Psychological Perspectives

Faculty of Psychology and Neuroscience

IPN1601

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

Credits:
0.0

Coordinator:
A.C. MartijnA.H. van der Lugt

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

Assessment methods:
Portfolio

Keywords:
evolution, behaviourism, emotions, brain, consciousness, perception, Learning, memory, thinking, reasoning, Personality, Development, groups, language, culture

Full course description

Psychology is all around us. Psychology permeates our everyday lives. It is therefore not surprising that the science of psychology has received great interest from behavioural scientists and the general public alike. We are all amateur psychologists. We all want to know what makes us and other people tick! However, our common sense understanding of how people think, feel and act is often misguided. The self-referential nature of psychology has caused some people to believe that psychology is not a science at all! This course will show you that psychology is a science, and that it encompasses the collaborative efforts of scientists from many different disciplines.
Psychology is the study of behaviour and mental processes, and as psychologists we aim to describe, understand, predict, and sometimes change behaviour. Psychologists study human behaviour and mental life from different perspectives (i.e. biological, individual and social) and at different levels of analysis (from genes and the brain up to the social and cultural level). We will consider what these different approaches have to offer in our quest for an understanding of the human mind, the brain, and behaviour. Along the way, scientific methods of psychological research will be introduced by addressing some of the main questions that drive contemporary psychology: How do we experience fear or happiness? How do we (think we) see the world around us? How do we learn, remember and forget things? How can we be so smart and so stupid at the same time? Historical highlights and big

debates like mind-body and nature-nurture invite more philosophical reflection on the field of psychology.

There is no assessment for this module. You will only receive feedback on completed assignments.

Course objectives

1. engage in scientific inquiry about psychological processes
2. have a basic understanding of the various subfields of psychology as an academic discipline
3. have a basic understanding of methods of psychological research.
4. reflect on some of the big questions which played an important role in the history of psychology

Professional & life skills I

Faculty of Psychology and Neuroscience

IPN1603

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

Credits:
0.0

Coordinator:
S.A.J. WetzelsL.K. GollerE.B. de Sousa Fernandes Perna

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

Assessment methods:
Portfolio

Keywords:
mentoring, global citizenship, life skills, professional development, team work, Self-regulation, ethics, integrity

Full course description

The professional and life skills (PLS) modules in your bachelor will present a series of teaching and learning activities that will help you develop skills and mental habits for 21st century academics. You will collect outputs of these activities in a portfolio, on which you will reflect individually and with your mentor as your study progresses. The PLS modules bring together a number of learning arcs related to diversity skills, ethics, self-reflection and personal growth, academic writing and presenting, and both specific (e.g., psychodiagnostic assessment skills) and general professional skills (e.g., teamwork and project management skills). These learning arcs are aligned with each other, as well as with the SICT and Core modules. For instance, when you write a personality diagnostic report, you will hone professional psychodiagnostic skills, writing skills, diversity skills, statistical analysis skills while building on personality psychological knowledge acquired in the core module.

This module will start with an introduction to the collaborative and self-directed skills you need in our Problem-Based Learning environment. These guide you to become independent and enterprising problem solvers. In order to achieve this goal, teaching at UM extends beyond the traditional lecture-based education. You will often work in small groups on concrete problems. As a team, you analyse problems, attempt to understand the underlying theories and learn to apply your knowledge to

realistic situations. To perform well in this educational system, it is important to understand its background and key elements. Therefore, in the first weeks of your study you will familiarise yourselves with Problem-Based Learning, communication skills essential for learning in groups, teambuilding, and with the facilities and online services for students at FPN (e.g., library support for developing information literacy).

Communication
Critical reading and writing assignments are dispersed throughout the year. The writing learning arc starts with identifying the basic building blocks of a text. In period 1, aligned with critical thinking and argumentation assignments in SICT 1, you will analyze and identify the basic argument structure of texts that are relevant for the core module. Subsequent assignments in future periods focus on formulating pieces of academic texts, honing both information literacy and writing skills. You will also explore how to make best use of AI tools, mindful of the risks that learners run when they overrely on machine co-intelligence (e.g., skill degradation, ethical challenges).

In period 2, you will provide feedback on already written sections of text keeping in mind the academic standard and APA guidelines. Moreover, you will start writing the first sections of a paper yourself as well as building your own arguments. These writing assignments will be linked to the data that you will collect and analysed in the parallel learning lines.

In period 3, reading skills are at the center of attention when you read a book from a list of historically significant works compiled by FPN staff members. Staff members have adopted a book that they felt had a deep impact on their field of study and their personal, academic, or professional development. At the end of the period, you will discuss the contents of the book with peers who read the same book and with the teacher/researcher who adopted it. To maintain argumentation skills, you will visualize one of the book chapters in an argument map after a deep read of the chapter of your choosing. In the process, you will acquire a historical perspective on the field of psychology, and get to learn more about what life is like at academia from your living library person.

In period 4, personality diagnostic skills will be practiced by writing reports, working on information literacy (including the development of a critical stance towards less scientific vs. more scientific/clinically applied measures and evaluating them accordingly). Additionally, observation and critical thinking exercises (identifying fake news, writing a scientific rebuttal, and delivering a presentation on Sustainable Development Goals) will complete this period.
The professional and life skills (PLS) modules in your bachelor will present a series of teaching and learning activities that will help you develop skills and mental habits for 21st century academics. You will collect outputs of these activities in a portfolio, on which you will reflect individually and with

your mentor as your study progresses. The PLS modules bring together a number of learning arcs related to diversity skills, ethics, self-reflection and personal growth, academic writing and presenting, and both specific (e.g., psychodiagnostic assessment skills) and general professional skills (e.g., teamwork and project management skills). These learning arcs are aligned with each other, as well as with the SICT and Core modules. For instance, when you write a personality diagnostic report, you will hone professional psychodiagnostic skills, writing skills, diversity skills, statistical analysis skills while building on personality psychological knowledge acquired in the core module.

This module will start with an introduction to the collaborative and self-directed skills you need in our Problem-Based Learning environment. These guide you to become independent and enterprising problem solvers. In order to achieve this goal, teaching at UM extends beyond the traditional lecture-based education. You will often work in small groups on concrete problems. As a team, you analyse problems, attempt to understand the underlying theories and learn to apply your knowledge to realistic situations. To perform well in this educational system, it is important to understand its background and key elements. Therefore, in the first weeks of your study you will familiarise yourselves with Problem-Based Learning, communication skills essential for learning in groups, teambuilding, and with the facilities and online services for students at FPN (e.g., library support for developing information literacy).

Communication
Critical reading and writing assignments are dispersed throughout the year. The writing learning arc starts with identifying the basic building blocks of a text. In period 1, aligned with critical thinking and argumentation assignments in SICT 1, you will analyze and identify the basic argument structure of texts that are relevant for the core module. Subsequent assignments in future periods focus on formulating pieces of academic texts, honing both information literacy and writing skills. You will also explore how to make best use of AI tools, mindful of the risks that learners run when they overrely on machine co-intelligence (e.g., skill degradation, ethical challenges).

In period 2, you will provide feedback on already written sections of text keeping in mind the academic standard and APA guidelines. Moreover, you will start writing the first sections of a paper yourself as well as building your own arguments. These writing assignments will be linked to the data that you will collect and analysed in the parallel learning lines.

In period 3, reading skills are at the center of attention when you read a book from a list of historically significant works compiled by FPN staff members. Staff members have adopted a book that they felt had a deep impact on their field of study and their personal, academic, or professional development. At the end of the period, you will discuss the contents of the book with peers who read the same

book and with the teacher/researcher who adopted it. To maintain argumentation skills, you will visualize one of the book chapters in an argument map after a deep read of the chapter of your choosing. In the process, you will acquire a historical perspective on the field of psychology, and get to learn more about what life is like at academia from your living library person.

In period 4, personality diagnostic skills will be practiced by writing reports, working on information literacy (including the development of a critical stance towards less scientific vs. more scientific/clinically applied measures and evaluating them accordingly). Additionally, observation and critical thinking exercises (identifying fake news, writing a scientific rebuttal, and delivering a presentation on Sustainable Development Goals) will complete this period.

Finally, in period 5, three writing assignments linked to course content (viz. psychopathology) invite you to write an informal/laymen paper on the impact of disorders on society, an academic argument on the disease/choice model of addiction, and an argument on the impact of ecoanxiety on well-being.

Professional skills: Observing behavior
Psychology aims to draw conclusions about human behaviour. To do so, these behaviours must first be identified. Behavioural observation is one method of identification and involves collecting data that can be used to draw conclusions about certain behaviours. Psychologists in training must therefore become familiar with methods of behavioural observation. In period 3, you will discover how to draw systematic observations in a naturalistic setting (e.g., studying social play behavior in primates).

Professional skills: Clinical and psychodiagnostic skills
Throughout the year, you will complete brief assignments that will hone your psychological conversation technique skills, e.g., attending behavior and non-selective listening skills (e.g., encouraging); selective listening skills (e.g., asking questions, paraphrasing, summarizing and reflection of feelings); regulating skills, and dealing with intense emotions. These assignments will be offered in TrainTool, software that allows for peer-to-peer training of communication skills. In year 2, you will further develop your psychological communication skills, focusing on conversations that aim to clarify a problem. Eventually, some of you will acquire mentoring skills in year 2 and serve as psychological wellbeing coaches for first year bachelor students in your fifth semester.

In period 4, assignments connect to the social and personality psychological themes in the core course. You will critically investigate personality assessment in terms of its scientific (objective) value, moving from tools that are considered less scientific to tools that are more acknowledged in the field

(and have been validated accordingly). You will progress from reflecting on and observing healthy individuals towards reflecting on and observing clinical profiles. Finally, in the context of individual differences and personality, you will progress from self-assessment of your own personality (Myers-Briggs type indicator) towards observing and assessing another individual's personality (HEXACO), finishing with investigating on clinical profiles (e.g. Dark Triad Test).

In period 5, assignments focus on developing diagnostic skills such as administering, scoring and interpreting instruments frequently used to express experimental and clinical paradigms (or function domains) quantitatively. The key function domains for this module are memory, executive functions and attention. After learning about experimental possibilities and clinical applications of each instrument, you will practice using these instruments on your peers and experience first-hand the rules, successes and frustrations each instrument brings with it. After practicing these tests individually, you will analyse a complex case study describing a client with cognitive complaints who takes a neuropsychological exam. You will explore whether an underlying disorder may cause the complaints.

Life skills
Life skills encompass transversal skills and associated graduate attributes increasingly valued by employers and society at large. Perhaps more importantly, these skills facilitate personal growth and help individuals find a sense of purpose. They include diversity skills, critical self-reflection, creative problem-solving, systems thinking, interpersonal and teamwork skills. Associated graduate attributes include virtues such as curiosity, integrity, resilience, courage, and empathy.

In the first year, the focus of educational activities targeting life skills will be on personal development through character strength (CS) exercises, improvisational theater, and self-reflection in a portfolio. Improvisation exercises are aimed at enhancing resilience and one's ability to connect with peers. CS exercises stimulate the development and application of signature strengths by focusing on strength identification, strength exploration, perspective taking (intercultural awareness/intersectionality) and strength use/application in novel contexts. A privilege exercise will make you aware of diversity, positionality and intersectionality, as will an interview that you will conduct with a culturally distant member of society. Additionally, as you will be building a portfolio over the course of the academic year and systematically asking for and receiving feedback on your work, you will engage with constructive feedback techniques to facilitate your personal and professional development.

Self-reflection on both personal and academic development will be documented in a personal portfolio throughout the entire bachelor programme. Through continuous reflection you enhance

self-awareness by learning about others and yourselves, by accessing your thoughts, by regulating emotions and by focusing attention to perform better socially, emotionally and academically. For instance, a lifecrafting intervention will help you reflect on purpose and meaning in life (based on personal values and passion). You will make concrete plans to work toward this purpose in a structured manner, which will help guide personal and professional development in the second bachelor year.

The portfolio should stimulate critical reflection on your progress at the competency level, not the module level. As meaningful learning happens when you habitually try to make sense of your study experiences, you will continuously update your portfolio, share and discuss your reflections with your mentor-coach and with peers, and send a substantiated analysis of your competence development to your mentor at the end of the year. You will also discuss your life as a beginning student with a third year peer, who will have received relevant training for becoming a student well-being coach in their second year. Discussions with third year students (near-peer mentoring) during the first semester are expected to help you find your bearings in a new academic learning environment.

Course objectives

1. identify and visualize basic argument structures in simple and complex texts
2. search for scientific findings and use them to build a comprehensive argument
3. present ideas and knowledge in a comprehensive manner in front of a small audience of peers
4. retrieve and evaluate quality of references (books, articles, websites) and find library services and support
5. apply behavioural observation techniques, like systematic behavioural observation, use a behavioural classification system and judge the reliability of observations
6. explain how behaviour of people can be systematically observed during test administration
7. explain personality diagnostic methods
8. execute a personality assessment, i.e. to take and interpret personality questionnaires and observer reports (self and observer questionnaires), calculate personality scores, and to present the results of a personality assessment in a formal report
9. describe the diagnostic cycle and understand the role of neuropsychological tests
10. administer and score neuropsychological tests assessing memory and executive functions and learn how to interpret the results
11. generate hypotheses regarding the well-being of a person based on observations and test results
12. recognize and use basic psychological communication techniques (incl. non-selective and selective listening techniques)
13. understand how to lead, adapt one's performance and communicate in a diverse group
14. use AI tools to support performance in an ethically responsible way
15. identify one’s signature character strengths and apply them in different contexts
16. analyse, evaluate, and reflect on functioning (study behaviour, PBL skills, study progress and personal development)

17. create a structured portfolio in which analyses, evaluations, and reflections are discussed systematically
18. explain the importance of personal values (e.g., integrity, benevolence, honesty, social intelligence) in building strong relationships with others and adopt values that build community in tutorial groups
19. recognize self-regulation strategies (e.g., self-reflection, time management) and the link between efforts in self-management and achievement
20. incorporate feedback from tutors/mentors and peers

Scientific Inquiry/Critical Thinking I

Faculty of Psychology and Neuroscience

IPN1604

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

Credits:
0.0

Coordinator:
M.G.F. Colombi

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

Assessment methods:
Portfolio

Keywords:
Critical thinking, logic, argumentation

Full course description

The scientific inquiry/critical thinking learning arc in the bachelor contains teaching and learning activities that help you develop scientific reasoning and problem solving competencies, effective research methods and statistical analysis skills, and computational literacy. This first module prioritizes critical thinking and statistics.

Critical thinking involves more than just a critical attitude: it is a collection of complex cognitive skills which are at the core of human thinking and reasoning. In the first half of this module, you are introduced to some of the most important obstacles to understanding ourselves and the world around us. We appear to be cursed by biases, fallacies and illusions. You will learn to use some of the basic tools of scientific inquiry such as logic, basic statistical reasoning and information literacy. These tools enable you to deal with uncertainty and help you to think straight about psychology. By using these tools, you will dissect arguments and analyse their core structure.

The theoretical introductions of the main themes in academic psychology in the first core module are complemented with a more practical introduction of these complex cognitive skills that are important for scientific inquiry and critical thinking. We aim to build bridges of meaning between, for example,

research on human reasoning and logic. During the course, you will also practice your critical thinking skills in writing and speaking.

Course objectives

1. distinguish correlation from causation
2. recognise biases and fallacies
3. apply basic principles of logic
4. apply various descriptive statistical analysis techniques, such as univariate methods as well as bivariate methods and explain when application of these techniques is appropriate
5. analyse, build and evaluate arguments

Portfolio Year 1

Faculty of Psychology and Neuroscience

IPN1721

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

Credits:
60.0

Coordinator:
S.A.J. WetzelsH.T.H. FonteijnE.B. de Sousa Fernandes Perna

Teaching methods:
Assignment(s)

Assessment methods:
Portfolio

Keywords:
Portfolio, Self-regulation, feedback, feedforward, competency development, learning goals, reflection

Full course description

The bachelor's portfolio is an instrument with which the competence development and related longitudinal throughlines or learning arcs can be identified and managed by the students and supervised by a mentor-coach. It contains a collection of work that showcases your competencies, skills, and knowledge in various areas. Portfolios can include a wide range of evidence, from academic work to extracurricular activities and self-initiated projects, offering a comprehensive view of your abilities and achievements. It includes reflections that provide insights into how you understand your learning process, how you overcome challenges, and how you apply your knowledge and skills in different contexts. The portfolio holds fixed components that help you reflect on your progress toward goals, identify areas for improvement, and set meaningful objectives for the future. At the end of the year the portfolio and the performance information it holds allows you to write a substantiated analysis of competence development which is evaluated in an integrated way as part of the bachelor competency exam year 1. In the first year, special attention is paid to learning to recognise and analyse learning experiences.

To discuss your development and to practice and get used to working with the portfolio, you have at least four individual meetings with your mentor-coach in year 1. The portfolio must be updated before every mentor meeting. To this end you will continuously gather information during the year

(feedback, assessments, evaluations, tests). Your portfolio will not only hold feedback, but also indicate how you subsequently used this feedback, for instance to help derive new learning goals (feed-up) or directions for future learning (feedforward). You will reflect on self-regulation strategies, on how you accepted feedback of peers, teachers and mentors, how you used it to improve task performance, and to identify (self-care) strategies that build resilience in relation to failed efforts or unpleasant events. Reflection on portfolio content will also help you begin to identify patterns in past choices and outcomes, assess their effectiveness, and apply this insight to make better decisions in the future. Finally, it will help you identify academic and career options based on your personal interests and values

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

Course objectives

1. Describe self-regulation strategies that can improve performance
2. Accept feedback from peers, educators, and mentors to improve task performance
3. Identify self-awareness and self-care strategies to promote high-quality performance
4. Describe strategies that build resilience in relation to failed efforts or unpleasant events
5. Identify academic and career options based on personal interests and values
6. Reflect on one's progress toward personal goals, identify areas for improvement, and set meaningful objectives for the future.
7. Gain a deeper understanding of one's thoughts, feelings, values, and behaviours
8. Identify patterns in past choices and outcomes, assess their effectiveness, and apply this insight to make better decisions in the future

Brain and Cognition

Faculty of Psychology and Neuroscience

IPN1621

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

Credits:
0.0

Coordinator:
F. DueckerT.W. Boonstra

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

Assessment methods:
Portfolio

Keywords:
brain, cognition, neuroscience, neuroanatomy, perception, attention, memory, motor control, Cognitive Control, language

Full course description

Some people claim that we are our brains. This certainly is an exaggeration, but biological explanations of human behavior play a central role in psychology. This course provides an overview of how our brains work and highlights how cognition and behavior can be understood from a biological perspective.

You will learn about the structure and function of the central nervous system (functional neuroanatomy), and the various neuroscientific methods enabling us to measure and manipulate brain function with astonishing precision. From the pioneering steps in the 19th century that observed cognitive and behavioral changes resulting from brain damage to modern technology-driven approaches of neuroimaging and brain stimulation, you will unravel the mysteries of the brain. Equipped with this knowledge of brain organization, you will develop an understanding of how billions of neurons can underlie our rich repertoire of cognitive functions and behaviors.

You will learn about the brain processes that underlie our most important cognitive functions, including perception, attention, memory, motor control, cognitive control, and language. Using carefully crafted experiments, the study of the brain can answer an abundance of intriguing questions, such as: “How can we see the world around us?”, “Can we pay attention to more than one thing at a time?”, and “Why is it impossible to remember everything?” This course thus lays the

foundation for developing a biological understanding of the mind and the neurocognitive methods that are used to study it.
There is no assessment for this module. You will only receive feedback on completed assignments.

Course objectives

1. describe and compare the most important methods used in cognitive neuroscience to measure and manipulate brain activity.
2. describe the organization of the central nervous system across all relevant spatial scales, that is, from neurons to brain networks.
3. describe various cognitive functions, explain how they can be investigated with experimental tasks, and link them to the functional organization of the brain.
4. understand the contribution and relevance of the biological and cognitive perspective in psychology.
5. recognize brain structures in MRI images and use scientific terminology to refer to them

Scientific Inquiry/Critical Thinking II

Faculty of Psychology and Neuroscience

IPN1622

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

Credits:
0.0

Coordinator:
J. Schepers

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

Assessment methods:
Portfolio

Keywords:
statistics, analysis of variance, research integrity

Full course description

Empirical researchers test theories based on observed data. It is therefore important to acquire a set of skills that allow you to get to know these observed data. Hence, in the first part of this module you also learn how to apply various descriptive statistical techniques that help describe/summarize the univariate distribution of a single categorical or quantitative variable (including histogram, mode, mean, median, standard deviation, interquartile range) and the bivariate distribution of two categorical or quantitative variables (including correlation, association, contingency tables).

Finally, emphasis will be placed on the logic behind the statistical reasoning process when you study concepts that are central in inferential statistics (incl. random experiment, sample space, events, (un-) conditional probability, statistical (in)dependence, random variables, probability distribution, expected value and standard deviation, density curve, simple random sampling, parameters and (unbiased) estimators, population distribution, distribution of sample scores, sampling distribution, standard error, central limit theorem, null- and alternative hypothesis, one vs. two-tailed test, test statistic, z-test, p-value, significance level, power, Type I- and Type II-errors, confidence interval). These topics form the theoretical background that is necessary to understand the statistical techniques that are covered in the remainder of the bachelor program.

There are skills sessions to help prepare you to independently run statistical analyses (which is a learning goal in subsequent SICT modules of the bachelor). These sessions also aim to familiarise you with elementary programming concepts as you learn to use commands for manipulating and analyzing data in scripts.

During the second part of this SICT module in period 4 you will
familiarize yourselves with three of the most common statistical techniques used for analyzing between-subjects designs with a quantitative dependent variable: t-test, one-way and two-way ANOVA (incl. multiple comparisons, orthogonal versus non-orthogonal designs, main and interaction effects, confounding problems).

Subsequently, in period 5, you will learn how to analyze data from a between-subjects design with a categorical dependent variable (chi-square test) and from within-subject or mixed designs with a quantitative dependent variable (incl. one-way repeated measures analysis of variance, univariate versus multivariate analysis models, two-way repeated measures analysis of variance, split plot analysis of variance)

You will be given the opportunity to apply these techniques to several real data sets. By doing so, you will become more familiar with basic computational concepts that you will explore further when you learn to code in year two.

A final session will be devoted to principles and standards for good research practices. You become familiar with codes of conduct for research integrity, while looking back on some of the behavioral ethics problems you have encountered earlier in the year, and looking forward to the professional ethical dilemmas on which you will chew in year two. You will also critically reflect on your personal academic values as examples of plagiarism and data falsification are discussed.
During this session you will also look back on your experiences as research participant. As part of their Bachelor's examination, all Psychology and Neuroscience (FPN) students should be able to substantiate development of researcher competence by participating as research subjects in a minimum of twelve different scientific studies conducted at FPN. It is expected that you participate in at least six studies in the first year and at least six studies in year two of your Bachelor's program. You are also expected to ensure that the set of twelve studies in which you participate is varied in terms of study type (containing lab studies, multi-part studies (also onsite), and online studies) and covers the full breadth of research at the departments. For instance, you could participate in three online studies and nine lab studies including a mix of behavioural single studies, behavioural multi-part studies and imaging or TMS studies. (This variation in research types and research fields may be limited for students who cannot meet particular eligibility requirements). Only studies that are

awarded with SONA credits are eligible. You can find a list of available studies on the SONA system (accessible at maastricht-fpn.sona-systems.com), where you can register for participation. After participating in a study, you will complete a set of questions to help you reflect on how participating has shaped your understanding of research methods, ethical considerations, and how research is conducted at the Faculty of Psychology and Neuroscience.

Course objectives

1. explain the logic and aspects of the t-test, one-way and two-way between-subjects analysis of variance (ANOVA)
2. explain the logic and aspects of the chi-square test and various repeated measures ANOVA techniques
3. specify and explain assumptions of statistical tests, specify the conditions for robustness against violations of these assumptions and apply this knowledge when analysing data
4. apply all methods covered in this course on real data sets
5. work with software for running statistical analyses and interpret relevant output of tests
6. recognize and apply basic computational concepts in scripts
7. understand principles and norms for good research practices

Individuals in Context

Faculty of Psychology and Neuroscience

IPN1661

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

Credits:
0.0

Coordinator:
D. RenK.J. Karos

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

Assessment methods:
Portfolio

Keywords:
Social psychology; personality; individual differences; context; evolution; culture

Full course description

Can we know ourselves? How do we discover who we ‘truly’ are? How do people process, store, and apply information about other people and social situations? Which mistakes (biases) do they make in doing so? How do systems and structures in our social context – including culture – interact with our personality and evolved psychology, and how does this interaction subsequently influence our thoughts, feelings, and behavior? In this course, students will collaboratively try to find answers to these questions. In each tutorial session, two students will take the lead to discuss the content of the literature by using a real-life case/example to illustrate how social and personality psychology is embedded in our everyday lives. By reading and discussing the core literature, students will become acquainted with classic and recent theories, and empirical findings about a range of topics in social and personality psychology. In this manner, starting with 'me' - the self from a social psychological and personality perspective - and ending up at 'us' - groups and social identity - the course will illustrate how humans are fundamentally social beings. Throughout the course, there is attention for the (social) experiences that are common to all humans, but there will simultaneously be an emphasis on individual differences (including personality) and how these interact with - and are influenced by - other people, society, our genetic makeup, and the culture we live in. Throughout the course, there is attention for the application of knowledge and theory of social and personality psychology to wicked problems in society, and to methodology and statistics.

There is no assessment for this module. You will only receive feedback on completed assignments.

Course objectives

1. provide definitions of concepts central to social & personality psychology, such as group processes, stereotypes & prejudice, social influence, attitudes, social cognition, aggression, affiliation & attraction, prosocial behaviour, and self & identity
2. explain the relationships between these concepts, and between these concepts and the (social) context, including culture and genetics
3. distinguish classic and recent theoretical and empirical insights from social & personality psychology
4. discuss practical applications of social & personality psychology
5. name, evaluate, and analyze research methods and measurement techniques from social & personality psychology

Lifespan psychology

Faculty of Psychology and Neuroscience

IPN1681

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

Credits:
0.0

Coordinator:
F.C.L. DonkersK.P.C. Kuypers

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

Assessment methods:
Portfolio

Keywords:
development, biological and psychological theories, perception, cognition, emotion, language, psychological disorders, diagnostics, therapies

Full course description

This course bridges developmental and clinical psychology, offering an integrative exploration of human growth, behavior, and psychological well-being. You will examine the complex interactions among biological, psychological, and social factors that shape human development from conception through old age. The course provides an in-depth analysis of critical developmental processes, including: perceptual, cognitive, linguistic, and motor development, that is, how children learn to observe, think, and act in the world. Social and emotional development, including the pivotal role of attachment in early relationships and the influence of peer and group dynamics during adolescence will be addressed as well. A key focus will be understanding individual differences through a critical evaluation of major developmental theories and the exploration of normative and non-normative developmental trajectories. Key clinical conditions, including ADHD, schizophrenia, obsessive-compulsive disorder, depression, and dementia will be examined including psychological interventions, pharmacological treatments and emerging therapeutic modalities such as psychedelic-assisted therapy and mindfulness-based interventions. By integrating developmental and clinical perspectives, the course provides a well-rounded view of human psychological development, variation within it, and potential paths for intervention.

Course objectives

1. reproduce the stages of pre- and postnatal brain development, and understand concepts relevant in the context of growing and the biological development of the central nervous system
2. summarize the processes and (age-related) changes relevant to developmental psychology and explain relevant developmental theories
3. explain how perception, cognition, language emotions, and social skills develop over time
4. understand, analyze, and evaluate research and research methods published in the field of developmental and clinical psychology
5. explain the DSM-5 classification, have knowledge about RDoC (Research Domain Criteria) framework
6. distinguish and explain the prevalence, clinical picture, and diagnostic criteria for several frequent psychological disorders
7. describe and discuss theories and research on the etiology (e.g., cognitive biases, learning processes, neurotransmitters, and genetic factors) of these psychological disorders
8. describe/explain customary therapies (e.g., cognitive and behavioural therapy, schema-focused therapy, and psychopharmacology) and their effectiveness for these psychological disorders

Psychological Literacy

Faculty of Psychology and Neuroscience

IPN2601

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

Credits:
0.0

Coordinator:
K. MassarA. Sambeth

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

Assessment methods:
Portfolio

Keywords:
Psychological literacy, applied psychology, ethics, teamwork

Full course description

This module will invite you to become more psychologically literate, i.e. able to apply psychological science to complex professional/societal problems. In doing so, you will be introduced to the full breadth of the field of psychology. To boost your perceived employability, you will prepare and deliver introductory presentations in small groups on history, current scientific debates and working practice in a psychological (sub)discipline (e.g., work and organizational psychology, educational psychology, health psychology, legal psychology, clinical neuropsychology, behavioural neuroscience, cultural psychology or a field associated with another one of the 54 APA divisions). In addition, you will explore how these fields expect to contribute to solving grand challenges of our time (e.g., climate crisis, diversity and inclusion, digital transformation or sustainability).
As you expand your knowledge about psychology, you will work in small teams together with stakeholders outside academia on authentic, locally meaningful or wicked problems. In doing so, we will deviate from classic PBL and integrate elements from research-based, challenge-based and community engaged learning. For instance, in the first two weeks you will define the problem that will guide your team's activities, together with a stakeholder outside academia. Learning to deal with the ambiguity and complexity of a real-world problem, taking multiple perspectives into account, should hone problem framing skills that you will need when you work in diverse, interdisciplinary teams on complex problems after graduation (like for instance, stakeholder analysis and systems

thinking skills). After the external stakeholder has agreed with your group's project plan, you will analyse the problem, and find plausible explanations for the problem by consulting relevant psychological literature. Where appropriate, other sources can be consulted. To this end, a number of assignments will acquaint you with tools for qualitative research (e.g., focus group and interview techniques). In weeks six to nine, your team will integrate your findings in a process model which in turn should help you develop interventions in weeks ten to thirteen. Meetings with your project mentor every other week, team charters and logbooks, peer reviews of project plans, and midterm and final presentations offer opportunities to gather feedback on both process and outputs of your project group. In the last two weeks, your team will write a report that will be assessed by peers, your mentor, and external stakeholders.

While the teaching and learning activities above involve teamwork, you will also be challenged individually. From week 5 onwards, you will imagine how you could put psychological competences to creative use and explore your (social) entrepreneurial mindset. Here, you will first focus on setting a vision for yourself and the value you wish to add with your initiative and on opportunity identification, looking at the world of work for psychologists. Here, a creativity workshop will serve a dual purpose, helping you ideate on future value creation and innovation while your group explores the space of possible interventions. Next, you will learn to use tools like value proposition maps to guide the search for information on how to create social or economic value. In addition, you will analyse the external environment, e.g., by desk research or interviewing stakeholders. Finally, you will pitch your proposal in the presence of a jury of psychologist-entrepreneurs. Together with your study of a psychological subdiscipline or interest group and your psychological literacy project work, the exploration of your entrepreneurial mindset will deepen your awareness of the employability of psychology graduates, and the contribution psychological science can make to tackle today's challenges.

Course objectives

1. apply psychological science to an authentic problem
2. acquire basic knowledge of psychological subdisciplines and interest groups
3. take perspectives of other (sub)disciplines and stakeholders outside academia
4. deal with uncertainty and complexity while framing a problem definition
5. reflect on ethical and moral dimensions of applied psychological problems
6. engage in creative problem solving while designing an intervention and exploring one's entrepreneurial mindset
7. evaluate teamwork processes
8. manage a project
9. apply methods of data collection in qualitative research (interview, focus groups)

10. communicate effectively with different audiences (peers, professionals, mentors, clients, stakeholders)
11. self-regulate and critically self-reflect on what is learned
12. Recognize the employability of psychology graduates

Scientific Inquiry/Critical Thinking III

Faculty of Psychology and Neuroscience

IPN2602

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

Credits:
0.0

Coordinator:
N.M.H. GijzenJ. Schepers

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

Assessment methods:
Portfolio

Keywords:
Statistics, psychodiagnostics, clinical reasoning

Full course description

The first part of this module targets reliability and factor analysis, the analysis of tests and questionnaires that forms the statistical background for the second part of the module, which focuses on psychodiagnostics.

Reliability analysis is a classical psychometric method for analyzing tests and questionnaires. Often, subjects' answers to multiple-choice questions (items) are scored dichotomously and summed to give a total score for e.g. intelligence or attitude. In doing so, one assumes that these items measure the same thing. Reliability analysis can verify whether each item fits into the scale and how reliable the total score is. In the course, you receive a training in classical psychometrics and an introduction into modern psychometrics (the Rasch model).
Factor analysis is a method used to reduce a multitude of variables to a small number of underlying factors. In the past, factor analysis was used to reduce the scores on various tests to a small number of dimensions, such as verbal and spatial intelligence, or extraversion and neuroticism. Nowadays, factor analysis is more often used to group items of one questionnaire into sub-scales. Factor analysis is thus related to psychometrics. In a skills training you will practice application of the corresponding statistical techniques on real or realistic data. Again, these sessions further deepen your knowledge

of elementary programming concepts as you learn to perform data manipulation and analysis in scripts.

Examples of questions that psychologists have to answer in practice are:

- Suppose a student has to develop a questionnaire for his master thesis that simplifies the career choice (and thus the choice of continuation education) of pupils. Advise the student where to start and/or what to pay attention to;
- Suppose you get the question to determine the intelligence of a client who has only lived in the Netherlands for three months and therefore speaks little Dutch. Can you utilise the standard IQ test, with or without the help of an interpreter? Or should you make adjustments? And is that allowed?

Illustrated by such practical problems and/or questions, tasks cover the meaning of psychometric concepts such as reliability, validity, standardisation/norms, instrument type (questionnaires and tests), and sources of misinterpretation of diagnostic results. You will recognise diagnostics as a decision making process. Psychodiagnostics is made-to-measure and requires specific knowledge but also flexibility and creativity. Shortcomings in decisions by the use of cognitive heuristics are put in the perspective of the old controversy between clinical and statistical prediction. You will also explore the application of Bayesian statistics within psychodiagnostics. Finally, you will be introduced to the ethical professional code of the NIP (Dutch Institute of Psychologists) and the general standard test practices. You will deepen the insight into the principles and measurement problems in psychology.

Finally, since your project work in these periods includes a focus on intervention design, you will learn more about single case experimental design in which a researcher manipulates an independent variable while repeatedly measuring a dependent variable before and after an an intervention is introduced.

Course objectives

1. apply various descriptive statistical analysis techniques, such as univariate methods as well as bivariate methods and explain when application of these techniques is appropriate
2. explain relevant concepts central to this module, including inferential statistics, classical psychometrics, reliability, modern psychometrics, item response theory, Rasch model, and Bayesian concepts within psychodiagnostics (e.g., sensitivity, specificity)
3. explain and apply reliability analysis (including item analysis) and exploratory factor analysis, and interpret relevant output of these techniques
4. specify the assumptions of statistical techniques that were discussed in this module and are able to apply this knowledge when analyzing data.
5. work with software for running the statistical analyses discussed in this module and interpret the results
6. apply all statistical methods covered in this course on a dataset

7. recognize and apply basic computational concepts in scripts
8. to explain how test results of psychodiagnostics should be interpreted, and identify sources that lead to distortion of test results (i.e., bias, multicultural testing)
9. demonstrate clinical reasoning to arrive at a justifiable diagnosis apply
10. know and understand the ethical professional code of the NIP and standard test practices.

Professional & Life Skills II

Faculty of Psychology and Neuroscience

IPN2603

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

Credits:
0.0

Coordinator:
J.J. López CuelloS.A.J. WetzelsH.T.H. Fonteijn

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

Assessment methods:
Portfolio

Keywords:
Psychological communication, psychodiagnostics, intercultural communication, ethics, project management, teamwork, career perspectives

Full course description

Communication

Several opportunities for sharpening your writing and presentation skills are offered throughout the year, including writing group reports on core module assignments (in periods 1, 2, 4 and 5), individual reports (period 2), group presentations (periods 1, 2, 4 and 6) and individual presentations (period 2), as well as debates (period 1, 2) and communication via visual products like infographics and posters (period 4, 6).

Professional skills: Clinical and psychodiagnostic skills

Psychological communication exercises in year 1 served to make you aware of and practice techniques you can use when you direct conversations with others. In year 2, you will further expand your psychological communication skill set through exercises with peers that hone your ability to clarify a problem, to listen actively, to ask probing questions, show empathy, and use metacommunication techniques. In addition, several assignments will target conflict management and negotiation. In the second part of the year, you can either opt for interpersonal skills exercises focused on mediation/negotiation or for mentoring/coaching skills exercises that prepare you for psychological wellbeing coaching sessions with first year students in year 3. In these sessions you are

prepared to conduct a conversation with a fellow student aimed at finding out "a problem," using basic psychological interviewing techniques. You learn to maintain control of the conversation, determine goals for a follow-up interview and master the signaling and referral function. Caring Universities modules as well as Traintool are used as alternative forms of work in addition to the training meetings.

A psychologist is often consulted in the context of diagnostics and selection, usually following a referral question raised by another professional or by another person (such as a parent or a partner). Psychologists often complete a so-called ‘diagnostic’ cycle to find answers to the above-mentioned referral questions. While completing this cycle, the psychologist will raise questions like: What is the exact referral question? What are the hypotheses in this case? What test do I need to administer in order to test these hypotheses and when will I accept (or reject) my hypotheses? How do I interpret the data that I receive after completing the planned test administrations? What do I recommend based on this interpretation, or what is my conclusion? And, looking back, did I make the correct choices during this whole process? Finally, what ethical issues played a role in this case? In the third semester, you will practice choosing, administrating, and interpreting various psychological tests and get "hands on" experience in what steps one needs to take in order to "help" a person answering a referral question. You will also, as a group, write a report on this process (including a reflection on it).

Life skills

In the second bachelor year, you will build on what you have learned about your personal and academic development, and integrate this with your future career perspective through project-based learning and continuous self-reflection. The focus will be on professional development and sustainable employability (job crafting) by stimulating students to reflect on the alignment between self-endorsed (as opposed to socially prescribed) goals and personal values/passion. You will evaluate methods/techniques that can enhance goal-congruency and are linked to well-being. While you engage in project-based learning in periods 1 and 2 and apply psychology and neuroscience to an authentic problem presented by outside stakeholders, workshops will help you to enhance creative problem solving skills. Interaction with external stakeholders and critical reflection on how you as psychology students could make a valuable contribution to a real life problem will feed into debates on ethical dilemmas. These will be addressed in a number of plenary sessions, which can prepare you for ethical challenges that you will encounter in your (working) lives.

Project work in periods 1, 2, 5 and 6 also provides the backdrop for assignments that target your teamwork, project management and stakeholder engagement skills. For instance, a group assignment in periods 1 and 2 challenges you to collaborate online with students from another part of

the globe on a topic that your culturally diverse group of students consider to be meaningful. This assignment gives you an opportunity to experience working in distributed multi-cultural teams. In your future career, you will probably encounter many opportunities to collaborate with co-workers online. Reflection on intercultural differences and collaboration in (virtual) teams should help you manage uncertainty and hone perspective taking skills that are needed in these work environments.

You will follow elective courses in the fifth semester and will be required to submit your choices halfway through your second year. Electives provide excellent opportunities to develop specific skills and/or a broad academic profile. This is what you will be focusing on by updating your portfolios with information acquired in the second year of the program, most notably in period 3, where you will get a taste of what electives, bachelor specialisations and master programs in Maastricht have to offer. In period 3 you will also discuss your study progress and elective course choices with your mentor, practice writing application letters and a curriculum vitae and receive a Quick Career Advice from UM Career Services. All this will help you answer questions like What is left to learn? What do you still need before the end of your bachelor?

Finally, 8 training sessions of 2 hours are planned with the aim of training students who are considering the clinical specialisation in year 3 to become student practitioners. The student is expected to be able to have a conversation with a fellow student that is aimed at asking about “a problem”, using psychological interviewing. Caring Universities modules and Traintool are used as alternative working methods in addition to the training sessions.

Course objectives

1. attend to language and nonverbal cues to interpret meaning
2. express ideas in written/oral formats that reflect basic psychological concepts/principles
3. analyze and effectively adapt to intercultural differences in communication
4. improve collaborative problem solving skills, like creating a shared understanding of a problem, taking appropriate action to complete an assignment, and establishing and maintaining team organization
5. design an evidence-informed intervention for boosting a learning outcome in a culturally different educational context
6. understand how challenges to virtual team work in culturally diverse groups can be overcome
7. identify ethical aspects in different steps of the diagnostic process
8. choose, administer and interpret various psychological tests
9. write a scientific report on the steps of the diagnostic cycle, and reflect on it
10. explain how individual differences, social identity, and worldview may influence beliefs, values, and interaction with others and vice versa
11. recognize potential prejudice/discrimination in oneself and others

12. can recognize/identify aspects of individual and cultural diversity and associated interpersonal challenges
13. to analyze personal progress in developing competences and to (self-) reflect on these skills in a portfolio
14. to set goals regarding further development of one's skills
15. to make choices regarding the elective courses and specialization based on one's personal goals and on the information acquired in the second year of the bachelor's programme
16. reflect on one's personal development, goals, and choices in the portfolio

Portfolio Year 2

Faculty of Psychology and Neuroscience

IPN2721

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

Credits:
60.0

Coordinator:
S.A.J. WetzelsH.T.H. FonteijnE.B. de Sousa Fernandes Perna

Teaching methods:
Assignment(s)

Assessment methods:
Portfolio

Keywords:
Portfolio, competence development, self regulation

Full course description

The bachelor's portfolio is an instrument with which the competence development and related longitudinal throughlines or learning arcs can be identified and managed by the students and supervised by a mentor-coach. It contains a collection of work that showcases your competencies, skills, and knowledge in various areas. Portfolios can include a wide range of evidence, from academic work to extracurricular activities and self-initiated projects, offering a comprehensive view of your abilities and achievements. It includes reflections that provide insights into how you understand your learning process, how you overcome challenges, and how you apply your knowledge and skills in different contexts. The portfolio holds fixed components that help you reflect on your progress toward goals, identify areas for improvement, and set meaningful objectives for the future. At the end of the year the portfolio and the performance information it holds allows you to write a substantiated analysis of competence development which is evaluated in an integrated way as part of the bachelor competency exam year 2. In the second year, special attention is paid to identifying personal, academic and career options for the third year of your study and beyond.
To discuss your development and to practice and get used to working with the portfolio, you have at least three individual meetings with your mentor-coach in year 2. The portfolio must be updated before every mentor meeting. To this end you will continuously gather information during the year (feedback, assessments, evaluations, tests). Your portfolio will not only hold feedback, but also

indicate how you subsequently used this feedback, for instance to help derive new learning goals (feed-up) or directions for future learning (feedforward). You will reflect on self-regulation strategies, on how you accepted feedback of peers, teachers and mentors, how you used it to improve task performance, and to identify (self-care) strategies that build resilience in relation to failed efforts or unpleasant events. Reflection on portfolio content will also help you begin to identify patterns in past choices and outcomes, assess their effectiveness, and apply this insight to make better decisions in the future. Finally, it will help you identify academic and career options based on your personal interests and values

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

Course objectives

1. Describe self-regulation strategies that can improve performance
2. Accept feedback from peers, educators, and mentors to improve task performance
3. Identify self-awareness and self-care strategies to promote high-quality performance
4. Describe strategies that build resilience in relation to failed efforts or unpleasant events
5. Identify academic and career options based on personal interests and values
6. Reflect on one's progress toward personal goals, identify areas for improvement, and set meaningful objectives for the future.
7. Gain a deeper understanding of one's thoughts, feelings, values, and behaviors
8. Identify patterns in past choices and outcomes, assess their effectiveness, and apply this insight to make better decisions in the future

Mind

Faculty of Psychology and Neuroscience

IPN2661

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

Credits:
0.0

Coordinator:
M. SendenM. Capalbo

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

Assessment methods:
Portfolio

Keywords:
Cognitive science, consciousness, computational models, human-machine interaction

Full course description

This module covers foundational philosophical aspects of computational thinking as well as attempts to model the mind computationally. Nowadays, psychological hypotheses are often specified in the form of computational models. Precision, transparency and the heuristic value of these models on the one hand, and the availability of sufficient computing capability on the other explain their popularity. Cognitive psychological theories have for long periods of time relied on symbolic architectures to make sense of human problem-solving, reasoning and knowledge acquisition or on connectionist models to describe aspects of human learning, memory, perception and attention. In this course, you will discuss several influential architectures and algorithms, in conjunction with various biopsychological phenomena that shaped them.

You will revisit some of the topics you covered in the first year with special attention to computational thinking. The parallel SICT module will help you appreciate the literature covering models of auditory perception, visual attention, Hebbian learning, the hippocampus, problem solving and decision making.
This module will also build on some of the foundational debates that classical cognitive science has triggered. Topics like dynamical systems theory and the role of time, and the importance of the physical and social environment for 4E (i.e., embodied, embedded, enacted, extended) cognition will

be addressed. The latter interests will manifest in problems focusing on distributed cognition, human factors and neuroergonomics, human-machine interaction, and brain-computer interfaces. These topics also invite you to reflect on the nature of artificial intelligence, our ability to forecast future technological developments, changes in the division of labour between humans and machines and how these will impact psychological practice.

Finally, you will be immersed in foundational debates on consciousness, with tasks focusing on the philosophical problems related to consciousness, awareness and attention, the neurophysiological correlates of consciousness, altered states of consciousness and research by Libet into the neurophysiological correlates of free will and criticisms to it.

Course objectives

1. explain selected theories and cognitive models of attention, learning, decision making and problem solving
2. interpret the impact of AI and digitalization on (cyber)psychology and on the future of work in general and man-machine interaction in particular
3. understand foundational issues in the philosophy of cognition (functionalism, easy/hard problems of consciousness, free will)
4. reflect on how cognitive scientists have faced challenges to classical cognitive science (e.g., by focusing on the role of time, consciousness and the social and physical environment)
5. explain the unity of consciousness and associated disorders of consciousness
6. retrieve the neural correlates of consciousness and distinguish paradigms in consciousness research

Scientific Inquiry/Critical Thinking IV

Faculty of Psychology and Neuroscience

IPN2662

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

Credits:
0.0

Coordinator:
M. CapalboJ. Schepers

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

Assessment methods:
Portfolio

Keywords:
Coding, computational literacy, statistics, multiple linear regression,

Full course description

The computer and the computer metaphor are everywhere in everyday life. For example, not a day goes by that we do not use a programmable device, and many people perceive memory as ‘storage space’. In modern psychological science, computing is just as, if not more, essential. Two pillars of cognitive science are computation and representation, both directly from computer science. In modern behavioral neuroscience, programming is essential for data acquisition and data analysis. Computational neuroscience has added substantially to our understanding of neurons and brains. Statistics, an essential part of the psychological method, also relies heavily on computing. You have already seen examples of the use of programming in earlier courses, where you have used small programs to collect and analyze data.

One of the most important skills you will further develop during this course is to disentangle (apparently) complex problems into smaller problems and specify exactly how to solve these smaller problems. The result is called an algorithm. In specifying these algorithms, you will learn the essentials of procedural programming. You will practice with exercises that start simple and will get gradually more complex. In the process, you will learn about computation, representation, and the basic elements of neural networks. You will be handing in assignments to show you have understood the principles and can apply them. There will be choice in the assignment you hand in, so you can

choose what is relevant for you. There will be assignments related to cognitive, biological, evolutionary and clinical psychology. In this way, you will develop your programming skills while working directly with the principles that are relevant to the whole field of psychology
We will teach you the programming language Python but mostly its underlying logic, algorithmic thinking, so you will be able to learn other programming languages more easily after completing this course.

In the second half of this course, you are familiarized with generalizations of the techniques used to analyze data from between-subjects studies (i.e., t-test, ANOVA and chi-square test). Specifically, you will learn how to include quantitative predictor variables in the analysis model (ANCOVA and, more generally, multiple linear regression) as well as what to do if the dependent variable is dichotomous and there is more than one predictor variable (three-way contingency table analysis and logistic regression).
ANCOVA is a generalization of one-way ANOVA that allows for one or more quantitative predictor variables. ANOVA and ANCOVA are both special cases of multiple linear regression. Three-way contingency table analysis is the equivalent of two-way ANOVA if the dependent variable is dichotomous instead of continuous (e.g., recovery from disease or passing an exam). It is therefore a generalization of the chi-square test to two categorical predictor variables (i.e., factors). Logistic regression analysis is a generalization of three-way contingency table analysis that allows for the inclusion of quantitative predictor variables. It is also a generalization of multiple linear regression that can be used if the dependent variable is not quantitative but dichotomous.
Central to our discussion of the methods in this class are two issues: adjusting the effects of multiple independent variables for each other (confounding) and studying interactions between predictor variables.
A skills training allows you to practice with the corresponding statistical techniques based on real or realistic data.

As part of their Bachelor's examination, all Psychology and Neuroscience (FPN) students should be able to substantiate development of researcher competence by participating as research subjects in a minimum of twelve different scientific studies conducted at FPN. It is expected that you participate in at least six studies in the first year and at least six studies in year two of your Bachelor's program.
See Scientific Inquiry/Critical Thinking II for more details.

Course objectives

1. understand variables, types, type-conversion, operators algorithms, control-flow, subroutines, arguments and parameters, modularity, call by reference, arrays, dynamic arrays, records,

data-structures, file operation, computation, representation, time and space constraints, searching and sorting
2. read and write pseudo-code, flowcharts and Nassi-Shneiderman diagrams
3. debug and error-proof a program
4. create own code and make functional applications
5. explain confounding, main and interaction effects, analysis of covariance, multiple regression analysis, logodds, odds ratio
6. explain and apply ANCOVA, multiple linear regression, three-way contingency table analysis and logistic regression
7. specify the assumptions of statistical techniques that were discussed in this class and apply this knowledge when analyzing data
8. work with software for running the statistical analyses discussed in this class and interpret the results
9. apply all statistical methods covered in this course on real data sets
10. appreciate research, research methods and research designs, by participating as a subject in research at our faculty

Research Project

Faculty of Psychology and Neuroscience

IPN2681

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

Credits:
0.0

Coordinator:
A. BloklandS.T.L. Houben

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

Assessment methods:
Portfolio

Keywords:
Research, Psychology, Writing, Presentation

Full course description

This research practical will span a period of 12 weeks during which you will go through various stages of the empirical cycle in small groups, supervised by a researcher. The research practical will conclude with a symposium in which research is presented in the form of a presentation or poster.
The approximate course structure is as follows:
Weeks 1-4: Studying literature, formulating the research question and hypothesis, establishing the research design and statistical analysis. The research protocol will be written and submitted to the Ethical Research Committee Psychology and Neuroscience (ERCPN) for approval. After obtaining ERCPN approval, participants will be recruited. You will start writing the research report (introduction and method);
Weeks 5-8: Data collection and continuing to write the research report;
Weeks 7-8: Data analysis, discussion and evaluation of the research question and interpretation of the data;
Weeks 9-10: Writing the research report in English (consisting of: introduction, method, results and discussion in line with the APA format for an academic article);
Week 11: You will review each other's research reports
Week 12: Processing of the feedback and finishing the final draft of the research report.

During lectures, attention will be paid to relevant themes, such as the different designs and research methods, research ethics and how articles can be read, written and discussed. Literature on these themes will also be available. Furthermore, attention will be paid to popularizing scientific results by means of writing a research blog. You will also receive mini-workshops about how to present, how to write reviews, and how to communicate (in writing and by means of visualizations) the results of statistical analyses.

At the concluding symposium, groups will present their findings (poster or presentation) to an audience of fellow students, psychologists, and a jury. A jury consisting of FPN researchers will judge each presentation and poster and award prizes at the end (e.g., best presentation, best poster, best solid research, etc.).

Course objectives

1. to indicate the difference between science and common sense
2. to understand the ethical directives governing psychological research
3. to distinguish and compare various research designs
4. to explain and apply the empirical cycle of research
5. to theorize on a particular topic and draw up a research question on the basis of previously acquired theoretical knowledge
6. to translate a research question into hypotheses
7. to draw up an appropriate design in order to test a specific hypothesis (i.e. operationalization of hypotheses)
8. to design quantitative research for testing a research hypothesis correctly
9. to collect and analyse research data adequately
10. to interpret and discuss the results of a piece of research, referring them back to theory and hypothesis
11. to translate research into a scientific article in writing in English and in accordance with the APA norms that apply
12. to evaluate what went all wrong during the research, and why
13. to present research findings to a scientific audience in a symposium, by creating a scientific poster or presentation
14. to ask questions and provide feedback to other students regarding their research
15. to answer questions addressed by psychologists, students, and a jury.

Skills V: Regulation and Job Application

Faculty of Psychology and Neuroscience

IPN3131

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

Credits:
1.0

Coordinator:
E. Kok

Teaching methods:
Lecture(s), Skills

Assessment methods:
Attendance

Keywords:
portfolio, QCA, personal learning goals, self-reflection, study progress, applying, Curriculum Vitae

Full course description

Skills V builds upon Skills IV. The course includes two practicals, Portfolio year 3 (IPN3159) and Quick Career Advice (IPN3160). For the practical Portfolio year 3, students update the portfolio. Students sent the updated portfolio to their mentor, and the final discussion will be based on the submitted portfolio. For the practical Quick Career Advice (QCA) students receive advice and/or feedback on their Curriculum Vitae (CV) from the UM Career Services staff.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students:

- are able to formulate goals and they have knowledge about how to pursuit such goals;
- are able to analyse their goals and performance (study behaviour and study progress), s.a. by means of a competence analysis, evaluating, reflecting (self-reflection), and regulating (self-regulation);
- are able to create a (written) portfolio in which they systematically discuss analyses, evaluations and reflections;
- are able to explain their master choice or other professional choice they would like to pursue;

- have knowledge about and have practiced with writing an application letter and a curriculum vitae;
- have received a lecture and/or Quick Career Advice from UM Career Services.

Prerequisites

See Practicals IPN3159 and IPN3160

Practical: Portfolio Year 3

Faculty of Psychology and Neuroscience

IPN3159

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

Credits:
0.0

Coordinator:
E. Kok

Teaching methods:
Lecture(s), Skills

Assessment methods:
Portfolio, Attendance

Keywords:
Portfolio, Personal learning goals, self-reflection, study progress, applying

Full course description

The portfolio part in year 3 consists of two parts: updating the portfolio that was made in year 2 and an individual mentor meeting. Updating this portfolio requires students to reflect on the goals they set a year earlier, to what extent they have achieved them and what goals can be added. The emphasis lies on the programme that students will go through during year three in the build-up to completing the bachelor. Much attention will be paid to master programmes and jobs that students are interested in. The lecture will teach students how to write a letter of application and a curriculum vitae. In year three, students update their portfolio once (April-May). In April-May, students sent the updated portfolio to their mentor, and the final discussion will be based on the submitted portfolio. Students need to have fulfilled the requirements of the portfolio practical to receive the credits for Skills V.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students:

- are able to formulate goals and they have knowledge about how to pursuit such goals;
- are able to analyse their goals and performance (study behaviour, study progress and personal development), s.a. by means of a competence analysis, evaluating, reflecting (self-reflection)

and regulating (self-regulation);
- are able to create a (written) portfolio in which they systematically discuss analyses, evaluations and reflections;
- are able to explain their master choice;
- have knowledge about and have practiced with writing an application letter and a curriculum vitae.

Prerequisites

Having fulfilled the portfolio year 2 (IPN2142 and IPN2143 Portfolio Year 2 Part 1 and 2) is a prerequisite for the portfolio part of skills V.

Practical: Quick Career Advice

Faculty of Psychology and Neuroscience

IPN3160

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

Credits:
0.0

Coordinator:
E. Kok

Teaching methods:
Lecture(s), Skills

Assessment methods:
Attendance, Assignment

Keywords:
Applying, curriculum vitae

Full course description

Students receive a lecture and/or Quick Career Advice (QCA) from the UM Career Services staff. During the QCA, students get feedbackon their curriculum vitae (CV). Students receive detailed instructions in the lecture, via AskPsychology and via e-mail about the planning of the QCA.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students:

- have knowledge about and have practiced with writing an application letter and a curriculum vitae;
- have received a lecture and/or Quick Career Advice (and feedback on their CV) from UM Career Services.

Prerequisites

Having fulfilled the portfolio year 2 (IPN2142 and IPN2143 Portfolio Year 2 Part 1 and 2) is a prerequisite for the portfolio part of skills V.

Statistics III

Faculty of Psychology and Neuroscience

IPN3008

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

Credits:
6.0

Coordinator:
J. Schepers

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

Assessment methods:
Written exam, Attendance

Keywords:
contingency tables, logistic regression, classical and modern psychometrics, factor analysis

Full course description

The goal of this course is twofold. On the one hand, it supplements Statistics II; that is the analysis of two-way designs with a dichotomous instead of quantitative dependent variable. On the other hand, the emphasis lies on the analysis of tests and questionnaires. In this way, this course provides students a solid statistical preparation for the course 'Psychodiagnostics'.
In this course, students will study three techniques spanning several weeks: logistic regression, reliability analysis and factor analysis.
Logistic regression is the equivalent of ANOVA and regression analysis covered in 'Statistics II' if the dependent variable is dichotomous instead of continuous, such as recovery from disease or passing an exam. Logistic regression allows us to adjust the effects of multiple independent variables for each other (confounding) and to study interactions. In this way, it also expands upon the contingency table analysis from 'Statistics I' to multiple independent variables.
Reliability analysis is a classical psychometric method for analyzing tests and questionnaires. Oftentimes, persons' answers to multiple-choice questions (items) are scored dichotomously and summed to give a total score for e.g. intelligence or attitude. In doing so, one assumes that these items measure the same thing. Reliability analysis can verify whether each item fits into the scale and how reliable the total score is. In the course students receive a training in classical psychometrics and

an introduction into modern psychometrics (the Rasch model), validity, and agreement between evaluators.
Factor analysis is a method used to reduce a multitude of variables to a small number of underlying factors. In the past, factor analysis was used to reduce the scores on various tests to a small number of dimensions, such as verbal and spatial intelligence, or extraversion and neuroticism. Nowadays, factor analysis is more often used to group items of one questionnaire into sub-scales. Factor analysis is thus related to psychometrics. In the course students receive a training in exploratory factor analysis with SPSS.
The corresponding practical for this course is: SPSS III
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to explain relevant concepts central to this module, including confounding and interaction, classical psychometrics, reliability, modern psychometrics, item response theory, Rasch model, validity, agreement;
- to explain and apply specific statistical techniques, such as three-way contingency table analysis, logistic regression, reliability analysis (including item analysis) and exploratory factor analysis, and they can interpret relevant output of these techniques;
- to specify the assumptions of statistical techniques that were discussed in this module and are able to apply this knowledge when analyzing data.

Prerequisites

Admission requirement: On reference date March 15 of the relevant year Statistics I has to be completed.

Methods of Cognitive Neuroscience

Faculty of Psychology and Neuroscience

IPN3011

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

Credits:
6.0

Coordinator:
L. RieckeF.T.Y. Smulders

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

Assessment methods:
Written exam, Attendance

Keywords:
methods of cognitive neuroscience, experimental paradigms

Full course description

In cognitive neuroscience, cognitive functions and their neural basis are often studied by placing people in a lab and have them do a computer task with only few well-controlled variables. By careful manipulations of the task, we try to break down functions into sub-processes, and by measuring the effect on behaviour and neural processes, we learn more about their properties.
In this manner, important progress has been made towards understanding processes underlying perception, attention, emotion, language, memory and the motor system.
In this module, students study the most important methods. Response time (RT) is used to measure the duration of processes and is combined with all other methods. RT-based models are strong, but a limitation is that RT is only the sum of the underlying processes.
Measuring electrical brain activities with Electro- and Magnetoencephalography (EEG / MEG) during the processing of stimuli gives an accurate image of the duration of the involved brain processes. A disadvantage is that it is often difficult to determine the source of activity in the brain. Other methods are sensitive to relatively slow metabolic processes that result from brain activity and give a more accurate view of the location of activity in the brain. These methods are in turn less sensitive to the exact duration. Functional Magnetic Resonance Imaging (fMRI) and Positron Emission Tomography (PET) will be covered.

In humans, decreased functioning of the brain is often the result of accidental brain damage. A temporary and better controlled way to interfere with brain function uses Transcranial Magnetic Stimulation (TMS). The good control allows for stronger evidence that a specific brain activity is in fact causally involved with some behaviour.
Every week, students will learn the principles and several applications of one or two research methods. They will also compare different methods with each other and discuss the manners of integration of the information that comes from methods that differ in temporal and spatial precision.
The corresponding practicals for this course are: Excel for Scientists, fMRI Data Analysis
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students:

- can explain conventional experimental paradigms which are used to isolate cognitive functions, and the research methods (RT, EEG/MEG, PET, fMRI, TMS) that are used to investigate them;
- can explain the biological basis of the measurements, and the way they inform us about the functioning of the brain.

Practical: Excel for Scientists

Faculty of Psychology and Neuroscience

IPN3153

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

Credits:
0.0

Coordinator:
L. Pimpini

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

Assessment methods:
Attendance, Assignment

Keywords:
practical excel, signal analysis

Full course description

Modern experimental psychology and cognitive neuroscience are inconceivable without computers to process numerical data. There are various spreadsheet programs that offer the necessary flexibility and are widely available. For the purpose of this course, students will be working with Excel. Some proficiency is very useful for displaying research results and calculating simple statistical parameters. In addition, several basic concepts from digital signal processing are clarified by the hands-on approach of conducting calculations. These calculations correspond with topics from the course 'Methods and Paradigms'. Some examples of possibilities are How do you determine simple statistical parameters as an average or standard deviation? How do you calculate signal detection parameters and Beta? How is data transferred between statistical programs, such as SPSS? How do you create a publishable graph? The practical involves working through a manual under supervision.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students:

- are able to work with a standard modern spreadsheet to process and display data from experiments;
- have increasing insight into analyses by setting them up your self in a spreadsheet.

Practical: fMRI Data Analysis

Faculty of Psychology and Neuroscience

IPN3154

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

Credits:
0.0

Coordinator:
G. ValenteF. de Martino

Teaching methods:
Skills, Training(s)

Assessment methods:
Final paper, Attendance

Keywords:
fMRI analysis, neuroimaging, cognitive neuroscience

Full course description

The most important goal of this practical is to familiarise students with the different types of data that are usually collected during an fMRI experiment, and a number of basic analytical steps necessary to calculate statistical results and visualising those values on an image of the brain. Students will analyse the data of a simple demonstration experiment in Brain Voyager QX based on step-by-step instructions and under supervision of a tutor. After this session, students will be introduced to a number of basic features of this software used for visualisation, exploration and analysis of functional time series.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students:

- can explain and apply the elementary steps of the analysis of MRI data;
- can identify how one should deal with disturbances of the signal;
- can (at a basic level) analyse data collected by Brain Voyager QX, by a systematic plan, can base their choice of statistical tests, and can interpret the end results are addressed.

Practical: SPSS III

Faculty of Psychology and Neuroscience

IPN3201

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

Credits:
0.0

Coordinator:
J. Schepers

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

Assessment methods:
Attendance

Keywords:
SPSS, contingency tables, logistic regression, scale analysis, reliability, factor analysis

Full course description

This practical is an integral part of the course ‘Statistics III’ and includes trainings in the use of SPSS for the statistical techniques covered in ‘Statistics III’. There are four practical classes, one for each of the subjects: contingency tables, logistic regression, classical psychometrics, and factor analysis. During these classes, students practice with the corresponding statistical technique based on real or realistic data. The assignments for the SPSS analyses are in the course manual. The SPSS output will be discussed during a tutorial. In preparation for the practical classes, students are to study the corresponding theory (lecture and literature).
In preparation for the tutorial discussing the SPSS output, students are to answer the questions about that SPSS output included in the course manual. As far as time allows, students are supposed to do this during the practical.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to work with the software SPSS for running the statistical analyses discussed in the module 'Statistics for psychologists III' (such as Contingency table analysis, logistic regression, reliability analysis and exploratory factor analysis);

- to correctly interpret SPSS output for the statistical analyses that were discussed in the module 'Statistics for psychologists III'.

Prerequisites

Good SPSS skills based on SPSS practicals for modules IPN1024 ‘Statistics I’ and IPN2028 ‘Statistics II’

Action

Faculty of Psychology and Neuroscience

IPN3012A

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

Credits:
5.0

Coordinator:
P.L.J. Stiers

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

Assessment methods:
Written exam, Attendance

Keywords:
motor system, executive functions, decision making, prefrontal cortex, basal ganglia

Full course description

Although action usually refers to a physical movement, human and animal actions are part of meaningful behaviour. This means that they are executed with a particular goal or intention to bring about something that is valued. In this course students will investigate how the brain is organised to produce actions that serve particular purposes. Students will focus primarily on voluntary actions. Such actions involve a motivational component, but also cognitive considerations, attention choices and motor options. For each of these components decisions have to be made. Students will see that different parts of the brain are involved in these decisions, in close collaboration with subcortical structures such as basal ganglia.

Students will discuss the hierarchical organisation of the motor system - the apparatus to generate actions that influence the environment. Then, students will focus on the cognitive system, which links potential actions (e.g., entering a room) to the available options in a particular situation (e.g., is the door open or closed). The cognitive system does this by relying on the regularities learned previously about this and other situations. Next, students will investigate how our choice of options is dependent on the expected consequences (such as reward, approval, things not happening...) and how much we value these. Lastly, after having decided which option we want, we still need to establish what the best action is to actually obtain the chosen option. This requires monitoring the outcome of actions, and in case of failing to obtain the chosen option, learning to do better next time.

Students will also investigate how the emotional and social aspects of the situation can influence the choice of options.
This tour will make clear that meaningful behaviour engages the whole brain. Exemplary chosen studies on animals and humans will make clear the differential contributions of subsystems of the brain, while discussion of diseases (Parkinson's disease, obsessive-compulsive disorder, depression, apathy) and clinical lesions affecting these subsystems will demonstrate their relevance for human behaviour. The corresponding practicals for this course are: Group decisions or Neuronal Basis of Decision Making
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to describe the role of (sub-)cortical structures for movement and action selection (incl. prefrontal cortex);
- to explain the relation between movement and cognition, and translate this knowledge to motor/cognitive impairment in patients with Parkinson's disease;
- to distinguish between choosing an option based on expected reward and choosing an action to bring closer the chosen option. To relate actions and decisions to the moral and social context (i.e. social cognition, moral decisions, altruistic, and cooperative behaviour).

Action

Faculty of Psychology and Neuroscience

IPN3012B

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

Credits:
5.0

Coordinator:
P.L.J. Stiers

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

Assessment methods:
Written exam, Attendance

Keywords:
motor system, executive functions, decision making, prefrontal cortex, basal ganglia

Full course description

Although action usually refers to a physical movement, human and animal actions are part of meaningful behaviour. This means that they are executed with a particular goal or intention to bring about something that is valued. In this course students will investigate how the brain is organised to produce actions that serve particular purposes. Students will focus primarily on voluntary actions. Such actions involve a motivational component, but also cognitive considerations, attention choices and motor options. For each of these components decisions have to be made. Students will see that different parts of the brain are involved in these decisions, in close collaboration with subcortical structures such as basal ganglia.

Students will discuss the hierarchical organisation of the motor system - the apparatus to generate actions that influence the environment. Then, students will focus on the cognitive system, which links potential actions (e.g., entering a room) to the available options in a particular situation (e.g., is the door open or closed). The cognitive system does this by relying on the regularities learned previously about this and other situations. Next, students will investigate how our choice of options is dependent on the expected consequences (such as reward, approval, things not happening...) and how much we value these. Lastly, after having decided which option we want, we still need to establish what the best action is to actually obtain the chosen option. This requires monitoring the outcome of actions, and in case of failing to obtain the chosen option, learning to do better next time.

Students will also investigate how the emotional and social aspects of the situation can influence the choice of options.
This tour will make clear that meaningful behaviour engages the whole brain. Exemplary chosen studies on animals and humans will make clear the differential contributions of subsystems of the brain, while discussion of diseases (Parkinson's disease, obsessive-compulsive disorder, depression, apathy) and clinical lesions affecting these subsystems will demonstrate their relevance for human behaviour. The corresponding practicals for this course are: Group decisions or Neuronal Basis of Decision Making
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to describe the role of (sub-)cortical structures for movement and action selection (incl. prefrontal cortex);
- to explain the relation between movement and cognition, and translate this knowledge to motor/cognitive impairment in patients with Parkinson's disease;
- to distinguish between choosing an option based on expected reward and choosing an action to bring closer the chosen option. To relate actions and decisions to the moral and social context (i.e. social cognition, moral decisions, altruistic, and cooperative behaviour).

Motivation and Emotion

Faculty of Psychology and Neuroscience

IPN3013

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

Credits:
5.0

Coordinator:
C.R. Markus

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Attendance

Keywords:
emotion, motivation, emotional brain, cognition and emotion (and elf-determination), appraisal, emotion regulation, genes and stress, sleep and emotionality, burn-out, goal setting, application of theories

Full course description

Emotions refer to subjective experiences characterized by changes in mental affective state and bio-psychological expressions caused by environmental changes. Emotions strongly drive (motivate) us to behave in a certain direction. They mainly appear when our intentions and goals are experienced as either satisfied, threatened or frustrated; which then will force (motivate) behaviour into the desired direction. The aim of the module is to study Emotion from different cognitive-social and biological perspectives and to understand their role in guiding/motivating human behaviour. The module starts with the classic theories of emotion and then continues with several relevant topics, including cognitive and biological perspectives on causation of emotion and motivation, emotion-regulation and self-determination, social-communicative functions of emotion expressions, the interaction between genes, stress and affective-emotional behaviour, the relation between sleep, emotion regulation and affective behaviour, as well as topics related to emotion and, or motivational problems as seen in work stress or problems with goal setting.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to explain emotion and how they steer our motivation and behaviour from different theories/approaches;
- to explain neural, cognitive and social processes in relation to emotion and emotional (motivated) behaviour;
- to compare and criticise different theories related to emotion and emotional behaviour;
- to apply the theoretical perspectives, by recognising and exemplifying relevant concepts in a situation.

Practical: Group Decisions

Faculty of Psychology and Neuroscience

IPN3155

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

Credits:
0.0

Coordinator:
G.J.A.M.L. Uitdewilligen

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

Assessment methods:
Final paper, Attendance

Keywords:
social cognition, decision making.

Full course description

Decisions are omnipresent in our lives, and many of the most crucial decisions are made in groups. Medical teams diagnose patients' illnesses, emergency teams decide on the best approach to deal with an incident, and management teams make important investment decisions. Each member of a decision making group often contributes specific information and has his or her own perspective on the decision problem. In this project students will experience the challenges and hindrances of decision making when members have diverse information and to scientifically investigate factors that contribute towards successful group decision making. The practical consists of two parts: 1) a group decision making exercise and 2) a short report including analyses of the data gathered during these exercises. During the exercise, students will play the role of a fire brigade commander, police officer, or environmental expert and make decisions as a member of an emergency management team. During this session, data will be collected on a number of group variables (e.g. leadership, personality, communication). After all students have participated, they will receive an anonymous version of the dataset containing data on all teams. In small groups, the students will conduct statistical analyses on this data and write a short report.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to describe and abstract challenges and hindrances of decision-making in groups; and to formulate a model to study group decision-making;
- to collect and statistically analyse and interpret data on group variables;
- to write a scientific report on a group decision study.

Practical: Neuronal Basis of Decision Making

Faculty of Psychology and Neuroscience

IPN3156

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

Credits:
0.0

Coordinator:
J.C. Peters

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

Assessment methods:
Final paper, Attendance

Keywords:
decision making, action, analyses of neuroimaging data, EEG

Full course description

In daily life, a person must (almost) continuously make choices, with respect to his or her actions. Various cognitive processes underlie the choice(s) that a person makes in this context and how the actions are evaluated. These cognitive processes include attention, response inhibition, motor learning, but also the ability to e.g., weigh economic factors while making a choice. These cognitive processes are controlled by multiple brain networks. In this practical, students will gain some hands-on experience with and reflect critically on (a) the selection and the administration of tasks that are used to measure these cognitive processes and (b) the analyses of data sets obtained by using neuroimaging techniques (like EEG). During the practical, students are provided with tests and EEG data sets and (in a small group) will practice with these tests and analyze EEG data. The practical will be tailored to the knowledge of the students and they will be guided while conducting the analyses of the data. Questions that will be raised during the practical are: Which steps need to be taken while analyzing neuroimaging data? Do different brain states induce different (decision making) behaviors? How can we examine such differences in neuroimaging data or test performance? Students will perform statistical analyzes on EEG data sets and write a brief report.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to explain the cognitive functions underlying action and decision making and how to test them;
- to analyse and interpret data obtained by using neuroimaging techniques (i.e. EEG);
- to write a scientific report of a neuroimaging study on decision making.

Psychodiagnostics

Faculty of Psychology and Neuroscience

IPN3109A

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

Credits:
6.0

Coordinator:
P. Brüll

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

Assessment methods:
Written exam, Attendance

Keywords:
Psychometrics, bias, diagnostic cycle, Bayesian statistics, ethical professional code, test instruments

Full course description

The practice of psychodiagnostics is made-to-measure and requires specific knowledge but also flexibility, creativity, et cetera. Examples of questions that psychologists have to answer in practice are:

- Suppose a student has to develop a questionnaire for his master thesis that simplifies the career choice (and thus the choice of continuation education) of pupils. Advise the student where to start and/or what to pay attention to;
- Suppose you get the question to determine the intelligence of a client who has only lived in the Netherlands for 3 months and therefore speaks little Dutch. Can you conduct the usual IQ test, with or without the help of an interpreter? Or should you make adjustments? And is that allowed?

Illustrated by such practical problems and/or questions, the first tasks cover the meaning of psychometric concepts such as reliability, validity, standardisation/norms, instrument type (questionnaires and tests), and sources of misinterpretation of diagnostic results. Students will deal with diagnostics as a decision making process. Shortcomings in decisions by the use of cognitive heuristics are put in the perspective of the old controversy between clinical and statistical prediction. The diagnostic process is seen as a cycle that is closely related to the empirical cycle. Students will also deal with the application of Bayesian statistics within psychodiagnostics. Finally, students will be

introduced to the ethical professional code of the NIP (Dutch Institute of Psychologists) and the general standard test practices. Although the matter is explained based on examples from the clinical practice, students will deepen the insight into the principles and measurement problems in psychology.
The corresponding practicals for this course are: Constructing a Psychological Test
or The Diagnostic Cycle
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to compare the empirical and diagnostic cycle;
- to clarify and distinguish psychometric concepts of psychodiagnostics (e.g., reliability, validity, test theory, test development and construction, standardization/norms);
- to explain how test results of psychodiagnostics should be interpreted, and identify sources that lead to distortion of test results (i.e., bias, multicultural testing);
- to apply Bayesian statistics within psychodiagnostics (e.g., cognitive heuristics, sensitivity, specificity);
- to know and understand the ethical professional code of the NIP and the general standard test practices.

Prerequisites

Admission requirement: ‘Statistics I’ has to be completed

Psychodiagnostics

Faculty of Psychology and Neuroscience

IPN3109B

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

Credits:
6.0

Coordinator:
P. Brüll

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

Assessment methods:
Written exam, Attendance

Keywords:
psychometrics, bias, diagnostic cycle, Bayesian statistics, ethical professional code, test instruments

Full course description

The practice of psychodiagnostics is made-to-measure and requires specific knowledge but also flexibility, creativity, et cetera. Examples of questions that psychologists have to answer in practice are:

- Suppose a student has to develop a questionnaire for his master thesis that simplifies the career choice (and thus the choice of continuation education) of pupils. Advise the student where to start and/or what to pay attention to;
- Suppose you get the question to determine the intelligence of a client who has only lived in the Netherlands for 3 months and therefore speaks little Dutch. Can you conduct the usual IQ test, with or without the help of an interpreter? Or should you make adjustments? And is that allowed?

Illustrated by such practical problems and/or questions, the first tasks cover the meaning of psychometric concepts such as reliability, validity, standardisation/norms, instrument type (questionnaires and tests), and sources of misinterpretation of diagnostic results. Students will deal with diagnostics as a decision making process. Shortcomings in decisions by the use of cognitive heuristics are put in the perspective of the old controversy between clinical and statistical prediction. The diagnostic process is seen as a cycle that is closely related to the empirical cycle. Students will also deal with the application of Bayesian statistics within psychodiagnostics. Finally, students will be

introduced to the ethical professional code of the NIP (Dutch Institute of Psychologists) and the general standard test practices. Although the matter is explained based on examples from the clinical practice, students will deepen the insight into the principles and measurement problems in psychology.
The corresponding practicals for this course are: Constructing a Psychological Test
or The Diagnostic Cycle
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to compare the empirical and diagnostic cycle;
- to clarify and distinguish psychometric concepts of psychodiagnostics (e.g., reliability, validity, test theory, test development and construction, standardization/norms);
- to explain how test results of psychodiagnostics should be interpreted, and identify sources that lead to distortion of test results (i.e., bias, multicultural testing);
- to apply Bayesian statistics within psychodiagnostics (e.g., cognitive heuristics, sensitivity, specificity);
- to know and understand the ethical professional code of the NIP and the general standard test practices.

Prerequisites

Admission requirement: ‘Statistics I’ has to be completed.

Practical: Constructing a Psychological Test

Faculty of Psychology and Neuroscience

IPN3157

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

Credits:
0.0

Coordinator:
G.C. Kraag

Teaching methods:
Skills, Work in subgroups

Assessment methods:
Final paper, Attendance

Keywords:
psychological tests, test construction, psychometrics

Full course description

A psychologist is often consulted in the context of behavioral research, diagnostics, selection, coaching, training, and/or interventions. In this context, the psychologist makes extensive use of tests (performance tasks, questionnaires, etc.) to examine the behavior, thoughts, and/or emotions of a person under study. Graphology (handwriting analysis) and/or phrenology are still sometimes applied in jobbing and recruitment op personnel. How well the test results are a reflection of the person in question is dependent on the (psychometric) quality of the test being used. For one, it should be clearly defined what the test is supposed (or pretends) to measure. In addition, the test needs to reliably (accurately) measure behavior, one's thoughts, or emotions, and there needs to be proof that the test indeed measures what it aims to measure (validity). However, the reality learns that the number of tests available on the market is limited: we do not have (psychometric sound) tests available for measuring all domains of behavior, thoughts, and/or emotions, in every target group (think of people with e.g., severe reading disabilities, visual impairments, or severe motor impairments). Furthermore, innovative trends arise in this field, for example the use of game elements to assess behavior and emotions. That means that many tests still need to be developed and/or that the psychometric qualities of many tests still need to be demonstrated, especially for specific target groups. During the practical, the students get "hands on" experience with innovations and/or the development of a new psychological test and what is involved in order to show that the

(psychometric) quality of this instrument is sufficient. Students will work in small groups during the practical to a) develop a test for a specific target group; b) clarify why some techniques are not valid or reliable and suggest alternative tests; c) will critically evaluate innovative developments from a psychometric point of view and make suggestions for quality improvement. In each case students will write a plan on how to test the psychometric properties of the new instrument or approach. The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to set up a framework to construct a test for a specific target group;
- to evaluate innovative developments and suggest quality improvements;
- to evaluate the psychometric qualities of a test by writing a plan on how to test the psychometric properties of a self-developed instrument;
- to write a scientific report on testing psychometric properties of an instrument.

Practical: The Diagnostic Cycle

Faculty of Psychology and Neuroscience

IPN3158

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

Credits:
0.0

Coordinator:
R.R. Magdalena

Teaching methods:
Skills, Work in subgroups

Assessment methods:
Final paper, Attendance

Keywords:
psychological tests, diagnostic cycle, referral questions

Full course description

A psychologist is often consulted in the context of diagnostics and selection, usually following a referral question raised by another professional or by another person (such as a parent or a partner). For example, consider a child aged 9 years, who experiences difficulties at school (in terms of e.g., learning or in a social context). Parents and the teachers at school are very concerned and want to know what is causing the child's problems at school. Or think about a director of a medium sized company that has a vacancy for a manager and who asks a psychologist to find the most suitable candidate to fill this vacancy. During the practical, students are being offered a referral question - similar to the examples mentioned here – and they need to find an answer to this question while completing a so-called 'diagnostic' cycle (or process) (e.g., De Bruyn et al ., 2003) - an approach that psychologists frequently use to find answers to the above-mentioned referral questions. While completing this cycle, the psychologist will raise questions like: What is the exact referral question (e.g., what is causing the school difficulties in the 9-year-old child from the example above)? What are the hypotheses in this case (e.g., the child has a specific learning disability/ dyslexia, the child has attention problems that explain reading difficulties, or the child has depressive symptoms affecting school performance)? What test do I need to administer in order to test these hypotheses and when will I accept (or reject) my hypotheses? How do I interpret the data that I receive after completing the planned test administrations? What do I recommend based on this interpretation, or what is my

conclusion? And, looking back, did I make the correct choices during this whole process? Finally, what ethical issues played a role in this case? During the practical, students will work together in small groups to resolve this so-called ‘puzzle’ and thereby to get answers to these, and related, questions. In addition, students will practice choosing, administrating, and interpreting various psychological tests. During the practical, the students get "hands on" experience in what steps one needs to take in order to "help" a person answering a referral question. They will also as a group, write a report on this process (including a reflection on it).
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- Students are able to distinguish the steps of the diagnostic cycle.
- Students are able to identify ethical aspects in different steps of the diagnostic process.
- Students are able to choose, administer and interpret various psychological tests.
- Students are able to write a scientific report on the steps of the diagnostic cycle, and reflect on it.

Research Participation

Faculty of Psychology and Neuroscience

IPN3442

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

Credits:
1.0

Coordinator:
E.L. Theunissen

Teaching methods:
Assignment(s)

Assessment methods:
Attendance

Keywords:
participation in research, test subject

Full course description

Every student must have participated as a test subject in FPN scientific research as part of the bachelor's exam. If you started in 2013 or later, you must act as a test subject for a total of 20 hours. The Research Participation is included in the overview of year 1, but does not count towards the 60 credits you must obtain in year 1. The corresponding ECTS credit will only be awarded in year 3. Participation in experimental studies is not guaranteed for 2nd and 3rd year students, due to too much prior knowledge. Furthermore, the sign-off Research Participation hours must have been obtained if you want to continue the programme abroad at the start of the 3rd academic year. Students are encouraged to complete the Research Participation in their first year. Therefore, 5 hours will be waived if you have acted as a test subject for 15 hours in your first academic year (students from cohort 2013 onwards). If you have acted as a test subject for less than 15 hours in your first academic year, you will have to complete the full 20 hours in other academic years of the bachelor's programme. If you started psychology in 2016 or later, there is the additional restriction that a maximum of seven hours of the total number of hours required can originate from online studies. The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students:

- get familiar with research, research methods and research designs, by participating as a subject in research at our faculty.

Psychopharmacology

Faculty of Psychology and Neuroscience

PSY3312

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

Credits:
6.0

Coordinator:
N.L. Mason

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

Assessment methods:
Written exam, Attendance

Keywords:
antidepressants, benzodiazepines, antipsychotics, psychedelics, cognition enhancers, pharmacokinetics, pharmacodynamics, neurobiological theories of psychopathology

Full course description

Current theories of psychiatric and neurological disorders are largely derived from what we know about drugs that can mimic the symptoms or that are used for treating these disorders. Basic knowledge of the effects of drugs and their underlying neurobiological mechanisms will therefore help students to understand these theories better. This course primarily aims at facilitating the understanding of therapeutic and side effects of psychoactive drugs. This will be done by presenting major classes of CNS drugs and their use in prominent disorders, such as anxiety, depression, and schizophrenia and by presenting the mechanisms and effects of a number of recreational drugs such as cannabis, LSD, and ketamine.
At the end of the course there will be a written exam consisting of at least six open/essay questions. The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

After this course students are able to:

- explain pharmacokinetic processes and moderating factors, including the role of various organ systems
- apply knowledge of neurotransmission to explain drug effects;

- name most frequently used drugs used for the treatment of anxiety, depression, and schizophrenia;
- explain the primary neurobiological mechanisms of action these drugs;
- describe the major differences between subclasses of drugs;
- explain why these drugs may have therapeutic effects;
- know the most relevant side-effects, and understand the neurobiological mechanisms of common side-effect;
- understand the neurobiological theories of the psychopathology of depression and schizophrenia and explain some of the supporting empirical evidence.

Prerequisites

Basic understanding of neuroanatomy and neurotransmission is recommended.

Group Dynamics

Faculty of Psychology and Neuroscience

PSY3339

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

Credits:
6.0

Coordinator:
B.P.I. Fleuren

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Presentation, Attendance, Assignment

Keywords:
groups, inclusion, cohesion, influence, leadership, power, performance, decision-making, conflict, intergroup-relations

Full course description

Groups are an important part of everyday life. Individuals' actions, thoughts and emotions cannot be fully understood without taking the groups they belong to and that surround them into consideration. Consequently, any psychologist benefits from a deeper understanding of groups and their dynamics. Moreover, as much of the world's work is done and most impactful decisions are made in and by groups, it is essential to understand how group processes shape performance and decision making. Finally, the quality of relations in and between groups can have a tremendous impact on people and society. Therefore, understanding these dynamics and how to improve them is important.

In this course, students will learn about various aspects of group dynamics. To achieve this, a recent edition of an excellent book supplemented with other learning material will be read. Additionally, lectures are provided to demonstrate and deepen the understanding of group phenomena. In tutorial meetings, students will facilitate exercises that promote a deeper processing of the read materials and improve group-analysis and group-management skills. This should improve students' ability to understand and manage groups and their dynamics.

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

Course objectives

The intended learning outcomes of this course are threefold:

- Deeper knowledge and understanding of theories, studies and empirical findings pertinent to groups. Essential topics include inclusion, cohesion, power, leadership, group performance, decision-making, teamwork, conflict, intergroup relations, and collective behavior.
- Broader outlook on determinants of behavior. Students of this course should learn to consider more complex interpersonal and group level processes as determinants of behaviors, thoughts and emotions in addition to regular individual level determinants.
- Improved group analysis skills and the ability to use these in practice. Students practice analyzing and managing groups and group behavior by facilitating exercises in tutorials.

Forensic and Legal Psychology in a Nutshell

Faculty of Psychology and Neuroscience

PSY3343

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

Credits:
6.0

Coordinator:
A. Sagana

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Attendance

Keywords:
Clinical and applied psychology, crimes committed with and without mental illnesses, violence and aggression, decision making.

Full course description

This course will provide psychology (but also law and criminology) students with a brief introduction to topics typical of the Forensic and Legal Psychology field.
Forensic psychology is the application of clinical specialties to the legal arena and people who encounter the law. Think about assessment, treatment, and evaluation of these people. Legal psychology deals with investigating human functioning related to the legal system and focuses on functions such as perception, memory, and decision-making.
During each tutorial, research articles and case material descriptions related to a specific theme will be studied and discussed.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

At the end of this course students:

- are able to understand and explain the terminology of forensic and legal psychology;
- have a general understanding of forensic and legal psychological topics;
- can contrast and criticize current issues and controversies in forensic and legal psychological research;

- are able to understand, explain and criticize methods and the experimental work done in this discipline;
- develop and improve their ability to examine the relation between the discussed topics, and articulate how ideas connect to, or contrast with one another.

Child Neuropsychology

Faculty of Psychology and Neuroscience

PSY3359

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

Credits:
6.0

Coordinator:
E.H.H. Keulers

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

Assessment methods:
Written exam, Final paper, Attendance

Keywords:
brain development, cognitive development, brain (dis)functioning, cognitive (dis)functioning, developmental disorders, neuropsychology

Full course description

This course focuses on brain-behaviour relationships from a developmental perspective. It aims at increasing one's understanding of how typically developing children and adolescents (or brains) function and how brain injury or developmental disorders, such as ADHD, autism spectrum disorders and learning disabilities, express themselves and interfere with the demands of daily life. Relevant catchwords in this context are behaviour, higher cognitive functions (e.g., executive functions, working memory and attention), and the level of interactions a child has with his environment, since these elements determine how well individuals cope and participate in daily life situations. Typical and atypical brain and cognitive development will be discussed in preschoolers, school-aged children and adolescents. During the course, students will gain insights into: (1) developmental changes in brain structure, functioning, connectivity and cognitive functions; (2) The clinical phenomenology of the most important developmental disorders; (3) The underlying brain-behaviour relationships in these disorders; and (4) Diagnosis and treatment. Students will also gain experience in the selection, administration and interpretation of commonly used neuropsychological tests, measuring the above-mentioned domains of higher cognitive functions and behaviour.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students are able:

- to explain (a)typical development of the brain and cognitive functions such as working memory, executive functions and attention;
- to apply and plan different steps in diagnostics, neuropsychological assessment, and treatment;
- to distinguish different neurodevelopmental disorders (i.e., ADHD, behavioural disorders, learning disabilities, autism spectrum disorder, traumatic brain injury) and to form hypotheses about these disorders based on case material.

Manipulating Memories

Faculty of Psychology and Neuroscience

PSY3372

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

Credits:
6.0

Coordinator:
V.G. van de Ven

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

Assessment methods:
Presentation, Attendance, Assignment

Keywords:
memory consolidation; memory manipulation; mnemonic techniques; event segmentation; brain stimulation; skill learning; hippocampus; cortex; enhancement

Full course description

Neurobiological and cognitive research has resurrected an old alternative notion that all memories – independent of their type or age – remain vulnerable to change. Rather than permafrosted, stored memories can change from an inactive state to an active state during retrieval, in which new information can be added, old information be changed or existing representations be strengthened. These findings have important ramifications both for a fundamental understanding of how the brain memorizes experiences, as well as for practical applications in which memory manipulations are wanted, such as in skill learning, education and therapies to reduce the impact of traumatic memories. In this elective, we will discuss the cognitive (e.g., conditioning, skill learning, interference paradigms) and neurobiological (e.g., long-term potentiation and molecular neuroscience, brain anatomy, hippocampus) substrates of memory and how they can be changed, and discuss relevant research methods and behavioural paradigms to study memory manipulation. Further, we will discuss how these principles and methods can be applied in fields of education, cognitive enhancement and clinical therapy. This elective is meant for students who have an interest in fundamental as well as applied aspects of memory research. While the course aims to provide a multi-disciplinary and integrative description of memory, the course assumes a basic understanding of neuroscientific principles in the brain (e.g., brain anatomy, neural communication, brain plasticity).

Further, a strong interest in research methods, cognitive science and experimental design is also highly recommended. Finally, we will make use of various teaching methods, which include PBL discussions of empirical research papers, group assignments and slide-based presentations of the assignments in front of the class. Presentations will be done in small groups of 2-4 students within each tutorial group.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students:
- learn about neurobiological principles of learning and memory;
- discuss, learn about and understand research methods of memory manipulation;
- learn to translate fundamental research findings to applied sciences (e.g., clinical, educational);
- learn about how memory interacts with other important cognitive domains, such as attention, perception, decision-making and action;
- learn to present research ideas and findings in a concise and informative manner;
- to some extent apply methods of memory manipulation to their own studying.

Prerequisites

There are no prerequisites, but a strong interest in research methods, cognitive science and/or neuroscience of memory is highly recommended.

Cognitive Neuroscience of Language

Faculty of Psychology and Neuroscience

PSY3373

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

Credits:
6.0

Coordinator:
B.M. Jansma

Teaching methods:
PBL, Lecture(s), Skills

Assessment methods:
Participation, Presentation, Attendance, Assignment

Keywords:
cognitive neuroscience, language, research proposal, peer review

Full course description

Language is one of the most relevant cognitive skills in humans. We listen, speak, type, joke, and think a lot during the day without being aware of how we do it. We are not aware of it simply because language comprehension and production is highly automatic. Only when we meet people with aphasia after stroke, or people who stutter, or who have severe reading issues we notice the diversity of problems the human brain has to deal with during communication. In this course, we study language from different scientific angles, ranging from fundamental principles of language processing to understanding what can go wrong. From the beginning, students make their own choice on a preferred topic, and will conceptualize and write a research proposal in which they theoretically tackle one open question of their choice.

We first study the theoretical background of language processing and learn how it received empirical support from psycholinguistics – mainly based on behavioural experiments. By reading more over time, we get insights on language from a cognitive neuroscience perspective. We will learn about the current state of the art: What problems need to be solved by the cognitive language system? How does our brain solve them? We will discuss the consequences in case the network is not functioning well. From the readings, each participant select the topic of interest for the proposal, extract open questions, formulate research questions, present the ideas to peers, and write the proposals on how to investigate this selected topic of interest.

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

Course objectives

- knowledge of theoretical background of cognitive neuroscience of language with regard to content (psycholinguistic model, dual route model) and a selection of methods (design, acquisition techniques: RT, EEG, fMRI, analysis teaching techniques: ERP components, frequency analysis, fMRI region of interest and network analysis);
- knowledge of Criteria, content,writing process of a research proposal following provided guideline;
- making informed choices of a preferred theme for a research proposal based on reading of fundamental, clinical,or social cognitive neuroscience literature;
- apply criticalthinking to evaluatethe literature (state of the art, limits, shortcomings, extract open questions);
- application of knowledge in writing of a research proposal about an investigation of a “still open” issue in language research;
- oral presentation of the proposal idea and of the progress during weekly panel discussions;
- constructive peer reviewing in written form and as presentation;
- active participation in scientific discussions; working in teams / team science context.

Neuropsychology and Law

Faculty of Psychology and Neuroscience

PSY3375

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

Credits:
6.0

Coordinator:
E.H. Meijer

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Attendance, Assignment

Keywords:
forensic neuropsychology, psychiatry, brain disorders, criminal offences

Full course description

Most of this course pertains to neurocognitive processes of criminal offenders. Contextual factors, such as the history and current state of neuropsychology and psychiatry will be discussed to give students the desired background knowledge of this topic. A considerable part of the course is devoted to neuropsychological abnormalities in offenders who are affected by a psychiatric disorder. Another substantial part of the course pertains to offenders with acquired brain injury. The connection between neural abnormalities and criminal offences will be critically evaluated for each psychiatric or neurological disorder. A completely different side of neuropsychology and law, the effect of neurocognitive disorders in victims/witnesses of crimes on their eyewitness testimony, will also be dealt with.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

After this course, students will have knowledge of psychiatric and neurological disorders that predispose to criminal offences. They will be able to appreciate the role of ‘nature’ and ‘nurture’ in criminal behaviour, and will understand problems associated with witnesses who have brain disorders.

Intercultural Awareness 1

Faculty of Psychology and Neuroscience

PSY3378A

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

Credits:
0.0

Coordinator:
H.T.H. Fonteijn

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

Assessment methods:
Attendance, Assignment

Keywords:
intercultural competence, reflection, writing skills, internationalisation

Full course description

Study abroad does not automatically build intercultural competence (ICC). Intercultural contact is not sufficient for intercultural learning. Hence, this assignment triggers focused attention on life outside the international bubble and on knowledge, skills and attitudes conducive to development of ICC. In a preparatory meeting, second year students reflect on ICC together with third year students who have returned from study abroad. Students select ICC subcompetences that will be the focus of attention. During their study abroad, students gather evidence to illustrate development of intercultural (sub) competences and they reflect on their experiences in a novel cultural and academic environment in a short report. After returning, students will exchange experiences with peers and with second year students during their preparatory meeting.
This module is only relevant for FPN students and not available for Exchange students.
De eindbeoordeling voor deze module is pass of fail – en geen cijfer tussen 0,0 en 10,0”

Course objectives

Students can:

- reflect on and select ICC learning goals that become part of their learning contract;
- interpret and exemplify intercultural differences;
- intentionally address and deconstruct intercultural interactions.

Intercultural Awareness 2

Faculty of Psychology and Neuroscience

PSY3378B

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

Credits:
0.0

Coordinator:
H.T.H. Fonteijn

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

Assessment methods:
Attendance, Assignment

Keywords:
intercultural competence, reflection, writing skills, internationalisation

Full course description

Study abroad does not automatically build intercultural competence (ICC). Intercultural contact is not sufficient for intercultural learning. Hence, this assignment triggers focused attention on life outside the international bubble and on knowledge, skills and attitudes conducive to development of ICC. In a preparatory meeting, second year students reflect on ICC together with third year students who have returned from study abroad. Students select ICC subcompetences that will be the focus of attention. During their study abroad, students gather evidence to illustrate development of intercultural (sub) competences and they reflect on their experiences in a novel cultural and academic environment in a short report. After returning, students will exchange experiences with peers and with second year students during their preparatory meeting.
This module is only relevant for FPN students and not available for Exchange students.
De eindbeoordeling voor deze module is pass of fail – en geen cijfer tussen 0,0 en 10,0”

Course objectives

Students can:

- reflect on and select ICC learning goals that become part of their learning contract;
- interpret and exemplify intercultural differences;
- intentionally address and deconstruct intercultural interactions.

The Professional in Psychology: An Orientation Internship

Faculty of Psychology and Neuroscience

PSY3379

Semester 1:
1 Sep 2025 **31 Jan 2026**

Credits:
6.0

Coordinator:
A.L.T. Walkowiak

Teaching methods:
Assignment(s)

Assessment methods:
Final paper

Keywords:
Skills, working in a relevant setting

Full course description

As a psychologist, people may contact you for your expertise and ask you to answer a variety of questions, e.g., ‘What kind of work or which program would suit person A best?', 'Why does person B experience problems in domain C?', or 'What can individual D do to increase his or her quality of life?’ Examples of issues relevant within organizations (such as businesses or schools) are: ‘How do I motivate my employees or my students to opt for a healthy lunch?’ or ‘Are the volunteers in our organization satisfied with how we coach them and how can we improve satisfaction?’ During his or her training and work experiences, a psychologist has gained theoretical knowledge and skills and, as such, can advise (or assist) an individual, a group of individuals, or an organization/ institution with respect to these questions. During their studies, psychology students gain this theoretical knowledge and learn skills, and that they (can) practice applying both.

For 6 ECTS, psychology students can complete part of the elective program, 3rd year of the Bachelor of Psychology (FPN), while working in an institution or company and gaining relevant practical experience. However, note that a student can only be enrolled in this elective ‘The professional in psychology: An internship’, if s/he has found an internship on his or her own.

Students can work in a variety of 'settings': e.g., a (mental) health care facility, rehabilitation centres, schools, but also companies, such as HR consultancies. Suitable institutions or companies provide students the opportunity to gain practical experience, relevant for becoming a psychologist. If the

student wants to obtain ECTS for this practical work, FPN has to approve the institution or company (and the content of the work) before the student starts working there. Students can only obtain ECTS for work conducted at one (and not multiple) institute(s).
During this practical, students need to work under the supervision of an experienced psychologist. At the start of the practical, the student drafts a personal development plan (PDP), defining the learning objectives for the practical. In addition to the work experience, the student must write a report about this experience. As such, the student will get more insight into the work setting(s) of a psychologist and s/he will gain experience with applying knowledge and skills essential for being a psychologist.
Note: this practical experience cannot be used to fulfil the prerequisites regarding the theoretical background and working experience set for the psychodiagnostics registration (i.e., the BAPD) and/or vLOGO.
This module is only relevant for FPN students and not available for Exchange students.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

The student:

- obtained more insight into the work setting(s) of a psychologist;
- has gained experience with applying knowledge and skills essential for being a psychologist.

Applied Social Psychology

Faculty of Psychology and Neuroscience

PSY3389

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

Credits:
6.0

Coordinator:
K. Schelleman - Offermans

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

Assessment methods:
Final paper, Participation, Presentation, Attendance, Assignment, Presentation and paper

Keywords:
ecological approaches, environment, health behaviours, individual and environmental determinants of behavior, program planning and implementation, problem-oriented, sustainability, theory- and evidence-based methods for changing behaviour

Full course description

What is applied social psychology

In (social) psychology, researchers focus on 1) developing theories in the behavioural laboratory, 2) on validating those theories in the field, and 3) applying these theories to solve real life problems. There is no status difference – all three types of research are needed. But given this distinction, in this course the focus is on the third approach: systematically applying (social) psychology to 1) understanding behaviour, and 2) changing behavior by carefully planned interventions to promote quality of life.

What will be in this elective

In this elective, the core processes for developing theory-and evidence-based interventions are highlighted. Several topics in the field of applied psychology are discussed (for example socio-economic health inequities, safe sex, and sustainability topics such as pro-environmental behaviours). Additionally, the student will be provided with applications of more fundamental insights (e.g., the role of reserve capacities such as psychological and social capital, or stigma), and first-hand examples

of existing behaviour change programs: From problems they target and who (stakeholders) are involved, to theory and empirical evidence, to development, implementation and evaluation.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

After this course, the student:

- knows what kind of problems are the focus of an applied psychologist (e.g., health, environment, safety, work);
- Is able to describe (and apply) the route from problem analysis to intervention development, implementation, and evaluation;
- is familiar with the causal logic of real life problems and solutions;
- is familiar with often used models and protocols of planned behaviour change;
- is acquainted with examples of successful interventions;
- acknowledges the relation between fundamental and applied psychology.

Psychological Interventions

Faculty of Psychology and Neuroscience

PSY3392

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

Credits:
6.0

Coordinator:
A.F. Domensino

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

Assessment methods:
Written exam, Attendance

Keywords:
Psychological prevention, intervention, therapy

Full course description

This course offers an in-depth exploration of psychological interventions and the principles guiding effective mental health care. Beginning with the history of psychotherapy, students will learn about major therapeutic frameworks, including (cognitive) behavioral, psychodynamic, humanist, and system therapies. During the course, students encounter specific psychological techniques, such as EMDR and imagery rescripting, and will engage in hands-on experience with foundational therapeutic tools . Students will also explore pedagogical principles relevant to psychological practice, learning how to deliver psychoeducation tailored to diverse populations.
Throughout the course, students critically evaluate the evidence base of treatment effectiveness and appraise the differences and similarities between interventions. Special attention will be given to psychological prevention strategies and the application of ethical standards in clinical practice. This course prepares students to understand and apply therapeutic approaches, setting the stage for good clinical practice in diverse psychological settings.
At the end of the course there will be a written exam consisting of at least six open/essay questions. This module is only available for students in the Clinical Psychology Package.

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

Course objectives

After this course students are able to:

- know how psychotherapy evolved and how different therapies relate to eachother
- understand the theoretical frameworks behind several programs targeting psychological prevention, intervention, or therapy;
- understand and apply pedagogical principles in the context of psychoeducation, prevention, and therapy;
- understand the opportunities and limitations of psychological prevention strategies;
- recognize and reflect on the primary competencies of a clinical psychologist;
- apply ethics codes, laws, and legislations in this context.

Student well-being practitioner training

Faculty of Psychology and Neuroscience

PSY3396

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

Credits:
3.0

Coordinator:
N.M.H. GijzenA.L. Smitten

Teaching methods:
Skills, Assignment(s)

Assessment methods:
Final paper, Presentation, Attendance, Assignment

Keywords:
clinical communication skills

Full course description

Eight two-hour training sessions aim to train the student to become a student well-being practitioner. In the process, the student will prepare and conduct interviews with a fellow student that focus on the elicitation of "a problem," using psychological interviewing. Caring Universities modules as well as Traintool will be used as alternative forms of work in addition to the training meetings. Upon completion, students write a reflection report.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

1. Be able to conduct a psychological conversation with fellow student
2. Master and use basic psychological interviewing techniques
3. Use basic cognitive behavioral therapy techniques with fellow students
4. Maintain control of the conversation with fellow students
5. Determine goals for a follow-up interview
6. Mastering the signaling and referral function
7. Reflect on the effect of conversation techniques
8. Reflect on own skills

This course contributes to the following programme objectives:
4.1 Interact effectively with others

5.1 Exhibit effective self-regulation 5.3 Display effective judgment in professional interactions 5.6 Develop direction for life after graduation

Social Neuroscience

Faculty of Psychology and Neuroscience

PSY3332

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

Credits:
6.0

Coordinator:
T. Otto

Teaching methods:
PBL

Assessment methods:
Final paper, Presentation, Attendance

Keywords:
neural correlates, self-reflection, emotion regulation, attitudes, mirror-neuron system, hyperscanning, mental effort, fMRI

Full course description

Social Neuroscience is a new and rapidly growing field of research. It is an interdisciplinary field that asks questions about topics traditionally of interest to social psychologists, economics and political science using methods traditionally employed by cognitive neuroscientists, such as functional brain imaging. In this course, the student will discuss functional MRI research into the following topics: self-reflection, emotion regulation, perceiving others/mirror neurons, intersubject/hyperscanning designs and moral judgement. Students will gain insight into the neural correlates of social behaviour and acquire knowledge about designing a functional MRI study.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

- Students should be able to read and understand social neuroscience literature in a standard journal article format. For this, students will gather a basic understanding in neuroscience background, technology and terminology;
- Students should be able to use this understanding in discussing the application of neuroscientific methods to social psychology topics such as self-reflection, emotion regulation, reappraisal, attitudes, stigma, actions and emotions of others, mirror-neuron system, empathy,

social decision making, game theory, cooperation versus competition, moral judgments, theory of mind, event-related design, block-design, BOLD signal;
- The aforementioned knowledge and skills should enable students to formulate research questions based on relevant social theories and design experimental setups that would be fit to solve them.

Work and Organisational Psychology

Faculty of Psychology and Neuroscience

PSY3344

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

Credits:
6.0

Coordinator:
W.K.J. Wehrt

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

Assessment methods:
Assignment

Keywords:
employee motivation, leadership, work stress, employee health, team functioning, inclusive organisations

Full course description

This course familiarizes students with various aspects of work and organisational psychology. Questions that will be addressed during the course are: How can organisations select good employees? What can organisations do to maintain a healthy and motivated workforce? What are effective leadership styles? What does a high performance team look like? Which work factors lead to stress? To answer these questions we will present an array of different topics from work and organisational psychology such as work stress, occupational health, emotions in organisations, leadership, personnel selection, work motivation, and teamwork. The course consists of lectures, an individual assignment and a group project in which hstudents either work on a practical consultancy project (e.g., develop a plan how to address an issue in an organization) or a research project (e.g., develop a specific idea for a field study). At the end there will be a 'mini-conference' in which groups present the results of their group project. This course forms an excellent introduction for the Master's programme 'Work and Organisational Psychology'. N.B. there will be no tutorial groups, but there will be some rooms and times made available for the group project
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

SStudents will be able to understand in which way psychology is relevant within organizations and what are relevant areas of work and organizational psychology. Relatedly, students will learn to select relevant scientific literature, get an on-hands experience with the scientific review process where they learn to constructively give and consider feedback, and throughout the process train their skills in writing an academic text integrating scientific studies. In addition, depending on the group project chosen, students will be able to utilize scientific models and findings to develop a concrete plan for a field research in the area of work and organizational psychology or will be able to translate scientific models and findings into practical applications and solutions in organisations.

Political Psychology

Faculty of Psychology and Neuroscience

PSY3357

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

Credits:
6.0

Coordinator:
P. Brüll

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Presentation, Attendance

Keywords:
Political psychology, war crimes, human rights violation, groups, behaviour, decision making, personality

Full course description

Why do people cause conflicts such as those in Bosnia, Rwanda, or Northern Ireland? What motivated people to commit such atrocities as the mass murder and mass raping in Nanking (China, 1937 – by Japanese troops), the massacre in My Lai (Vietnam, 1968 – only one of many similar atrocities committed by American troops in Indochina) or the Józéfów massacre (1942, carried out by the German Police Battalion 101),... to name only a few? Why did Western leaders secretly sustain repressive and genocidal dictatorships like e.g. Chile under Pinochet (1973-1990), Uganda under Idi Amin Dada (1971 – 1979) or Cambodia under Pol Pot's Khmer Rouge (1975-1979)? Why can ordinary people be educated to torturers, like in the "Greek Torture School" (1967-1974) or in the former US Army "School of the Americas" (since 1946)? Why is the still ongoing genocide in Darfur (since 2003) widely unnoticed? What motivates a political leader to enforce violence on entire populations and to sacrifice troops without the slightest chance of winning this conflict, like e.g. Nixon/Kissinger (the Vietnam War in the mid-1970s)?

We will use an interdisciplinary approach to answer such questions. Therefore, not only our psychological tool set will help us, but also we will include perspectives from other academic fields, (such as criminal law, political science, anthropology, and sociology). Further, we will evaluate cases of GHRV against their unique historical background, using recently declassified governmental

documents, newspaper reports, and short historical overviews. In addition, each task will be related to current events, allowing us to apply what we learned to events happening right now. During the course, we will combine the above-mentioned different academic fields with political psychology tools to establish a unique understanding of why people violate the rights of others.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

- knowledge of key political psychological theories, key political psychological concepts and mechanisms;
- understanding of the importance of a historical understanding of a situation;
- the complex interplay between dispositional and situational components.

Skills:

- applying psychological theories used in political psychology to historic and current cases;
- using an interdisciplinary approach to research a question;
- analysing a situation while using primary sources;
- scrutinising complex information critically;
- identifying concepts and theories used in political psychology during everyday life situations;
- critical independent thinking.

Sexuality

Faculty of Psychology and Neuroscience

PSY3367

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

Credits:
6.0

Coordinator:
M.V.E. Dewitte

Teaching methods:
PBL, Lecture(s), Skills, Research

Assessment methods:
Final paper, Attendance, Assignment

Keywords:
sexual response cycles, sexual problems, biopsychosocial, evidence-based, sexology research

Full course description

This course will elaborate on the biological, psychological as well as societal determinants of sexuality (in general) and sexual disorders (in specific). There are 6 lectures and 7 educational meetings in which a theme or group of complaints will be discussed. These themes are (biological and psychological) theories on sexuality, sexual diversity, sexual dysfunctions in men and women, the impact of physical/psychological health and disease on sexual behaviour and well-being, sexuality in vulnerable groups, gender dysphoria and transgenderism, and the role of attachment and relationships (context and history) on sexuality. After the theoretical part, students are offered a practical/clinical training in which they learn to administer a sexual anamnesis and there is a workshop on research methods in sexology in which students conceive and discuss a research design on a sexology-related topic of their choice.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Knowledge
Students know about:

- the normal sexual development;

- the sexual response cycle;
- sexual diversity;
- the biopsychosocial model of sexual dysfunctions;
- theories and empirical research on the development and maintenance of sexual problems;
- diagnostic criteria (DSM-IV & -V) for the different sexual dysfunctions;
- the incidence, prevalence, and course of sexual dysfunctions;
- different treatment options for sexual dysfunctions (biopsychosocial view);
- the impact of disease on sexuality;
- sexuality in people with a mental disability;
- gender dysphoria and transgenderism;
- the role of attachment and relationships in sexuality;
- research methods in sexology.

Applying knowledge

- students can apply their knowledge on sexual development and sexual dysfunctions on clinical cases.

Critical thinking

- students know the difference between pathological and non-pathological sexual development;
- students are critical regarding extant evidence on the different treatment options for sexual problems;
- students can develop research ideas on sexology-related topics.

Communication

- students can communicate on sexuality and sexual problems with individual clients;
- students can reflect and talk about their own sexual development and sexual experiences;
- students learn to break current taboos on (talking about) sex.

Adult Neuropsychology: An Introduction

Faculty of Psychology and Neuroscience

PSY3369

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

Credits:
6.0

Coordinator:
M.C. Marzolla

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

Assessment methods:
Written exam, Attendance

Keywords:
brain (dis)functioning, cognitive (dis)functioning, brain injury, aging, neuropsychology, neuropsychiatry

Full course description

This course focuses on brain-behaviour relationships and aims at increasing one's understanding of how healthy humans (or brains) function and how brain disease, brain injury disorders, such as, traumatic brain injuries, stroke and dementia, express themselves and interfere with the demands of daily life. Relevant keywords in this context are behaviour, higher cognitive functions (e.g., memory, attention, executive functioning and language), emotion and adaptation. During the course, students will collect knowledge on: (1) The clinical phenomenology of the most important cognitive and behavioural disorders seen in humans; (2) The underlying brain-behaviour relationships in these disorders; (3) The interrelationships between various cognitive dysfunctions, emotional-, and behavioural problems; and (4) Assessment methods, diagnosis and treatment. Students will also gain experience in the selection, administration and interpretation of commonly used tests, measuring the above-mentioned domains of higher cortical functions, affective functions, and behaviour.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

- students are able to work with basic functional neuroanatomy, neuropsychological assessment, behavioural disorders, executive functions and attention, memory, brain injury,

aging, neuropsychiatry, motivation, emotion, coping, insight;
- students can apply a neurocognitive test and questionnaire on subjective complaints;
- students are able to specify the most common neuropsychological consequences of stroke, traumatic brain injury and dementia;
- students can explain the rationale of neuropsychological treatment.

Hormones, the Brain and Behaviour

Faculty of Psychology and Neuroscience

PSY3370

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

Credits:
6.0

Coordinator:
P. van Ruitenbeek

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Attendance

Keywords:
Social, stress and sex hormones, brain, Memory, social behaviour, depression, autism spectrum disorder, memory

Full course description

This course will review the interrelationships among hormones, the brain and behaviour. Basic endocrine (hormone) system physiology will be introduced and the different approaches that researchers take to address questions of hormone-behaviour relationships will be discussed. The focus will be on three large 'classes' of hormones, i.e. 'stress' (cortisol), 'social' (oxytocin, vasopressin), and 'sex' hormones (testosterone, estradiol, progesterone). Those hormones will be linked to normal behavioural processes such as memory and social behaviour as well as to psychiatric conditions such as depression/anxiety and autism spectrum disorder. At the end of this course, you will have developed an understanding of a selection of topics related to behavioural neuroendocrinology.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

You will be able to

- recall information regarding hormones and major endocrine organs
- explain methods to study hormone-behaviour relations and their limitations
- interpret the role of some hormones in 'normal' behaviour and psychiatric disorders.

Connecting Brains and Computers: Theory, Practice and Applications

Faculty of Psychology and Neuroscience

PSY3381

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

Credits:
6.0

Coordinator:
B. Sorger

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

Assessment methods:
Final paper, Presentation, Attendance

Keywords:
cognitive neuroscience, translational neuroscience, brain-computer interface (BCI), online/real-time data analysis, mental states, brain reading, brain-based communication and control, neuro feedback (therapy), self-modulation

Full course description

The analysis of brain activation *online* (*i.e.* , during ongoing data acquisition) allows for brain-computer interfacing. A brain-computer interface (BCI) connects a brain with a computer. It can 'translate' brain activation as measured with (almost) any functional-neuroimaging method (*e.g.* , electroencephalography [EEG], functional magnetic resonance imaging [fMRI] and functional near-infrared spectroscopy [fNIRS]) into digital code (*i.e.* , computer signals). These computer signals can be interpreted as different 'commands' for motor-independently controlling external devices (*e.g.* , robotic hand or spelling system) that can aid severely paralyzed patients. Moreover, it allows for providing individuals with information about their ongoing brain processes ('neurofeedback'). This not only creates fascinating research possibilities in fundamental neuroscience but also opens up the opportunity to develop brain-based therapies for the treatment of brain disorder and dysfunction. This elective will introduce the students to the general technical/methodological requirements, problems/challenges and application possibilities of brain-computer interfacing. Besides attending lectures, in which course participants will be provided with basic relevant knowledge by local BCI researchers, students will study seminal papers of recent BCI work. Further, students will discuss the

pros and *cons* of different functional brain imaging methods employed for BCIs as well as ethical implications and future directions. The practical part of this Elective course includes a demonstration of an fNIRS-BCI experiment. At a later stage of the Elective, the students will perform an fNIRS-BCI experiment themselves.
At the end of this course, students will have obtained fundamental knowledge of the methodology, limitations and the application potential and implications of brain-computer interfacing.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

Students are able to understand:

- the definition of brain-computer interfacing and related concepts;
- general principles of brain-computer interfacing;
- functional brain imaging methods for brain-computer interfacing;
- designing, setting-up and conducting BCI experiments;
- basics of online/real-time brain signal analysis;
- key studies in brain-computer interfacing;
- applications of BCIs for the treatment of brain disorder and dysfunction.

Psychedelic Medicine: The therapeutic Potential of mind-altering Substances

Faculty of Psychology and Neuroscience

PSY3382

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

Credits:
6.0

Coordinator:
K.P.C. Kuypers

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Final paper, Presentation, Attendance

Keywords:
psychedelics, emotion, cognition, treatment, psychiatric disorders

Full course description

Long before Western people in the sixties and seventies tried out psychedelics for recreational and therapeutic purposes, other cultures had already been using them for ages because of their therapeutic potential. This ‘psychedelic wave’ in the West scared off politicians leading to a scheduling of these substances and a halt to scientific research into the effects of those substances. In the nineties placebo controlled studies emerged looking into the negative effects of these drugs due to reports that these users might be cognitively impaired after abundant use of a number of these substances. Two decades later however, after the negative effects had been demonstrated to be limited, when used in moderate amounts, and after the substances appeared to be relatively safe, research into the positive effects started rising and it is blossoming today.
While previously only a handful of labs investigated these effects, new research labs in other countries are emerging. The therapeutic potential of psychedelics is now being widely investigated and two companies are now setting up trials in psychiatric patients in order to demonstrate the therapeutic potential of these compounds. Their aim is to have those substances approved as a psychiatric medicine within a few years.
While psychedelic research is experiencing a renaissance, it is still treated as the ‘bad daughter’ in psychiatric settings and frowned upon by the general public. From the patient side however there is a

large demand for effective and alternative treatments since treatment is not a ‘one-size-fits-all’ thing and many of those patients fail to benefit from current treatments, leaving them in distress and despair with a pessimistic view on their future.

Psychedelic researchers have the obligation to educate you, students, about the positive and negative effects of these substances since you will encounter this in your future work. When you have this knowledge, you will be able to communicate to the lay audience and to patients in an objective way what the current state of affairs is.

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

Course objectives

After you have finished this course you will be able to:

- define what psychedelics are and explain the neurobiological mechanism of a selection of psychedelic substances;
- explain what historical research with psychedelics demonstrated;
- differentiate the type of effects (positive and negative, acute and long-term) of a selection of psychedelics on cognition, mood, and social behavior;
- explain how psychedelics could be of use in a therapeutic setting and reflect on the psychiatric indications that could benefit from psychedelic treatment;
- explain how to do research with psychedelics.

Aggression

Faculty of Psychology and Neuroscience

PSY3384

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

Credits:
6.0

Coordinator:
K.J. Karos

Teaching methods:
PBL, Lecture(s), Skills

Assessment methods:
Presentation, Attendance, Assignment

Keywords:
aggression; GAM; aggression subtypes; aggression assessment; aggression therapy; biological and psychological correlates

Full course description

Aggression is defined as any behaviour directed towards a target who is motivated to avoid harm with the cause of damaging that target. Surprisingly maybe, nowadays, aggression levels in our society are actually lower than that in previous societies. Nonetheless, when incidents of aggression do occur they can cause major damage both on a personal level (i.e. for both victim and perpetrator) and for the society as a whole. This course is situated on the interplay between social, clinical and forensic psychology. Next to the major models on the existence and maintenance of aggression, and both nature and nurture-related causes, the course will focus on the main expression forms, cultural influences, and pathological disorders related to aggression. We will also address how aggression can be measured adequately and what the treatment options are.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

- students are able to explain the definition of aggression, and its sub forms like reactive and proactive aggression. They also have insight into the relation with related constructs like anger and hostility, and of the transdiagnostic nature of aggression. These also learn which pathological disorders are related to aggression;
- students gain and apply knowledge about gender and cultural influences on aggression;

- students can explain the different main models on aggression like the GAM, and on nature- and nurture related origins of aggression;
- students are able to explain the main goals of the different treatment model available for aggression, like cognitive therapy, stop-think-do approaches, schema therapy; gain clinical insight into these therapies, and reflect on the empirical evidence supporting the effectiveness of the different therapies;
- students gain knowledge and are able to reflect critically on the assessment methods used to measure aggression.

Clinical Psychology Package Internship B

Faculty of Psychology and Neuroscience

PSY3393

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

Credits:
8.0

Coordinator:
A.L. Smitten

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

Assessment methods:
Final paper, Participation, Presentation

Keywords:
Professional communication, professional skills, internship experience, interdisciplinary experience

Full course description

This course follows PSY3395: Clinical Psychology Package Internship A. As part of the latter, students have already gained some practical experiences in working in a health and patient care facility, and got to know the general structures of the health care system in the country where the internship facility is located, and what it entails to work interdisciplinary to help patients.
In this course, students' build on their previously acquired knowledge and skills. During the internship, students' gain their first practical experience in psychological prevention, interventions, and/or therapy. The internship must take place in an interdisciplinary health care facility or in another facility in which counselling, prevention, or rehabilitation are used to maintain, promote, and restore.

This internship can be done in outpatient clinics, or ambulatory center, or inpatient clinics, however, the facility needs to offer care in one of the following areas: psychotherapeutic care, psychiatric care, psychosomatic care, neuropsychological care, prevention, rehabilitation, care for people with mental and/or physical disabilities, or other areas of institutional care.

The internship has to be supervised by a licensed health care psychologist or psychotherapist who works in the facility. The students observe this professional at work and carry out their own work

assignments. Also, the students will gain basic insights into the institutional, legal, and structural framework conditions of the facility. Furthermore, students learn about the professional ethics codes, laws, and legislations related to offering psychological prevention, intervention, and therapy to (groups of) individuals and reflect upon these in the context of their experiences during the internship.
Note: this practical experience cannot be used to fulfil the prerequisites regarding the theoretical background and working experience set for the psychodiagnostics registration (i.e., the BAPD) and/or vLOGO.This module is only available for students in the minor Clinical Psychology. At the end of the course students have to hand in a written report.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

The student:

- obtains more insight into working interdisciplinary in a clinical setting; recognizes the distribution of tasks in an interdisciplinary collaboration and work appropriately together with the various professionals in accordance with the distribution of tasks;
- develops and applies basic skills in communication with patients and with other people or professionals involved;
- has gained practical experience in psychological prevention, interventions, and/or therapy;
- can apply ethics codes, laws, and legislations in this context.

Prerequisites

Registered in Clinical Psychology Package (4 elective package)
The students must find and secure the internship and internship supervisor which meets requirements independently. Internship needs to be approved by UM course coordinator.

Clinical Psychology Package Internship A

Faculty of Psychology and Neuroscience

PSY3395

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

Credits:
5.0

Coordinator:
A.L. Smitten

Teaching methods:
Assignment(s)

Assessment methods:
Final paper, Participation

Keywords:
professional skills, internship experience

Full course description

As a psychology student, you gain a lot of relevant theoretical knowledge and skills and in this elective you have the opportunity to apply the knowledge and skills in practice. The aim of this course is to facilitate you in developing knowledge, skills and abilities that are relevant for psychologists. In this way, you will increase your employability:

As part of the Clinical Psychology Package, for 5 ECTS, psychology students complete a short (4 week) orientation internship; Internship A.

Students must complete Internship A, prior to starting Internship B.

Students can apply to a variety of 'settings' for their internship. Suitable ‘settings’ provide students the opportunity to gain practical experience, relevant for becoming a psychologist. During this practical, students need to work under the supervision of an experienced psychologist. At the start of the practical, the student drafts a personal development plan (PDP), defining the learning objectives for the practical. In addition to the work experience, the student must write a report about this experience. As such, the student will get more insight into the work setting(s) of a psychologist and s/he will gain experience with applying knowledge and skills essential for being a psychologist.

Note: this practical experience cannot be used to fulfil the prerequisites regarding the theoretical background and working experience set for the psychodiagnostics registration (i.e., the BAPD) and/or vLOGO.

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

Course objectives

The student:

- obtains insight into the work setting(s) of a psychologist;
- gains experience with applying knowledge and skills essential for being a psychologist.

Prerequisites

Registered in Clinical Psychology Package (4 elective package)

The students must find and secure the internship and internship supervisor which meets requirements independently. Internship needs to be approved by UM course coordinator.

Behavioural Problems in Childhood and Adolescence

Faculty of Psychology and Neuroscience

PSY3341

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

Credits:
6.0

Coordinator:
L.M. Jonkman

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

Assessment methods:
Written exam, Attendance

Keywords:
developmental psychopathology, attachment theory, epigenetics, neurobiology of socio-emotional development

Full course description

Several environmental, personal and biological factors appear to be important for healthy socio-emotional development, but occasionally these influences can lead to problem behaviour. The course focuses on the development of problem behaviour during childhood and adolescence, how it originates and how it can be treated as it poses a risk for further healthy development. Topics addressed are the influence of genes/neurobiology, personality and the child's environment (peer interaction, parent attachment/parenting style) on socio-emotional and moral development and the development of psychopathology such as anxiety, depression, suicide, and narcissism.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

After this course students:

- are able to explain the interactive role that environmental (peer influences/parenting-style/attachment), personal (temperament/personality) and neurobiological (genes and brain development) factors play in the childhood and adolescent development of internalising and externalising behavioural problems/psychopathology such as bullying and antisocial/immoral behaviour, anxiety, depression, suicide and narcissism;

- will be able to critically read and reflect on research and research methods used in developmental psychopathology research. Can describe/explain therapies/interventions and their effectiveness in bullying and suicide intervention;
- have gained knowledge of instruments to assess some internalising, externalising or personality characteristics.

Prerequisites

There are no specific prerequisites to enroll this course except for a genuine interest in the topics (also the neurobiological aspects)

Sleep and Sleep Disorders

Faculty of Psychology and Neuroscience

PSY3349

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

Credits:
6.0

Coordinator:
P.R.A. HeckmanJ.G. Ramaekers

Teaching methods:
PBL, Lecture(s)

Assessment methods:
Written exam, Attendance

Keywords:
sleep, circadian rhythm, insomnia, daytime sleepiness, parasomnias

Full course description

Sleep is considered essential for good physical and mental health, yet, about 30% of the adult population complains of disturbed sleep. Prevalence of sleep disturbances is particularly high among elderly and women, and highly associated with psychiatric disorders like anxiety and depression. This course will address various aspects of normal and disturbed sleep, like the measurement and structure of normal and disturbed sleep; the normal need for sleep; the role of sleep in memory and cognition; various sleep disorders, like insomnia, narcolepsy, sleep apnea and sleepwalking; and the biological mechanisms involved.
At the end of the course there will be a written exam consisting of at least six open/essay questions. The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

After this course students are able to:

- know the characteristics of normal sleep and developmental changes;
- explain the interaction of homeostatic sleep drive and circadian processes affecting sleep duration and sleep architecture;
- know how to measure sleep, sleep complaints and daytime sleepiness;
- know the effects of sleep deprivation and explain major causes of lack of sleep;

- characterize, differentiate and explain the neurobiological mechanisms of major sleep disorders such as insomnia; narcolepsy, sleep apnea; sleep walking; restless legs syndrome; REM behaviour disorder; night terrors; nightmares; circadian rhythm disorders;
- apply knowledge of the neurobiology of sleep and circadian rhythm to explain sleep disorders;
- understand various theories of the function of sleep, including the function of sleep for cognition.

Cognitive Enhancement

Faculty of Psychology and Neuroscience

PSY3362

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

Credits:
6.0

Coordinator:
F. Duecker

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

Assessment methods:
Presentation, Attendance, Assignment

Keywords:
cognitive enhancement, brain stimulation, smart drugs, neuro-feedback, mindfulness, ethics

Full course description

Humans have always explored ways to enhance their mental capacities. For the largest part of human history, efforts primarily involved external devices that aid cognition such as written language, mathematics, and ultimately smartphones. Recently, however, the potential of cognitive enhancement by manipulation of the brain caught a lot of attention. With cognitive enhancers becoming increasingly available to the general public, this is a highly relevant topic for psychologists and neuroscientists alike. In this course, students will learn about various ways to enhance cognition covering a broad range of approaches. The focus will be on current hot topics such as brain stimulation, neuro-feedback, smart drugs, and meditation. Additionally, students will have the opportunity to critically discuss the scientific basis of other (potential) cognitive enhancers such as sleep, hypnosis, nutrition, physical exercise, or neuro-linguistic programming. Lastly, the possibility of cognitive enhancement poses ethical questions that will be discussed. At the end of this course, students will have basic knowledge of the potential, current limitations, and risks of cognitive enhancement.
The final assessment for this course is pass or fail - and not a numerical grade between 0,0 and 10,0.

Course objectives

After completion of the course, students will:

- understand the basic mechanisms of several brain-based cognitive enhancers;
- know about the efficacy and side effects of these cognitive enhancers;
- be able to discuss the benefits and costs of cognitive enhancers on the individual and societal level based on various ethical perspectives.

Positive Psychology

Faculty of Psychology and Neuroscience

PSY3385

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

Credits:
6.0

Coordinator:
M.M. Hanssen

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

Assessment methods:
Final paper, Presentation, Attendance, Assignment

Keywords:
positive psychology, optimism, resilience, protective factors, well-being, Motivation, Theory, practice, positive psychology interventions, motivation, theory

Full course description

The intent of positive psychology is to have a more complete and balanced scientific understanding of the human experience, by abandoning the exclusive focus on vulnerability factors ('fixing what is wrong') towards including protective factors ('building what is strong'). Positive psychology is concerned with both making the lives of people fulfilling as with healing and preventing pathology. Focusing on building strengths (e.g., optimism, positive affect) instead of correcting weaknesses can protect against and bolster recovery of mental illnesses. Examining both vulnerability and protective factors will help to disentangle what leads to outcomes of recovery, sustainability (perseverance in valued activities despite hardship) and growth (benefit finding).
The course will focus on the science of (applied) positive psychology. First, key constructs (e.g. optimism, self-compassion) and theories (e.g. broaden-and-build theory of positive emotions, self-determination theory) in the field of positive psychology will be covered. Second, the use of evidence-based positive psychology interventions in clinical practice will be discussed. Last, experience with positive psychology techniques will be gained during this course.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

After you have finished this course:

- you have gained knowledge about central positive psychology topics (e.g. well-being, resilience, optimism, positive emotions and self-compassion);
- you are able to understand and explain theories that are relevant to positive psychology (e.g., self-determination theory and broaden-and-build theory);
- you can interpret, contrast and criticize empirical findings in the field of positive psychology;
- you are able to design an empirical study to investigate the effect of positive psychology constructs/interventions;
- you have gained knowledge on evidence based positive psychology interventions;
- you know different positive psychology techniques and know how to apply them to enhance subjective well-being;
- you are able to apply learned positive psychology techniques in different contexts.

International Psychology and Climate Change

Faculty of Psychology and Neuroscience

PSY3391

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

Credits:
6.0

Coordinator:
H.T.H. Fonteijn

Teaching methods:
Lecture(s), Work in subgroups

Assessment methods:
Attendance, Assignment

Keywords:
Climate crisis, behavior change, Sustainability

Full course description

The climate crisis is an intersectional major challenge of contemporary society. In order to tackle it and mitigate its effects, transdisciplinary insights are required. In essence, the heating of the earth needs to be limited to prevent our ecosystems from collapsing. At the same time, the already devastating consequences on (mental) health need to be recognized and dealt with. As human behavior is at the root of these challenges, Psychology, the science of behavior, gives important approaches.

To get an insight on how psychology and climate change are interrelated, this student-led elective seeks first, to provide a basic understanding of climate change. At the same time, the two-way human-nature relationship gets explored. Thus, students will learn why humans cannot be seen independent of the environment and how cultural perspectives on nature differ.

Next, the focus lies on the role of psychology. Part of that are the consequences and anticipatory effects of climate change on mental health (e.g climate anxiety, trauma). Additionally, students will investigate findings about how both individual and social processes result in (un-)sustainable decisions and behaviors. And how these factors can be used to promote sustainable behavior.

After having built this knowledge base, students will examine examples of climate-protecting approaches. An important part of this is to consider different cultural perspectives.

Lastly, an essential goal of the elective is to apply the newly gained knowledge. Throughout the whole course of four weeks, students will develop a project in collaboration with other students. The project will deal with creating a strategy about a self-chosen aspect of climate change. Furthermore, self-reflection tasks will enhance the learning process throughout the course.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

After this course students are able to:

- to understand the role of psychology in tackling climate change;
- to understand how psychological theories of behavior change can be applied to promote environmentally friendly behavior;
- to evaluate and analyze effects of climate change on mental health and critically examine the relation to global climate injustice;
- to critically evaluate and analyze existing approaches of sustainability and psychology, and become familiar with psychology's role in developing climate policy;
- to apply the knowledge learned in the elective in creating a project to improve sustainability, locally and globally;
- to develop an awareness of their own responsibility and behavior regarding theories, issues and prevention strategies discussed during the course .

Bachelor's Thesis

Faculty of Psychology and Neuroscience

IPN3014

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

Credits:
6.0

Coordinator:
M.G.F. Colombi

Teaching methods:
Skills, Paper(s)

Assessment methods:
Final paper

Keywords:
writing skills, research report, empirical cycle, scientific communication

Full course description

Students are required to write a bachelor thesis to conclude the Bachelor phase. Either the thesis is an article in which students report on a literature study or the thesis reports on a study that they carried out under supervision of a staff member. For both types of theses, students pursue the empirical cycle and define a clear background/problem situation of the chosen topic(s) as based on relevant and recent academic literature and develop this problem statement into a clear research question. Students then answer this question in the thesis according to the present rules of the art. Students must start well in advance to prepare the bachelor thesis, ideally at the start of the third year. Students approach a potential supervisor for their thesis via the bachelor thesis matching system. Students and staff consult “http://www.askpsy.nl/bachelor-thesis” for details and deadlines of writing the bachelor thesis. The site also links to the handbook writing skills and APA cookbook which provide information on writing style and criteria for both writing and grading papers and theses. The final grade is the average of the grades of the supervisor and of a second assessor.
The final assessment for this course is a numerical grade between 0,0 and 10,0.

Course objectives

Students:

- apply rules and directives of scientific communication;
- communicate results scientifically via a written research report.

Behavioural Economics

Faculty of Psychology and Neuroscience

HONH017

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

Credits:
2.0

Coordinator:
M. Strobel

Teaching methods:
PBL

Assessment methods:

Full course description

De online course description is niet beschibaar, voor meer informatie neem contact op met de modulecoördinator.

Introduction to Honour's Programme

Faculty of Psychology and Neuroscience

HONH020

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

Credits:
1.0

Coordinator:
M. Capalbo

Teaching methods:

Assessment methods:
Written exam

Full course description

The online course description is not available, for further information please contact the course coordinator.

Honours+

Faculty of Psychology and Neuroscience

HONH021

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

Credits:
5.0

Coordinator:

Teaching methods:

Assessment methods:
Participation, Attendance, Assignment

Full course description

The online course description is not available, for further information please contact the course coordinator.

Philosophy and Psychology of Consciousness

Faculty of Psychology and Neuroscience

HONH015

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

Credits:
2.0

Coordinator:
R.P. de Vries

Teaching methods:
PBL

Assessment methods:

Full course description

The online course description is not available, for further information please contact the course coordinator.

Perspectives on Psychopathology

Faculty of Psychology and Neuroscience

HONH012

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

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

Credits:
2.0

Coordinator:
A.J. Roefs

Teaching methods:
PBL

Assessment methods:

Full course description

De online course description is niet beschibaar, voor meer informatie neem contact op met de modulecoördinator.

Psychology and AI

Faculty of Psychology and Neuroscience

HONH016

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

Credits:
2.0

Coordinator:
M. Capalbo

Teaching methods:
PBL

Assessment methods:

Full course description

De online course description is niet beschibaar, voor meer informatie neem contact op met de modulecoördinator.

Genetics

Faculty of Psychology and Neuroscience

HONH011

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

Credits:
2.0

Coordinator:
M. GerardsM.M.L. Moerel

Teaching methods:
PBL

Assessment methods:

Full course description

The online course description is not available, for further information please contact the course coordinator.

Historical Book Review

Faculty of Psychology and Neuroscience

HONH019

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

Credits:
2.0

Coordinator:
A.H. van der Lugt

Teaching methods:
PBL

Assessment methods:

Full course description

De online course description is niet beschibaar, voor meer informatie neem contact op met de modulecoördinator.