcontact Skills Training(s)
Assessment methods	Attendance Final paper Observation
Key words	interviewing skills, psychopathology, assessment

Title	**Clinical Skills II: Diagnostic Test Procedures**
Period	2
Code	PSY4533
ECTS credits	2
Organisational unit	Neuropsychology and Psychopharmacology (FPN) and Psychiatry and Neuropsychology (FHML)
Coordinator	Petra Hurks, Dymphie in de Braek
Descriptions	Students will learn to conduct a psychodiagnostic interview with adult clients with psychiatric diagnoses and caregivers of children with developmental problems. Students should also extend their experience in neuropsychological test administration and observation. They will acquire skills in writing a formal report and in communicating their conclusions to the patient. Following an introduction to the main cognitive domains in relation to brain areas and relevant neuropsychological and psychopathological test procedures, the skills training will focus on five disorders: developmental disorders (including disorders of executive functioning and disorders of learning and attention); schizophrenia; bipolar disorder; depression; and personality functioning. These conditions will be discussed in relation to the principles of assessment of psychopathology and neuropsychology outlined in the first session. Students will practise their interviewing skills in real client interviews. In addition, students will be trained in neuropsychological history taking and test administration.
Goals	Knowledge of: The procedures for psychodiagnostic and neuropsychological testing that are needed for assessing type, severity and extent of psychopathology and neuropsychological problems in individuals with psychiatric disorders.
Instruction language	EN
Prerequisites	
Recommended literature	Book chapters.
Teaching methods	Lecture(s) Patient contact
Assessment methods	Attendance Final paper
Key words	clinical skills training, psychodiagnostic and neuropsychological testing, interview techniques, test administration

*PSY4108 Neuroanatomy will be offered in CN, NE, NP and **PP.***

Title	**Neuroanatomy**
Period	3
Code	PSY4108
ECTS credits	1
Organisational unit	Psychiatry and Neuropsychology (FHML)
Coordinator	Jos Prickaerts
Descriptions	The aim of this practical training is to become acquainted with the neuroanatomical terminology and to gain insight into the spatial and functional organisation of the brain. It is essential to have a basic knowledge of the brain anatomy when working in the field of neuropsychology or neurobiology. Many specific brain areas can be linked to particular functions. Thus, knowledge of the brain anatomy and its main functions allows direct linkage of specific neurological or psychiatric disorders to particular brain areas. After a short theoretical introduction, students will study whole brains and brain material of mammals at both macroscopical (visual inspection) and microscopical level. The emphasis will be on major brain systems, including the basal ganglia and limbic system.
Goals	Knowledge of: Limbic system, basal ganglia, plastinated human brains, brain dissection, microscopical slices.
Instruction language	EN
Prerequisites	
Recommended literature	Papers from scientific journals and book chapters from books are provided.
Teaching methods	Lecture(s) Skills Work in subgroups
Assessment methods	Attendance Written exam
Key words	neuroanatomy, limbic system, basal ganglia

*PSY4422 Psychophysiological Skills will be offered in NP and **PP**.*

Title	**Psychophysiological Skills**
Period	4
Code	PSY4422
ECTS credits	1
Organisational unit	Neuropsychology and Psychopharmacology (FPN)
Coordinator	Eric Vuurman
Descriptions	The goal of this skills training is to acquire basic skills in major peripheral psychophysiological measures and to study the relationship between cognitive and psychophysiological variables, such as memory load, mental effort and attention. In addition, general methodological concepts and issues, such as tonic (baseline) activity, phasic activity and the 'law of initial value' will be discussed. Training consists of four meetings. In the first meeting, an overview lecture will be given on the psychophysiological methods that are relevant to both experimental clinical psychology and neuropsychology. The second meeting is devoted to major domains in psychophysiology, such as heart rate variability, blood pressure, galvanic skin responses. During this meeting, students become acquainted with a selection of psychophysiological techniques in the laboratory. The third and fourth meetings are practical sessions, in which an existing dataset will be provided for analysis and report writing.
Goals	Knowledge of: Peripheral psychophysiology, measuring psychophysiological functions.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignment(s) Lecture(s) Research Skills Work in subgroups
Assessment methods	Attendance Final paper Participation
Key words	peripheral psychophysiology, methodology

Title	Clinical Assessment Instruments
Period	1-6
Code	PSY4534
ECTS credits	2
Organisational unit	Psychiatry and Psychology (FHML)
Coordinator	Nancy Nicolson
Descriptions	Parallel to the core courses throughout year 1, this series of skills training sessions cover the range of rating scales, questionnaires, interview and observational instruments most commonly used in clinical practice and research. The first session will provide an overview of the classes of available instruments and their applications in clinical and research contexts. Later sessions will focus on instruments designed to assess specific symptoms and the severity of the disorders which are covered in the current core course. The last sessions will focus on a subset of broader measures of personality, psychopathology and adjustment (e.g., MMPI, SCL-90, quality of life, social adjustment or coping scales). Working with case materials, students will learn how to choose appropriate assessment instruments for clarifying individual diagnoses, planning interventions and monitoring their effects. These skills training sessions will provide students with basic background information and hands-on experience in the use of valid and reliable instruments for assessing psychopathology.
Goals	Knowledge of: Available research and clinical instruments for assessing psychopathology; state and trait measures; retrospective measures; projective methods; evaluating validity and reliability of assessment methods; self-report, clinician-rated and informant-rated measures; ethical issues in data collection, analysis and reporting; sources of bias and measurement error; presentation and interpretation of test results in research and clinical practice; continuous vs. categorical measures (symptoms vs. diagnoses); assessing clinical change; broad vs. specific measures; instruments designed or adapted for special populations (e.g., children, different cultures, cognitive impairment).
Instruction language	EN
Prerequisites	
Recommended literature	Scientific articles, book chapters.
Teaching methods	Lecture(s) Skills Training(s) Work in subgroups
Assessment methods	Assignments Attendance
Key words	questionnaires, interviews, observational measures, clinical evaluation, reliability, validity, psychodiagnostics, treatment response

Title	**Clinical Skills III: Clinical Interview for the DSM IV (SCID I and SCID II)**
Period	1
Code	PSY5531
ECTS credits	1
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Reinier Kreutzkamp
Descriptions	The aim of this skills training is to teach students how to conduct the semi-structured clinical interview for DSM-IV-Tr Axis I (SCID I) and Axis II (SCID II) diagnoses. Students will learn to carry out the interview and to interpret the outcomes, to establish differential diagnoses and to summarise findings in a written report. Special emphasis lies on comparing the patient's answer to a question and the clinical judgement of stating whether or not a certain behavioural criterion is met.
Goals	Knowledge of: Structured clinical interview of psychiatric disorders , structured clinical interview of personality disorders.
Instruction language	EN
Prerequisites	
Recommended literature	First, M., Spitzer R., Gibbon M. & Williams J. (2000). User's guide for the Structured Clinical Interview for DSM-IV Axis I Disorders Clinician version. Washington DC: American Psychiatric Press, Inc.; First, M., Spitzer R., Gibbon M. & Williams J. (1997). User's guide for the Structured Clinical Interview for DSM-IV Axis II Disorders. Washington DC: American Psychiatric Press, Inc.
Teaching methods	Skills Training(s) Work in subgroups
Assessment methods	Attendance Observation
Key words	standardised interview, psychiatric classification, judging behavioural criteria

Title	**Clinical Skills IV: Intervention Techniques**
Period	1
Code	PSY5523
ECTS credits	2
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Marisol Voncken
Descriptions	Cognitive behavioural therapy (CBT) is a widely used treatment regime that is considered as the evidence-based treatment for a wide range of psychopathological disorders, including anxiety disorders and depression. The behavioural component, exposure, was developed in the sixties by researchers like Skinner and was considered a breakthrough for specific phobias and obsessive-compulsive disorder. These disorders were seen as untreatable at that time. In the eighties, the cognitive component started to develop. Aaron Beck, who, in those days was trained as a psychoanalytic therapist, was able to treat depression within a few months using his cognitive approach. This was also considered a breakthrough, since psychoanalytic treatments for depression at that time normally took years of treatment. Researchers and therapists started to combine the behavioural and cognitive techniques, resulting in cognitive behavioural therapy. Over the years, many studies have shown the effectiveness of this treatment and, in the Netherlands CBT is included in the official professional guidelines for various psychopathological disorders.
Goals	Knowledge of: Elementary therapeutic procedures (CBT), making a case conceptualisation, explaining the rationale, applying exposure and cognitive therapy, writing a verbatim report of therapy sessions.
Instruction language	EN
Prerequisites	
Recommended literature	Roth Ledley, D. et al. (2005). Making cognitive-behavioural therapy work. New York: The Guilford Press.
Teaching methods	Assignment(s) Paper(s) Skills Training(s) Work in subgroups
Assessment methods	Attendance Final paper Observation
Key words	therapeutic skills, cognitive behavioural treatment, CBT, case conceptualisation, exposure, cognitive techniques

Methodological and technical workshops

PSY4112 Research Grant Writing Workshop will be offered in all RM specialisations.

Title	**Research Grant Writing Workshop**
Period	6
Code	PSY4112
ECTS credits	1
Organisational unit	Neuropsychology and Psychopharmacology (FPN)
Coordinator	Eef Theunissen
Descriptions	During this workshop students will learn why and how to apply for research grants. The need for acquiring funding for research, the opportunities for, and availability of grant application funding will be discussed. Several researchers who have experience in applying for different types of grants will provide students with first-hand knowledge and tips. Students will learn fundamentals of good grant writing, general preparation of the grant application and how to deal with reviewer comments. These skills will be practiced during the workshop. Students will subsequently choose a topic (provided by senior researchers) on which they will write a research proposal during the second-year Research Grant Writing Course (see description of PSY5112).
Goals	Knowledge of: Opportunities for funding, how grants can be acquired, grant writing skills.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignments Lecture(s)
Assessment methods	Attendance Final paper
Key words	funding possibilities, grant applications, proposal writing

PSY4110 Scientific Writing will be offered in all RM specialisations. Offering times vary according to RM specialisation:
CN: Period 5
NE: Period 5
NP: Period 5
FN: Period 1
PP: Period 1

Title	Scientific Writing
Period	1
Code	PSY4110
ECTS credits	1
Organisational unit	Maastricht University Language Centre
Coordinator	Alice Wellum
Descriptions	The course is delivered in a series of three lectures, interspersed with three tutorials, during which students produce and revise a short research proposal or research article. The lectures aim to cover the broader principles of scientific writing (including clarity/readability, structure and coherence). It also covers the ethical issues surrounding the production of scientific texts (for example, plagiarism and non-biased writing). Lectures are interactive; students are assigned with analysis and discussion tasks to complete. In tutorials students apply the principles in the linguistic sense and discover how these apply to their own writing. In particular, the 'doors and windows' (abstracts, introductions, hypotheses and discussions) of scientific papers are analysed for their linguistic and stylistic content. In the tutorials, students develop the language awareness and critical skills required to review their own work as well as that of their peers. Individualised feedback on parallel block assignments is given at the end of the course by the instructor.
Goals	Knowledge of: Principles of scientific writing, conventions in scientific writing, the structure of scientific texts, ethics in scientific writing, plagiarism, editing skills, language in scientific writing, academic writing style, coherence in scientific writing, reporting sources.
Instruction language	EN
Prerequisites	
Recommended literature	Literature is provided in the course materials.
Teaching methods	Assignment(s) Lecture(s) Paper(s) PBL Research Skills Training(s) Work in subgroups
Assessment methods	Attendance Final paper
Key words	scientific writing, research proposal, empirical research article, literature review, peer review, language awareness.

Title	**The Application of Cognitive Methods in Psychopathology Research**
Period	6
Code	PSY4542
ECTS credits	1
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Katrijn Houben
Descriptions	The goal of this course is to introduce the students to the most important paradigms in cognitive psychology that are often used in psychopathology research to study biased cognitive processing. Biased cognitive processes play an important role in many kinds of psychopathology, such as depression, anxiety disorders and eating disorders. The most intensively studied processes involve attention, memory, interpretation and associations. To study these processes, experimental paradigms from cognitive psychology have been adapted to the needs of clinical psychology. Most of these experimental tasks involve the measurement of reaction times. Unlike other techniques (e.g., eye-tracking, fMRI, EEG), they are easy to program and often run on a standard PC. This course will introduce the students to the most popular tasks in the areas of attention (emotional Stroop task, dot probe task) and associations (Implicit Association Test, (extrinsic) affective Simon Task, affective priming paradigm). At the end of this course, students will understand the pros and cons of each task well enough to choose an appropriate task for a given research question, and will be able to change the features of the chosen task to fit their own research needs. During the course, students are given a number of introductory papers about the tasks. There are two lectures in which the various paradigms are explained and briefly demonstrated and their applications in several forms of psychopathology are discussed. An important aspect of the lectures will be a discussion of the pros and cons of the various paradigms. Students also take part in a short practical, consisting of three meetings. During these practical sessions they will (1) analyse results of an experiment with a response latency based measure of associations, (2) experience and 'beat' the Implicit Association Test and (3) discuss the pros and cons of a paradigm of choice.
Goals	Knowledge of: Biased cognitive processing, analysis of response latencies, Implicit Association Test, Affective Priming Paradigm, Emotional Stroop task, implicit measures, indirect measurement procedures.
Instruction language	EN
Prerequisites	
Recommended literature	Journal articles, book chapters.
Teaching methods	Assignment(s) Lecture(s) Paper Research Skills

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	Training(s)
	Work in subgroups
Assessment methods	Attendance
	Final paper
Key words	cognitive psychology, response latencies, experiments

*PSY4371 Psychiatric Epidemiology will be offered in FN, NP and **PP.***

Title	Psychiatric Epidemiology
Period	6
Code	PSY4371
ECTS credits	1
Organisational unit	Psychiatry and Psychology (FHML)
Coordinator	Wolfgang Viechtbauer
Descriptions	The course will provide an introduction to the methodologies and analytical strategies of epidemiology as applied to mental health outcomes. The principles and practice of various study types (cohort, case-control, RCT, ecological) will be taught, with emphasis on interpreting associations and possible causality thereof. Consideration will be given to such issues as confounding, bias, and moderation. Further topics to be covered include the use and interpretation of diagnostic studies, the basic principles of analysing dichotomous and time-to-event outcomes, and the use of systematic reviews and meta-analysis for building cumulative knowledge.
Goals	Knowledge of: Different epidemiological study types, including their purpose, advantages, and disadvantages; calculation and interpretation of effect size and outcome measures for dichotomous and time-to-event outcomes; principles of analysing epidemiological studies; the basic steps of conducting a systematic review and meta-analysis.
Instruction language	EN
Prerequisites	
Recommended literature	Rothman, K. J., & Greenland, S. (1998). Modern epidemiology (2nd ed.). Philadelphia, PA: Lippincott-Raven Publishers.
Teaching methods	Assignment(s) Lecture(s) PBL Skills Training(s) Work in subgroups
Assessment methods	Attendance Final paper
Key words	epidemiology, methodology, statistics, experimental studies, observational studies, diagnostic studies, systematic reviews, meta-analysis

PSY4110 Scientific Writing will be offered in all RM specialisations. Offering times vary according to RM specialisation:
CN: Period 5
NE: Period 5
NP: Period 5
FN: Period 1
PP: Period 1

Title	Scientific Writing
Period	1
Code	PSY4110
ECTS credits	1
Organisational unit	Maastricht University Language Centre
Coordinator	Alice Wellum
Descriptions	The course is delivered in a series of three lectures, interspersed with three tutorials, during which students produce and revise a short research proposal or research article. The lectures aim to cover the broader principles of scientific writing (including clarity/readability, structure and coherence). It also covers the ethical issues surrounding the production of scientific texts (for example, plagiarism and non-biased writing). Lectures are interactive; students are assigned with analysis and discussion tasks to complete. In tutorials students apply the principles in the linguistic sense and discover how these apply to their own writing. In particular, the 'doors and windows' (abstracts, introductions, hypotheses and discussions) of scientific papers are analysed for their linguistic and stylistic content. In the tutorials, students develop the language awareness and critical skills required to review their own work as well as that of their peers. Individualised feedback on parallel block assignments is given at the end of the course by the instructor.
Goals	Knowledge of: Principles of scientific writing, conventions in scientific writing, the structure of scientific texts, ethics in scientific writing, plagiarism, editing skills, language in scientific writing, academic writing style, coherence in scientific writing, reporting sources.
Instruction language	EN
Prerequisites	
Recommended literature	Literature is provided in the course materials.
Teaching methods	Assignment(s) Lecture(s) Paper(s) PBL Research Skills Training(s) Work in subgroups
Assessment methods	Attendance Final paper
Key words	scientific writing, research proposal, empirical research article, literature review, peer review, language awareness.

*PSY4372 Functional Brain Imaging will be offered in FN, NP and **PP.***

Title	**Functional Brain Imaging**
Period	6
Code	PSY4372
ECTS credits	2
Organisational unit	Cognitive Neuroscience (CN)
Coordinator	Vincent van de Ven
Descriptions	This workshop is aimed at introducing basic knowledge and principles of functional brain imaging techniques, and at discussing novel advances in relevant fields, such as clinical, animal and cognitive research. The workshop comprises two versions that are tailored to two *a priori* levels of background that may exist within the Research Master cohort. Version 1 introduces the basic principles of neuroimaging (intro to imaging methods, experimental design & analysis, fMRI signal, etc.) and some applications to clinical research, neuroeconomics, social neuroscience and similar fields. Version 2 introduces a number of technical and methodological advances (multimodal imaging techniques, connectivity analyses, mental chronometry and other matters), and assumes that participants possess *a priori* knowledge of items discussed in version 1. Assignment to a workshop version is via allocation on an individual basis; participants must follow at least one version. Participants can opt to follow both versions, but will receive no extra credits. General description: The investigation of human brain anatomy and functions using a range of imaging methods represents the most influential development in psychology in the last few years. This workshop reviews essential facts about contemporary major structural and functional brain mapping techniques, but the focus will be on functional Magnetic Resonance Imaging (fMRI). Also, the workshop discusses strengths and weaknesses of neuroimaging methods and on the description of relevant applications in the normal and pathological brain. These topics will be investigated through lectures, paper and group discussions, and a final skills session in which fMRI data is analysed. The final assessment is via a paper assignment.
Goals	Knowledge of: Functional brain imaging techniques and principles, pros and pitfalls of functional brain imaging, data analysis, experimental design for brain imaging research, hands-on data analysis and visualisation experience.
Instruction language	EN
Prerequisites	Basic knowledge of Brain anatomy, experimental design and statistics.
Recommended literature	Journal articles.
Teaching methods	Lecture(s) Paper(s) Skills
Assessment methods	Attendance Final paper
Key words	Magnetic Resonance Imaging (MRI), functional MRI, structural MRI, positron emission tomography (PET),

	neuroimaging, data analysis, brain activity

*PSY4335 will be offered in NP and **PP.***

Title	**Psychopharmacology**
Period	5
Code	PSY4335
ECTS credits	1
Organisational unit	Neuropsychology and Psychopharmacology (FPN)
Coordinator	Arjan Blokland
Descriptions	Students will become acquainted with current topics in psychopharmacology, i.e. how current knowledge of neuropsychiatric disease processes relates to existing medicinal drugs and research and development of new medicinal drugs. Topics will also include testing new drugs in animal models and the use of healthy volunteers and patients in new drug studies, in order to cover the cycle of new medicine development from bench to bedside.
Goals	Knowledge of: Examples of psychopharmacological studies; present/prepare a presentation on a topic of psychopharmacology.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Lecture(s) Presentation(s)
Assessment methods	Attendance Presentation
Key words	psychopharmacology

Electives

The following electives will be offered in all RM specialisations.

Title	Elective: Course
Period	throughout
Code	PSY4156
ECTS credits	Variable
Organisational unit	Cognitive Neuroscience (FPN)
Coordinator	Vincent van de Ven
Descriptions	Students can attend a course offered by an RM specialisation or a course from a regular master's programme at Maastricht University (local courses) or a course that is organised at a different university in The Netherlands or abroad (external courses). The content, format and organisation of local courses are described in this catalogue or in the course descriptions of other UM master's programmes. The content, format and organisation of external courses are determined by the host university. Elective courses do not overlap with required RM courses, but instead offer new knowledge and insights. Enrollment in an elective course is subject to approval by the Course Instructor as well as the RM Electives Coordinator. There is no limit to the number of electives courses that may be taken, but elective courses do not substitute for mandatory courses.
Goals	Knowledge of: Extracurricular interests, broadening academic scope, taking specialised courses.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignment(s) Lecture(s) Paper(s) PBL Presentation(s) Skills Training(s)
Assessment methods	Attendance Computer test Final paper Observation Oral exam Participation Portfolio Presentation Take home exam Written exam
Key words	electives, external courses, external workshops

Title	Elective: Review
Period	throughout
Code	PSY4157
ECTS credits	3
Organisational unit	Cognitive Neuroscience (FPN)
Coordinator	Vincent van de Ven
Descriptions	Students write a critical literature review based on a specialised topic, under the supervision of a member of the scientific staff of Maastricht University. Students take the initiative to locate and arrange a supervisor for the review. The review topic, content and format will be determined by mutual agreement between student and supervisor. The review topic is also subject to approval by the RM Electives Coordinator. Students are expected to devote 84 hours to the Elective: Review. Each student may complete maximally one Elective: Review course The Elective: Review course must be completed and assessed prior to the start of the internship.
Goals	Knowledge of: Extracurricular interests, specialisation on topic of interest, supervised scientific writing, literature review.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Paper(s)
Assessment methods	Final paper
Key words	elective, review paper, paper assignment, literature review, writing assignment

Title	Elective: Research
Period	throughout
Code	PSY4158
ECTS credits	3
Organisational unit	Cognitive Neuroscience (FPN)
Coordinator	Vincent van de Ven
Descriptions	Students can participate in (parts of) an empirical research project that is conducted and supervised by a member of the FPN or FHML scientific staff. Students can apply for an available project from the list of project descriptions; available on the 'RM Electives' section on EleUM, which is published and updated in December of each year. The application procedure is also described on the 'RM Electives' section on EleUM. Students who are selected to participate in a research elective may assist in designing the experiment or observational study, acquire empirical data, be trained in using measurement equipment, analyse empirical data, or take part in other parts of the research project. Students must write a short research report of maximally 5 pages about the practical experience obtained. Students are expected to spend 84 hours on the Elective: Research course, which includes time spent on practical work and the research report. The principal investigator of the project will supervise the practical work and grade the research report. Each student may complete maximally one Elective: Research course. The Elective: Research course must be completed and graded before the start of the internship.
Goals	Knowledge of: Planning or designing empirical research, empirical data analysis, writing research report, quantitative methods, conducting research, skill learning of data acquisition techniques, functioning in a research team.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignment(s) Lecture(s) Paper(s) Patient contact PBL Presentation(s) Research Skills Training(s) Work in subgroups
Assessment methods	Final paper Participation
Key words	elective, practical research, empirical research

Internships

1. PSY5107 Research Proposal, PSY5102 Research Internship and PSY5103 Master's Thesis -> for [CN, NE, FN->50 credits] and [NP and PP->30 credits]. *Internship coordinators are different per specialisation.*

50 credits apply to: CN, NE and FN and for the NP student that only chooses a research internship (not including the clinical part)

The NP student that chooses the combined internship (Research + Clinical) will obtain 30 credits for the Research Proposal + Research Internship + Master's Thesis + 20 credits for Clinical Internship, Research Proposal and Minor's Thesis. The combined version is compulsory to PP students.

2. Clinical Internship, Research Proposal and Minor's Thesis PSY5104, PSY5108, and PSY5105
Are the same for NP and PP. *Only the internship coordinators differ from each other.*

Title	Research Proposal, Research Internship and Master's Thesis
Period	2-6
Code	PSY5107, PSY5102, and PSY5103
ECTS credits	**30** ECTS (1, 19, and 10, respectively) for RM PP students and for RM NP students who choose to conduct both a research and a clinical internship (plus minor's thesis). The total research internship will be assigned 30 credits: 20 credits for the research activities, including the research proposal (1 credit; graded pass/fail) and the practical execution of the internship (19 credits; graded assessment), and 10 credits (graded assessment) for the master's thesis. **50 (1, 35, and 14, respectively)** for RM CN, NE, FN, NP students who do *not* complete a clinical internship and minor's thesis. The total research internship will be assigned 50 credits: 36 credits for the research activities, including the research proposal (1 credit; graded pass/fail), and the practical execution of the internship (35 credits; graded assessment) and 14 credits (graded assessment) for the master's thesis.
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Sandra Mulkens
Descriptions	The second part of the second year of the research master's programme is devoted to conducting a research internship. As a result of the many international research contacts that faculty members have established, a substantial number of students will conduct their research internship abroad. Students start their internship with the writing of a research proposal. Students finish the master's programme by writing a thesis based on their internship research project. The internship can be undertaken at Maastricht University or at external research institutes. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors must be a member of the Faculty of Psychology and Neuroscience (FPN) or the Faculty of Health, Medicine and Life Sciences (FHML). The other assessor might be a (senior) researcher at, for

	example, the institute where a student collected the data. A detailed guide on research internships and the master's thesis can be found on EleUM > Students Research Master Faculty of Psychology and Neuroscience > internships. - RM Cognitive Neuroscience Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Neuroeconomics Internships Coordinator: Amanda Kaas, Cognitive Neuroscience (FPN), Phone: (0)43 38 82172, 55 Oxfordlaan, Room 2.019, Email: a.kaas@maastrichtuniversity.nl - RM Fundamental Neuroscience Internships Coordinator: Pilar Martinez, Psychiatry and Neuropsychology (FHML), Phone: (0)43 38 81042, 40 Universiteitssingel West, Room 2.574, Email: p.martinez@maastrichtuniversity.nl - RM Neuropsychology Internships Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl - RM Psychopathology Internships Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81608, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl
Goals	Knowledge of: Conducting a (supervised) empirical research project and summarising the research and findings in the form of a master's thesis.
Instruction language	EN
Prerequisites	
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

Title	Clinical Internship, Research Proposal and Minor's Thesis
Period	2-6
Code	PSY5104, PSY5108, and PSY5105
ECTS credits	**20** (15, 1, and 4, respectively)
Organisational unit	Clinical Psychological Science (FPN)
Coordinator	Sandra Mulkens
Descriptions	Students specialising in Psychopathology are required to, and students specialising in Neuropsychology may choose to, conduct a 13-week clinical internship in an approved setting. The clinical internship can be conducted in conjunction with the research internship or separately. Students are required to submit an additional research proposal and scientific report (the minor's thesis) based on client/patient-based investigations performed during the clinical internship. The aims of the clinical internship are twofold. Firstly, the internship is meant to provide experience in conducting research in a clinical setting; a small-scale research project culminates in the minor's thesis. Secondly, the internship provides an introduction to the organisation and practice of mental health care, as well as basic experience in clinical diagnosis and therapeutic interventions. For neuropsychology students who choose to undertake a clinical internship, this internship and minor's thesis will be assigned 20 credits, and the research internship and thesis 30 credits. A detailed guide on clinical internships and the minor's thesis can be found on EleUM > FPN Research Master Students > Internships. Although not a requirement by the research master's programme, students who wish to meet Dutch requirements for admission to advanced clinical training programmes are advised to extend their clinical internship by at least two weeks. - RM Psychopathology Internships Coordinator: Nicole Geschwind, Clinical Psychological Science (FPN), Phone (043) 38 81608, 40 Universiteitssingel East, Room 2.767, Email: Nicole.geschwind@maastrichtuniversity.nl - RM Neuropsychology Internships Coordinator: Caroline van Heugten, Neuropsychology and Psychopharmacology (FPN), Phone (043) 38 84213, 40 Universiteitssingel East, Room 2.736, Email: caroline.vanheugten@maastrichtuniversity.nl
Goals	Knowledge of: The work environment of the clinical psychologist. This internship provides students with the opportunity to practise clinical skills in a real-life setting and to design and conduct a small-scale clinical research project.
Instruction language	EN
Prerequisites	
Recommended literature	
Teaching methods	Assignment(s) Paper(s) Patient contact Research

	Skills Training(s) Working visit(s)
Assessment methods	Attendance Final paper Observation Participation
Key words	clinical research, clinical practice, clinical training, psychodiagnostics, patient contact