Bachelor Psychology

Find another programme

First year courses

Bachelor Psychology Year 1

Faculty of Psychology and Neuroscience

Skills I: Learning in Groups

Full course description

Problem-Based Learning (PBL) is a unique feature of the education provided at Maastricht. This educational system focuses on guiding students to become independent and enterprising problem-solvers. In order to achieve this goal, teaching must extend beyond the traditional individual studying and attending lectures. Students work in small groups on concrete problems from the field. As a team they analyse problems, attempt to understand the underlying theories and learn to apply their knowledge to recognisable, realistic situations.

To perform well in this educational system, it is vital for students to have knowledge of the background and central elements of this system. During this course, students will learn and practice the skills needed to be successful in tutorial group meetings.

During the introduction week, first-year students will familiarise themselves with Problem-Based Learning and communication skills essential for learning in groups. The students will focus on practising with problem tasks. Special attention will be paid to skills, which are important for individual participation in groups and the role played by the discussion leader. One session will be completely devoted to teambuilding.

Course objectives

Students:

- are able to explain the PBL system and are able to implement the approach;
- can reflect on the group processes and reflect on their own performance in the tutorial group;
- can give examples on how to adapt their performance in a group (teambuilding);
- have knowledge of communication skills and leading a group and are able to demonstrate this knowledge in a new situation.

IPN1131
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
2.0
Instruction language:
English
Coordinator:

Bachelor Psychology

- W.H.J. van Mansum

Teaching methods:
PBL, Skills, Work in subgroups
Assessment methods:
Attendance
Keywords:
PBL, communication skills, feedback, reflection, teambuilding
Faculty of Psychology and Neuroscience

Practical: Introduction UM Systems

Full course description

The practical takes place during the introduction week, with the aim to explain the facilities and online services for students who are starting their studies at FPN.

The training includes:

- UM account
- Student portal (course / exam booking, check study results)
- The electronic learning environment
- Computer facilities
- FPN AskPsychology http://www.askpsy.nl

This course consists of an information session, do-it-yourself assignments and a hands-on meeting.

Course objectives

Students:

- Are able to name various online information sources and resources available for FPN students;
- reveal that they have a general understanding of available systems;
- can give examples of UM and FPN regulations.

IPN1138
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- W.G.J.J. Teeling

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

Bachelor Psychology

Keywords:
Study facilities, ICT systems, UM-card, student portal, electronic learning environment, rules and regulations, introduction week
Faculty of Psychology and Neuroscience

Practical: Introduction Library

Full course description

In an interactive way students will be introduced to finding scientific information (e.g. in relation to search engines such as Google). Attention is also paid to the support offered by the library in searching for and finding information. This introduction is the first step in helping students to develop essential information skills. In collaboration with the course coordinator this practical is linked to the course literature. Students are asked to complete the online tutorial 'Finding your literature' before the practical.

Course objectives

Students:

- can recognise and know how to retrieve references (books, articles, websites);
- know what the learning and resource centre stands for;
- know how to find library services and support.

IPN1123
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- N. Siep

Teaching methods:
Assignment(s), PBL, Presentation(s), Skills
Assessment methods:
Attendance
Keywords:
Study resources, information skills, references, catalogue, learning and resource centre
Faculty of Psychology and Neuroscience

Skills II: Observing Others and Yourself

Full course description

Skills II focusses on both study skills and research skills. In Skills I students get a mentor assigned

who will supervise the meetings of Skills II. The mentor and the group will meet in total 5 times during Skills II. The focus of the first, second and fourth will be on study skills. Students learn what effective study strategies are in period 1, become aware of their own study strategies (period 2) and learn alternative study methods. During period 3, students will work in small groups on their first observational research. These research projects are methodologically supported by the courses Methods and Techniques and Statistics for Psychologists I. The projects are substantively related to the course Discover Psychology which runs in parallel to the observational study in period 3. In this period the mentor and the group have three group meetings to discuss the progress of this research. Additionally, students will present their research results together with their subgroup and write a research report. As preparation for the observational research students follow the practical training Systematic Literature Search…Finally, the students will complete the practical trainings Data Processing via SPSS, and Observing behaviour.

Course objectives

Students are able:

- to explain the quality of the different study methods (for example self-testing, distributed practice, elaborate interrogation, summarising,) and are able to apply the most effective skills;
- to explain the empirical cycle and have followed this cycle themselves in making a research design, the conduction of an observational research, and the analysis and interpretation of the data;
- to mention the most relevant aspects of observation and have had exercise in the observation of behaviour;
- to communicate in a scientific way by writing a research paper and presenting (orally) the results.

IPN1132
Period 1
1 Sep 2020
29 Jan 2021
Print course description
ECTS credits:
2.0
Instruction language:
English
Coordinator:

- E.B. de Sousa Fernandes Perna

Teaching methods:
Lecture(s), Paper(s), Presentation(s), Research, Skills, Work in subgroups
Assessment methods:
Attendance, Final paper, Presentation
Keywords:
research, communication skills, study skills, observation, mentoring
Faculty of Psychology and Neuroscience

Practical: Observing Behaviour

Full course description

Psychology aims to draw conclusions about human behaviour. In order 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. During this practical, students will learn how to draw systematic observations using computer tasks.

Course objectives

Students are able:

- to apply behavioural observation techniques, like systematic behavioural observation;
- to use a behavioural classification system;
- to judge the reliability of observations.

IPN1128
Period 1
1 Sep 2020
29 Jan 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- F.E.R.M. Nievelstein

Teaching methods:
Assignment(s), Research, Skills
Assessment methods:
Attendance, Assignment
Keywords:
Systematic behavioural observation, observing
Faculty of Psychology and Neuroscience

Practical: Data Processing in SPSS

Full course description

During the third period, students will work in groups on their first observational research. These research projects build on the courses ‘Methods and Techniques’ and ‘Statistics for Psychologists I’.

For the observational research, students conduct (as a research group) observations and analyse these in the software SPSS. During the practical 'Data Analysis via SPSS', the students analyse, in groups, the observations using an analysis protocol and with the support of SPSS trainers.

Bachelor Psychology

Course objectives

Students:

- are able to explain the following concepts within the concept of an observational study: formulation of research question, independent and dependent variables, measurement level, hypotheses, and research design, and are able to define these concepts in the process of setting up an observational study;
- are able to analyse the data obtained with an observational study (by means of an analysis protocol), in which they are able to explain and apply specific statistical techniques, such as z-test, t-tests, ANOVA, X2 goodness of fit test, and X2 test for contingency tables;
- are able to explain the SPSS output for these statistical techniques and are able to interpret the results hereof.

IPN1130
Period 1
1 Sep 2020
29 Jan 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- J. Schepers

Teaching methods:
Skills, Work in subgroups
Assessment methods:
Attendance
Keywords:
Observational research, statistical analysis, SPSS
Faculty of Psychology and Neuroscience

Practical: Systematic Literature Search

Full course description

Conducting research or writing a paper generally requires literature research. The library offers a range of information sources (databases) in various fields of study. During this practical, students are introduced to these sources (particularly PsycINFO), they will learn to use them and they will collect literature on the subject systematically. This takes place in the following steps: defining the subject and the search query (including translations of search items), determining sources to be searched, systematically searching various sources using a search planning form and finally evaluating search results. Special attention is paid to the use of general search engines in relation to subject-specific sources and the use of controlled key words (thesaurus). Students receive a number of leads, tips and tricks based on examples and assignments. In addition, focus will be put on the online tutorial 'Finding literature for your research'.

Bachelor Psychology

Course objectives

Students:

- are able to use different subject-related (such as PsycINFO, PubMed) and their features (like thesaurus) to systematically retrieve literature on a specific topic for their research or writing assignment;
- know how to build an effective search strategy.

IPN1137
Period 1
1 Sep 2020
29 Jan 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- N. Siep

Teaching methods:
Assignment(s), Presentation(s), Skills
Assessment methods:
Attendance, Participation
Keywords:
PsycINFO, literature research, thesaurus, search strategy
Faculty of Psychology and Neuroscience

Practical: Portfolio Year 1 Part 1

Full course description

Students will create portfolios to document their progress of the programme and their personal growth during 'Skills II'.

They will have individual meetings on their study progress with the mentor during the first, and in some cases the third period. The portfolio with study results will form the basis of these meetings.

Students need to have fulfilled the requirements of the IPN1139 portfolio year 1 part 1 to get the credits for Skills II.

Course objectives

Students are able:

- to formulate what they want to achieve;
- to analyse, to evaluate, and to reflect on functioning (study behaviour, study progress and personal development);
- to make a structured portfolio in which the analyses, evaluations, and reflections

systematically are discussed.

IPN1139
Period 1
1 Sep 2020
29 Jan 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- E.B. de Sousa Fernandes Perna

Teaching methods:
Skills
Assessment methods:
Attendance, Portfolio
Keywords:
Personal learning goals, self-reflection, study progress
Faculty of Psychology and Neuroscience

Social Behaviour

Full course description

How come we evaluate our own group more positively than other groups? When do we perform better - with others or by ourselves? Does altruism exist or is helpful behaviour always motivated by egoistic reasons? How can we change the negative attitudes towards blood donation? Social psychologists have studied such questions. Social psychology uses scientific methods to study the way in which our thoughts, feelings and behaviour are influenced by others. During the course Social Behaviour, students receive an introduction to the classical themes within social psychology, based on nine problems. These themes are: group processes, stereotypes and prejudices, social influence, attitudes, attributions, the self, social cognition, aggression, pro-social behaviour, and affiliation and attraction. Attention is not limited solely to intrapersonal and interpersonal processes; extensive consideration will also be given to the subject of group processes.

Course objectives

Students:

- can provide definitions of terminology used in social psychology, such as group processes, stereotypes and prejudices, social influence, attitudes, attributions, the self, social cognition, aggression, prosocial behaviour, affiliation, and attraction;
- can explain these terms because they are familiar with classic and recent social-psychological theories and insights;
- can name, analyse, and evaluate research methods in social psychology
- understand intercultural differences and limitations of psychological theory and its application.

IPN1021

Bachelor Psychology

Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- K.J. Jonas
- G.A. ten Hoor

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Social psychology, attitudes, social influence, Social cognition, interpersonal processes, group processes, aggression
Faculty of Psychology and Neuroscience

Practical: Social Networks

Full course description

In this skills training students will reconsider a number of topics discussed in the course 'Social Behaviour' within the specific context of online social network sites (e.g., Facebook). This, however, requires that students possess basic knowledge of networking principles as well as the ability to apply these principles. For this purpose, students will work on a number of computer assignments. These assignments consist of measuring, visualising, and analysing social networks by using network analysis methods. For example, students map out their own Facebook network and reproduce the classic Stanley Milgram 6 six degrees of separation experiment in the information age. In addition they learn about the influence of certain frequently occurring network principles on both the functioning of groups and the dissemination of information.

Course objectives

Students

- can explain network analysis and conduct research in this domain;
- can measure, analyze and visualize social networks.

IPN1124
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
0.0
Instruction language:

Bachelor Psychology

English
Coordinator:

- L. Vanwersch

Teaching methods:
Assignment(s), Research, Skills
Assessment methods:
Attendance, Assignment
Keywords:
Social networks, network analysis
Faculty of Psychology and Neuroscience

Methods and Techniques of Research

Full course description

Knowledge acquisition requires research. Because of this, research plays an important role in psychology. In this course, students will learn the most important steps for good research. First, students will learn about the empirical cycle. Good research starts with a theory, from which hypotheses are derived. These hypotheses are tested through experimentation or observations. Results are then compared to the theory: Is the theory supported or should it be adjusted, or even dismissed?

Measuring instruments (such as questionnaires or behaviour observations) are also important for conducting research: they need to be reliable and valid. That is, they need to actually measure what is intended, and do so consistently.

There are different types of research: you can describe a variable or investigate how two variables relate to each other. This relationship can be represented graphically and you can statistically calculate the strength of the relationship, using correlation or linear regression for example.

Moreover, if you want to know what the cause is and what the effect, you have to manipulate a variable in a true experiment and assess the effects on your dependent variable.
To give an example, imagine that results of a study show that drug users are on average, more impulsive; does this mean that impulsive people are more inclined to use drugs or does one become impulsive due to the use of drugs? In this course, students will learn how to examine such matters.

Of course, research should preferably be conducted as much controlled as possible and alternative explanations should be excluded. To this end, it is important to use a good research design including a control group for example.

Course objectives

Students can:

- name and explain different research designs, such as between-subjects designs, within-subjects designs, quasi-experimental designs, and factorial designs;
- name and reflect on important aspects of scientific research, such as different types of arguments, scientific theory, ethics in research, questionnaires, selection of participants, reliability, and validity;
- name various statistical analysis techniques, such as correlation, linear regression, associations, as well as causality, and can explain when application of these techniques is appropriate;
- describe the empirical cycle of scientific research and its elements;
- name and explain various types of research, such as observational research and experimental research.

IPN1022
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- L. Riecke
- A.J. Roefs
- A. Cassese

Teaching methods:
Lecture(s), PBL, Assignment(s)
Assessment methods:
Attendance, Written exam
Keywords:
Research, ethics, questionnaires, observations, correlations, design, experiment
Faculty of Psychology and Neuroscience

Body and Behaviour

Full course description

What causes jetlag? Why do you feel like having a cup of soup? How come smokers are so hooked on their cigarettes? These and other questions will be answered during the course Body and Behaviour. This course mainly studies biological explanations for behaviour based on themes such as sexuality, eating and drinking, sleeping and waking, medication, movement, and addiction. Knowledge of the biological basis of behaviour is essential for psychologists. The most important structure for explaining human behaviour is our brain. However, establishing a link between electrical and neurochemical activities in our brain to behaviour is no easy task. You need sound knowledge of neuroanatomy (how parts of the brain are in connection to one another), neurophysiology (how brain cells operate), and neurotransmission (how brain cells communicate). During the first few weeks of the course, special attention will be paid to the (further) development of this basic knowledge. Students will also learn that knowledge of the biological basis of human behaviour does not only come from research on humans, but also on animals. Finally, research methods used by

psychologists to study the biological basis of behaviour will be touched upon. Today, psychologists are able to carefully study the structure and function of the brain using these methods. The most important methods will be discussed and the pros and cons will be compared.

Course objectives

Students:

- can reproduce the basic (neuro)anatomy and anatomical views and positions;
- can explain the function of a neuron and the foundations of neurotransmission;
- can provide definitions of the terms systems neuroscience and basic genetics;
- can explain the sensorimotor system and the reflex arc;
- can explain circadian rhythms and can connect concepts such as sleep and sleep stadia, hunger and thirst, homeostasis, hormones, and sexual development;
- can explain concepts, such as mechanisms of specific medication, conditioning, and addiction, based on their basic knowledge on neuroscience;
- understand that there are different research methods in neuroscience and know how these differ.

IPN1023
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- M. Capalbo

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Neuroanatomy, neurophysiology, neurotransmission, neuropharmaceutical products, homeostasis, Sleep, Addiction, sexual development, methods
Faculty of Psychology and Neuroscience

Practical: Anatomy

Full course description

As a psychologist it is necessary to have an understanding of the overall organisation of the brain. This practical is a first introduction into the brain's anatomy. You are going to work with diverse, virtual 3D models of brains. You will navigate these virtual brains looking for brain structures and areas to advance your insight into the structure of the brain. A workbook shall be completed during this course. Literature and short video fragments of lectures on anatomy will also be used. The workbook gives information about the anatomy and it will help you locate the different parts and

structures. Each section contains a task and/or questions. Your workbook will be checked.

Course objectives

Students:

- can name directions and planes in the brain, hemispheres and lobes, gyri and sulci, cortical areas, functional areas, ducts and nerves, commissures and ventricles;
- can (better) interpret images of structural MRI.

IPN1129
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- M. Capalbo

Teaching methods:
Assignment(s)
Assessment methods:
Assignment
Keywords:
Neuroanatomy, neuro navigation, virtual anatomy, structural MRI
Faculty of Psychology and Neuroscience

Statistics for Psychologists I

Full course description

This course consists of two parts. During the first part of the course, students will study the foundations of inferential statistics. A great deal of emphasis will be placed on the logic behind the statistical reasoning process. During the second part of the course, students will be familiarised with several statistical techniques often used in the field: t-tests, ANOVA and X2 tests. In the parallel SPSS practical, students will be given the opportunity to apply these techniques to several real data sets. The subjects covered in the second part of this course will consistently be linked to the basic terms that were explained in the first part of the course.

Course objectives

Students:

- are able to specify and explain relevant concepts that are central in inferential statistics, including 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, p-value, significance level, power, Type I- and Type II-errors, confidence interval, population and sample proportion;
- are able to explain and apply specific statistical techniques, such as z-test, t-tests, ANOVA, X2-goodness of fit test, X2-test for contingency tables, and they can interpret relevant output of these tests;
- are able to specify the assumptions of statistical tests that were discussed in this module as well as the conditions for, robustness against violations of these assumptions and are able to apply this knowledge when analysing data.

IPN1024
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- A. Cassese

Teaching methods:
Lecture(s), Work in subgroups
Assessment methods:
Attendance, Written exam
Keywords:
Inferential statistics, hypothesis testing and (interval) estimation, t-test, ANOVA, chi-square
Faculty of Psychology and Neuroscience

Practical: SPSS I

Full course description

Psychologists that work with statistics rarely produce calculations manually, but use statistical software to run the required analyses. IBM Statistical Package for the Social Sciences SPSS is the software that psychologists use most. During the first three practicals, students will learn how to use the software correctly and will familiarise themselves with the many possibilities that SPSS offers the user. During the last three practicals, students will further explore the theory behind statistics by analysing data from actual research.

Course objectives

Students:

- are able to show that they can work with the software SPSS, such as entering data in SPSS and performing the statistical analyses discussed in the module 'Statistics for psychologists I' by means of SPSS;

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

IPN1121
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- A. Cassese

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

Discover Psychology: Psychology in Society

Full course description

At the start of their Bachelor's, students often do not yet have a clear idea of what psychology has to offer in terms of content. Discover Psychology (see general description of module IPN1029) is meant to help students find their bearings in the field. Students have the opportunity to explore a specific theme, by choosing between a number of brief courses, provided by staff members from various departments. In addition, students are introduced to the research that is being carried out by the different departments within FPN; several Professors are invited to tell students about their line of research within our faculty.

The elective track 'Psychology in Society' highlights the role that psychology plays in society. What does psychology for example contribute to maintaining good health, improving professional achievements, to care trajectories in primary schools or influencing consumer behavior? Students learn about the important contribution that psychological science makes to everyday society – both with regard to explaining behavior, and solving problems.

Course objectives

Students are able to:

- describe and explain classical theme's within applied psychology;
- explain the contributions of psychology to everyday life in society;
- understand the media influence on society;
- understand, analyse, and evaluate research and research methods in psychology.

Bachelor Psychology

IPN1029A
Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinator:

- K. Massar

Teaching methods:
Lecture(s), PBL, Skills
Assessment methods:
Attendance, Written exam
Keywords:
Social psychology, Work psychology, sport psychology, Cognitive Neuroscience, neuropsychology, clinical research
Faculty of Psychology and Neuroscience

Discover Psychology: Meet your Brain

Full course description

At the start of their Bachelor's, students often do not yet have a clear idea of what psychology has to offer in terms of content. Discover Psychology (see general description of module IPN1029) is meant to help students find their bearings in the field. Students have the opportunity to explore a specific theme, by choosing between numbers of brief courses, provided by staff members from various departments. In addition, students are introduced to the research that is being carried out by the different departments within FPN; several Professors are invited to tell students about their line of research within our faculty.

The elective track 'Meet your Brain' presents several intriguing examples of the link between brain and behaviour, and thereby showcases how insights into the workings of the brain provide novel ways for psychologists to explain, predict and ultimately influence behavior. The potential of neuroscientific methods such as neuroimaging and non-invasive brain stimulation is highlighted in the context of fundamental research and clinical applications to treat brain-based disorders.

Course objectives

Students

- gain insights into the link between brain and behaviour;
- obtain a basic understanding of the neural mechanisms underlying various cognitive functions;
- can name and explain how neuroscientific techniques can be used to treat brain-based disorders;
- can (better) understand, analyse, and evaluate original research articles in the field of (cognitive) neuroscience;

- get hands-on experience with non-invasive brain stimulation and EEG.

IPN1029B
Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinator:

- F. Dücker

Teaching methods:
Lecture(s), PBL, Skills
Assessment methods:
Attendance, Written exam
Keywords:
Social psychology, Work psychology, Cognitive Neuroscience, Neuropsychology, Clinical research
Faculty of Psychology and Neuroscience

Discover Psychology: Drugs and the Brain

Full course description

At the start of their Bachelor's, students often do not yet have a clear idea of what psychology has to offer in terms of content. Discover Psychology (see general description of module IPN1029) is meant to help students find their bearings in the field. Students have the opportunity to explore a specific theme, by choosing between numbers of brief courses, provided by staff members from various departments. In addition, students are introduced to the research that is begin carried out by the different departments within FPN; several Professors are invited to tell students about their line of research within our faculty.

The elective track 'Drugs and the Brain' deals with the neural and behavioral effects of several well-known drugs. How does each drug influence the brain, and how do the characteristic behavioral effects arise? What role do neurotransmitters play in this process? Does the general public's popular opinion reflect the actual dangers of a drug? Is a legal drug such as alcohol safer than illegal drugs? Could certain illegal drugs actually have valuable medicinal applications?

Course objectives

Students:

- are able to explain the neurobiological mechanisms underlying the behavioural effects of a number of well-known drugs of abuse;
- are able to understand the research paradigms and methods used in psychopharmacological research and evaluate the findings.

IPN1029C

Bachelor Psychology

Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinator:

- K.P.C. Kuypers

Teaching methods:
Lecture(s), PBL, Skills
Assessment methods:
Attendance, Written exam
Keywords:
psychopharmacology, drugs of abuse, biological mechanism, classification of drugs of abuse
Faculty of Psychology and Neuroscience

Discover Psychology: Mind your Body

Full course description

At the start of their Bachelor's, students often do not yet have a clear idea of what psychology has to offer in terms of content. Discover Psychology (see general description of module IPN1029) is meant to help students find their bearings in the field. Students have the opportunity to explore a specific theme, by choosing between numbers of brief courses, provided by staff members from various departments. In addition, students are introduced to the research that is begin carried out by the different departments within FPN; several Professors are invited to tell students about their line of research within our faculty.

The elective track 'Mind your Body' highlights the role of having a positive or negative body image, focusing primarily on the role that the (mass) media play in this process. A negative body image can cause a whole range of additional psychological problems, including depression and eating disorders. How does a negative body image develop? How can this be worsened, or improved? What is the role of your family and friends in this? And could a positive body image have very positive effects on our life?

Course objectives

Students:

- will be able to name and describe classic themes/theories within psychology, including the psychology of body image;
- will be able to describe the role of a positive or negative body image and how the media influence body image;
- will be able to better understand, analyse and evaluate the published research and research methods in the domain of body image.

IPN1029D

Bachelor Psychology

Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinator:

- J.M. Alleva

Teaching methods:
Lecture(s), PBL, Skills
Assessment methods:
Attendance, Written exam
Keywords:
Social psychology, Work psychology, Cognitive Neuroscience, Neuropsychology, Clinical research
Faculty of Psychology and Neuroscience

Development

Full course description

Development can be regarded as the changes in behaviour that entail an adjustment by a child to his/her physical and social environment. The central theme is how and why a certain psychological process develops. Is it the result of the maturing of the brain (nature) or environmental factors (nurture), or both? During the course, we will look at the processes and changes that play a role in the psychological change from conception to young adulthood. Maturation and development of the central nervous system is one of the subjects that will be studied (biological development). Students will also look at the way in which children learn to observe and think (perceptual and cognitive development), which will include the discussion of a number of theories, including the Piagetian and information-processing developmental theories. The social, emotional and moral development of the child will be discussed too, such as attachment to parents/caretakers. The effect of group processes will primarily be discussed in relation to adolescent development. Other important subjects are language acquisition, information processing and the development of social cognition.

Course objectives

Students:

- can name and explain classical topics in developmental psychology, such as temperament, information processing, learning theories, and social cognition;
- can summarize the processes and (age-related) changes relevant in developmental psychology and can explain relevant developmental theories;
- can explain cognitive development, perceptual development, language acquisition, moral development, and emotional and social development;
- can reproduce the stages of pre- and postnatal brain development, and understand concepts relevant in the context of growing and the development of the central nervous system;
- can understand, analyse, and evaluate research and research methods published in the field of

developmental psychology.

IPN1025
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- F.C.L. Donkers

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
development, Perception, cognition, emotion, language, moral development
Faculty of Psychology and Neuroscience

Perception

Full course description

How does our brain construct a picture of the world around us? The efficiency with which we see, hear, feel and smell makes perception seem easy and effortless. However, this ability is astounding when one considers the complexity and diversity of our senses and, in particular, how systematically the millions of neurons in our brain work together to process all of the various sensory stimuli.

The course will start with the following questions: ‘What is perception?’ and ‘How can we measure it?’ Subsequently, students will consider in detail the question of how the visual brain system transforms light stimuli into the perception of colours, contrast, movement, depth and visual objects. Building on this, students will study how our auditory system converts sound stimuli into the perception of tones, music, environmental sounds and human speech. Throughout the course, students will discuss basic functional and structural principles of perception through a comparison of the visual and auditory systems.

Course objectives

Students:

- are able to identify and understand different aspects of auditory and visual perception, such as object recognition, colour perception, sound perception, depth and size perception, auditory scene analysis, Gestalt psychology, and auditory/visual illusions;
- are able to explain physiological principles of auditory and visual perception, such as the structure and function of the ear and eye, colour and sound perception, subcortical and cortical auditory and visual pathways, and structural and functional principles of perception;
- are able to recognize and clarify anomalies in auditory and visual perception, such as colour

blindness, dyslexia and hearing loss, and are able to relate these anomalies to underlying physiological mechanisms and/or brain damage;
- understand, analyse and evaluate basic approaches and research methods central to the study of perception.

IPN1026
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- M.L. Bonte

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Perception, brain, visual perception, auditory perception, psychophysics, neuroimaging, Cognitive Neuroscience, neuropsychology
Faculty of Psychology and Neuroscience

Skills III: Communicating

Full course description

Several different skills will be covered in periods four, five, and six, which deal with communicating ideas effectively to a larger audience.

Based on a number of written exercises, attention will be paid to giving feedback, structuring an academic paper, plagiarism, and writing according to current language and style rules. Students will be required to complete three small individual written assignments. They will also gain experience with communicating ideas audio visually and verbally. Furthermore, they will be introduced to therapeutic communication skills.

In addition, students will engage in a number of activities with the object of familiarising themselves with the various disciplines within psychology and with the labour market. In May, the mentor will have another individual meeting with every student on study progress.

Course objectives

Students:

- can communicate findings in a scientific and/or popular manner, i.e., in writing articles on specific topics and giving (oral) presentations;
- are able to reflect on their own communication skills (self-reflection);

- have practiced their own communication skills. Giving feedback is a central part of this.

IPN1133
Period 4
1 Feb 2021
2 Jul 2021
Print course description
ECTS credits:
2.0
Instruction language:
English
Coordinator:

- A.L.T. Walkowiak

Teaching methods:
Assignment(s), Presentation(s), Paper(s), Skills
Assessment methods:
Attendance, Final paper, Presentation
Keywords:
Writing skills, communication, mentorate
Faculty of Psychology and Neuroscience

Practical: Writing Assignment 1

Full course description

Students will practice academic writing. Based on three writing assignments, attention will be paid to giving feedback, structuring an academic paper, plagiarism and writing according to current language and style rules.

The first assignment involves writing a blog about the observational study students performed in period 3 (part of Skills II). Students are challenged to describe their observational study in a scientific and popular way that appeals to a larger audience. They also have to give feedback on each other's blogs during the practical. Students are given the opportunity to edit their own blog on the basis of the feedback they will receive from their peers and teaching staff.

Students will perform this task under direct supervision of teaching staff.

Course objectives

Students:

- can read, interpret, and reflect upon papers summing experimental studies;
- can give constructive feedback on the work of others.

IPN1134
Period 4
1 Feb 2021
2 Jul 2021
Print course description

Bachelor Psychology

ECTS credits:
0.0
Instruction language:
English
Coordinator:

- F.E.R.M. Nievelstein

Teaching methods:
Skills, Assignment(s)
Assessment methods:
Attendance, Final paper
Keywords:
Writing skills
Faculty of Psychology and Neuroscience

Practical: Writing Assignment 2

Full course description

Students will practise academic writing. Based on three writing assignments, attention will be paid to giving feedback, structuring an academic paper, plagiarism and writing according to current language and style rules.

The second assignment involves practicing in clearly describing and consequently interpreting experimental studies, and formulating a critical conclusion.

The assignment involves reading about a controversial historical psychology perspective, and coming to a well-founded, critical conclusion about a personal perspective on the issue.

Students will perform this task under direct supervision of teaching staff.

Course objectives

Students:

- have knowledge on and experience with reading and interpreting experimental studies of others;
- can compare different experimental studies and can formulate a critical conclusion regarding the meaning of these studies;
- can write findings in a scientific manner.

IPN1135
Period 4
1 Feb 2021
2 Jul 2021
Print course description
ECTS credits:
0.0
Instruction language:
English

Bachelor Psychology

Coordinator:

- F.E.R.M. Nievelstein

Teaching methods:
Skills, Assignment(s)
Assessment methods:
Attendance, Final paper
Keywords:
Writing skills
Faculty of Psychology and Neuroscience

Practical: Writing Assignment 3

Full course description

Students will practise academic writing. Based on three writing assignments, attention will be paid to giving feedback, structuring an academic paper, plagiarism and writing according to current language and style rules.

The third assignment involves providing useful feedback to an academic paper written by a peer. Students will receive a clear instruction and will provide their peer-review under direct supervision of teaching staff.

Course objectives

Students:

- can write findings in a scientific and popular manner;
- can give constructive feedback on the work of others.

IPN1136
Period 4
1 Feb 2021
2 Jul 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- F.E.R.M. Nievelstein

Teaching methods:
Skills, Assignment(s)
Assessment methods:
Attendance, Final paper
Keywords:
Writing skills, communication
Faculty of Psychology and Neuroscience

Practical: Portfolio Year 1 Part 2

Full course description

Again in the fourth period students have an individual meeting with their mentor in which study progress and personal development are discussed. The portfolio with study results will form the basis of these meetings.

Students need to have fulfilled the requirements of IPN1140 portfolio year 1 part 2 to get the credits for Skills III.

Course objectives

Students are able:

- to formulate SMART goals;
- to analyse, to evaluate, and to reflect on their SMART goals and functioning (study behaviour, study progress and personal development);
- to make a structured portfolio in which the analyses, evaluations and reflections systematically are discussed.

IPN1140
Period 4
1 Feb 2021
2 Jul 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- E.B. de Sousa Fernandes Perna

Teaching methods:
Skills
Assessment methods:
Attendance, Portfolio
Keywords:
Personal learning goals, self-reflection, study progress
Faculty of Psychology and Neuroscience

History and Foundations of Psychology

Full course description

Scientific products and science-based solutions for social problems are all around us. This course describes the development of psychology as an independent branch of knowledge acquisition and attempts to capture the essence of this academic discipline. Because this entails fundamental questions, we will first set the stage by reflecting on several milestones in the development of

humanity. After this, we will zoom in on the scientific revolution of the 16th and 17th century that has determined our present view of the world. This should encourage you to think about the question of how modern psychology was shaped after and through this revolution. In this way, on temporary psychology is studied as a result of changes in and approaches of human thought and behaviour through the ages. The most important thinkers and schools of thought within psychology will be discussed.

Following Burke's adage "Those who don't know history are destined to repeat it", awareness of historical strengths and weaknesses of psychology is important to ensure a healthy future for scientific psychology and its practitioners.

Course objectives

Students:

- can explain theories regarding the origin of humanity and its influence on psychology;
- can name relevant milestones, approaches, and currents regarding the history of mankind and psychology, such as scientific revolution, dualism: mind-body problem, Darwin and theory of evolution, psychology as a discipline, behaviourism and cognitive psychology, Freud and psychoanalysis, and modern scientific psychology, and can reflect on the balance between these approaches;
- can analyse and evaluate the influence of brain research on modern scientific psychology.

IPN1027
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- A. Blokland

Teaching methods:
Lecture(s), PBL
Assessment methods:
Written exam, Attendance
Keywords:
Historical perspective, Scientific revolution, mind-body problem, experimental psychology, Darwinism, behaviourism, Freud, brain research, cognitive approach, demarcation science – non-science
Faculty of Psychology and Neuroscience

Learning and Memory

Full course description

We learn throughout our lives. At school, we learn to read and do sums. We also learn to cycle and

later how to drive a car. Besides this, we can recall specific events, such as our first driving lesson, or our first day in high school. For some, high school may elicit happy memories, for others simply recalling walking on the schoolyard is sufficient to elicit anxiety. Our memory can also fail. It may happen that you go to the supermarket with a list in your head of what you certainly need to buy, to come home with several items lacking. And maybe your sibling will have a very different memory of a past event, calling into question the truth-value of memories.

The above-elicited questions will be studied through behavioural research in humans and derived cognitive models, but also via biological research in animals, so that behavioural data and theoretical insights can be better linked to the brain function. This biologically oriented course gives students an introduction about generally applicable stages in learning and memory, namely encoding, storage, and retrieval. In addition, students will be exposed to the different brain areas and structures that contribute to the different types of memory, and to the contribution of individual neurons to forming short- and long-term memory traces. This course aims to significantly deepen the students' concepts of working memory, episodic memory, different forms of conditioning and skill learning, emotional learning, and learning by example.

Insights into how memory works may help enhancing memory and learning in many daily activities, in educational contexts, and in clinical contexts that involve revalidation after physical or emotional trauma, or neurological disease, brain lesions or ageing. The course will stimulate students to make the link between theoretical insights and applications.

Course objectives

Students will be able:

- to name and explain different types of memory and related theoretical models;
- to name the most important anatomical structures of different types of learning and memory, and to explain lesion effects;
- to explain neuronal processes and their changes during learning and memory (as explained in the present course);
- to understand the selected primary research articles, and to integrate them into the overall body of study materials;
- to understand research methods sufficiently (at the described introductory level) as to understand and explain findings in the discussed studies;
- to apply knowledge on learning and memory mechanisms to gain deeper insight in examples from clinical or other domains (e.g., study behaviour, social media, ADHD, depression, Alzheimer, autism, addiction, phobia's).

IPN1028
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- P.H.M. de Weerd
- V.G. van de Ven

Bachelor Psychology

Teaching methods:
Lecture(s), PBL
Assessment methods:
Written exam, Attendance
Keywords:
learning, Memory, Cognitive models, biological approaches, applications
Faculty of Psychology and Neuroscience

Practical: Measuring Cognitive Functions 1

Full course description

The practical courses IPN1125 to IPN1127 focus on developing diagnostic skills such as administering, scoring and interpreting instruments frequently used to express experimental and clinical paradigms (or function domains) in terms of size and number. The key function domains for this course are Memory, Executive Functions and Attention. The information provided during this practical course will explain the experimental possibilities and clinical applications of each instrument. The students will then practice using these instruments on each other and experience first-hand the rules, successes and frustrations each instrument brings with it. After practicing these tests individually, students will be presented with a complex verbal and visual case study. A client with cognitive complaints must undergo a neuropsychological exam. The students will be asked whether these complaints can be categorised as “functioning normally” (everyone forgets things at some point) or whether an underlying disorder may be the cause.

Course objectives

Students:

- can describe the diagnostic cycle and know the role of the neuropsychological tests;
- administered and scored neuropsychological tests assessing memory and executive functions and learned how to interpret the results;
- can explain how behaviour of people can be systematically observed during test administration;
- can generate hypotheses regarding the well-being of a person based on observations and test results.

IPN1125
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- I. Winkens

Teaching methods:
Skills, Work in subgroups

Bachelor Psychology

Assessment methods:
Attendance
Keywords:
Cognitive models, neuropsychological tests, clinical applications, diagnostic cycle
Faculty of Psychology and Neuroscience

Practical: Measuring Cognitive Functions 2

Full course description

The practical courses IPN1125 to IPN1127 focus on developing diagnostic skills such as administering, scoring and interpreting instruments frequently used to express experimental and clinical paradigms (or function domains) in terms of size and number. The key function domains for this course are Memory, Executive Functions and Attention. The information provided during this practical course will explain the experimental possibilities and clinical applications of each instrument. The students will then practice using these instruments on each other and experience first-hand the rules, successes and frustrations each instrument brings with it. After practicing these tests individually, students will be presented with a complex verbal and visual case study. A client with cognitive complaints must undergo a neuropsychological exam. The students will be asked whether these complaints can be categorised as “functioning normally” (everyone forgets things at some point) or whether an underlying disorder may be the cause.

Course objectives

Students:

- can describe the diagnostic cycle and know the role of the neuropsychological tests;
- administered and scored neuropsychological tests assessing memory and executive functions and learned how to interpret the results;
- can explain how behaviour of people can be systematically observed during test administration;
- can generate hypotheses regarding the well-being of a person based on observations and test results.

IPN1126
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- C.W.E.M. Quaedflieg

Teaching methods:
Skills, Work in subgroups
Assessment methods:
Attendance

Bachelor Psychology

Keywords:
Cognitive models, neuropsychological tests, clinical applications, diagnostic cycle
Faculty of Psychology and Neuroscience

Practical: Cognitive Disorders in Practice

Full course description

The practical courses IPN1125 to IPN1127 focus on developing diagnostic skills such as administering, scoring and interpreting instruments frequently used to express experimental and clinical paradigms (or function domains) in terms of size and number. The key function domains for this course are Memory, Executive Functions and Attention. The information provided during this practical course will explain the experimental possibilities and clinical applications of each instrument. The students will then practice using these instruments on each other and experience first-hand the rules, successes and frustrations each instrument brings with it. After practicing these tests individually, students will be presented with a complex verbal and visual case study. A client with cognitive complaints must undergo a neuropsychological exam. The students will be asked whether these complaints can be categorised as “functioning normally” (everyone forgets things at some point) or whether an underlying disorder may be the cause.

Course objectives

Students:

- can describe the diagnostic cycle and know the role of the neuropsychological tests;
- administered and scored neuropsychological tests assessing memory and executive functions and learned how to interpret the results;
- can explain how behaviour of people can be systematically observed during test administration;
- can generate hypotheses regarding the well-being of a person based on observations and test results.

IPN1127
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinators:

- C. Resch
- A. Terneusen

Teaching methods:
Skills, Work in subgroups
Assessment methods:
Attendance
Keywords:

Evolution and Genetics for Psychology

Full course description

The goal of this course is to provide students with insight into genetics and the theory of evolution. They discover how to use this knowledge in order to explain psychological phenomena.

Darwin's theory of evolution teaches us that human cognition originated gradually. Genetics explains that selection of genetic variation in populations has been the driving force of this process. Therefore, knowledge of evolution and genetics is required to understand the evolution of cognition. Students will discuss the principles of transmission genetics (how traits are passed on from parent to child?), molecular genetics (how do genes affect the development of a trait?), epigenetics (how is gene expression regulated?), and population genetics (how are traits selected in a population?). Based on these principles, students will examine the evolutionary explanations of cognition. Moreover, students will discuss the evolution of cooperation (inclusive fitness theory), and the question why humans take up a special position in the animal kingdom. Concrete examples will be discussed which show how knowledge of evolutionary or ultimate causation is linked to knowledge of the proximate cause of a phenomenon. By studying these examples, students will obtain a clear image of how knowledge on genetics and evolution contributes to a better understanding of psychological phenomena.

Course objectives

Students:

- can explain the basic principles of Mendelian genetics, molecular genetics , epigenetics, and population genetics;
- can mention and elaborate on the basic processes driving evolutionary change in populations;
- can describe inclusive fitness theory and can explain how this theory can be used to explain (the evolution of) behaviour and cognition;
- can explain the distinction between ultimate and proximate explanations and how they can be applied to psychological phenomena;
- can apply their knowledge of genetics and evolution to explain psychological phenomena;
- can mention and describe theories on the evolution of the human brain and cognition.

IPN1030
Period 6
7 Jun 2021
2 Jul 2021
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinators:

- M.M.L. Moerel

Bachelor Psychology

- M. Gerards

Teaching methods:
PBL, Lecture(s)
Assessment methods:
Written exam, Attendance
Keywords:
Natural selection, Genetics, evolution, inclusive fitness
Second year courses

Bachelor Psychology Year 2

Faculty of Psychology and Neuroscience

Complex Cognition

Full course description

This course supplements the first-year courses Perception and Learning and Memory and completes our introduction into cognitive psychology. The course ‘Complex Cognition’ focuses on higher cognitive processes such as reasoning, decision making and problem solving. Students will learn about the information processing system that constrains these processes. Finally, this course highlights the role cultural differences play in research into cognition.

The course starts with several questions about knowledge representation and language: How do we categorise objects? How do we store the meaning of words? How do we recognise words? How do we understand texts? We then focus on psychological research into human problem solving and reasoning and the underlying dual process. Decision making then becomes the dominant theme of this course. How rational is human decision making? What role does emotion play in the decision making process? If the human decision maker is often irrational, how can we improve his or her decisions? Can people learn to become better decision makers? How do we reach moral decisions and what role does our social and cultural environment play? The environment also plays an important role in negotiating and cooperative behaviour. A successful Indian negotiator, for example, acts differently than a negotiator in the Netherlands. Students learn how game-theoretic and social-neuroeconomic research help us understand cooperative behaviour. The course will offer illustrations of the role of complex cognitive processes in applied psychological disciplines (e.g., educational psychology and work and organizational psychology).Throughout the course, students will focus on and map relations between theories.

Course objectives

Students are able:

- to understand and explain higher cognitive processes (i.e., reasoning, decision making, problem-solving, and language comprehension);
- to compare and differentiate prominent theories of higher cognitive processes;
- to organize and visualize knowledge of these theories in maps;
- to explain how social and cultural factors affect complex cognitive behaviour (e.g., in moral judgment, team cognition, cooperation, and negotiation);
- to reflect on intercultural differences in cognition;

- to present an empirical article to peers;
- to self-supervise their group learning process.

IPN2021
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- H.T.H. Fonteijn

Teaching methods:
Assignment(s), Presentation(s), Lecture(s), PBL, Work in subgroups
Assessment methods:
Attendance, Written exam
Keywords:
language, problem solving, decision making, reasoning, Culture
Faculty of Psychology and Neuroscience

Practical: Cognition and Culture

Full course description

This practical gives students an opportunity to experience working in distributed multi-cultural teams. In their future career, students will probably encounter many opportunities to collaborate with co-workers online. By developing uncertainty management (i.e., knowledge on how insecurity and unfamiliarity can influence communication and interpersonal relations and how these can be influenced) and perspective taking skills, students may be better prepared for such types of work and thus enhance their employability.

A group assignment challenges students to find and reflect on a problem that they can relate to the content of IPN2021. Finding a topic and co-creating a group product invites reflection on intercultural differences and collaboration in (virtual) teams. The assignment will result in a joint group product and an individual reflection report.

Course objectives

Students are able:

- to describe and explain cultural differences in a cognitive process (e.g. moral judgment, decision making, negotiation);
- to collaborate online in culturally diverse groups and 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;
- to understand how challenges to virtual team work in culturally diverse groups can be overcome;

- to reflect on intercultural differences in communication and cognition.

IPN2139
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- H.T.H. Fonteijn

Teaching methods:
Work in subgroups, Assignment(s), Presentation(s)
Assessment methods:
Attendance, Final paper
Keywords:
Intercultural awareness, collaborative problem solving, cognition
Faculty of Psychology and Neuroscience

Personality and Individual Differences

Full course description

Structure of the course:

The course is divided into four parts. In the first part of the course students will gain an overview of the most important theories, techniques and methods used by psychologists in the context of personality and intelligence research. What are common conceptualizations of personality and intelligence? Secondly, students will learn about antecedents or explanations of individual differences. Why are there differences between humans? How does evolution come into play? What role does heredity play? In the third part, students will focus on outcomes of personality in terms of life experiences. What is the role of personality and intelligence in the prediction of life events? How important is intelligence for your career? Do personality traits predict the duration of a marriage? In the fourth part, students will focus on applications of personality theory and findings in practice. How is knowledge on personality and intelligence applied in clinical and organisational settings? What kind of practical implications can be derived from personality research?

Practical relevance:

Today, personality and intelligence research forms an important fundamental basis for the daily practice of psychologists. If psychologists execute experts' assessments for court, they do this based on knowledge from personality and intelligence research. Psychologists select people for jobs based on personality and intelligence research. If psychologists treat mental disorders, they often first assess personality and intelligence of a patient. Knowledge on personality psychology and intelligence is therefore an important basis for every student who wants to work in fields such as clinical psychology, forensic psychology, educational psychology, or work and organisational psychology.

Bachelor Psychology

Course objectives

Students:

- can describe and compare the most important theories and empirical findings about personality, individual differences, and intelligence;
- can explain the relation between personality, intelligence, and life events (life outcomes);
- can explain antecedents (e.g. genetics, evolutionary explanations) that cause individual differences;
- can discuss practical applications of personality theory and research findings;
- can apply and evaluate measurement techniques for assessing individual differences and personality disorders.

IPN2022
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- A. Sambeth
- B.A. Hendriks

Teaching methods:
PBL, Lecture(s)
Assessment methods:
Attendance, Written exam
Keywords:
personality, intelligence, measurement, antecedents, consequences
Faculty of Psychology and Neuroscience

Practical: Personality Diagnostics

Full course description

In this practical students explore the personality diagnostic methods used in the trait paradigm. The trait paradigm is one of the most popular paradigms within personality research and personality diagnostics in practice. The goal of the practical is for students to write a personality report about a person they know well. This person has to fill in a personality questionnaire. At the same time, students have to fill in an observer's personality questionnaire about this person. Students learn how this information is processed and how t-values and z-values can be calculated. Based on this information, students will write a report in which they describe the results in accordance with personality research, but also in a way that is understandable for academic non-psychologists, such as doctors, jurists, social workers or teachers.

Bachelor Psychology

Course objectives

Students are able:

- to explain personality diagnostic methods used in the trait paradigm/multivariate paradigms;
- to execute a personality assessment, i.e. to take and interpret personality questionnaires and observer reports (self and observer questionnaires);
- to calculate personality scores (T-values, Z-values);
- to report the results of a personality assessment in a formal report.

IPN2137
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinators:

- B.A. Hendriks
- C. Resch

Teaching methods:
Assignment(s), Lecture(s), Paper(s), Skills
Assessment methods:
Final paper
Keywords:
Personality assessment, self and observer reports, reporting on results, trait paradigm, questionnaires
Faculty of Psychology and Neuroscience

Skills IV: Academic Writing

Full course description

The advanced writing course Skills IV succeeds the writing practicals of Skills III. Students will continue to further develop their writing skills by writing a complete critical review paper. Writing their first complete, individual paper is aimed to prepare them for writing their Bachelor's thesis in year 3.

Each partaking supervisor proposes a group theme. Subsequently, based on their interests, groups of students are assigned to a supervisor. Under supervisors' guidance, and supported by their peers, students formulate a critical research question related to the group theme, and address the question with the help of several scientific articles. Emphasis is placed on developing a logical and compelling storyline, and extracting and comparing information from different sources, rather than just listing and summarising existing literature. Hence, Skills IV is not only an exercise in developing writing skills, but it also encourages the development of critical thinking. By peer-reviewing the paper of a fellow group member, students gain more insight into the process of writing and shaping an article, continue to expand their peer-reviewing and feedback skills, and benefit from additional feedback

themselves.

At various stages of this process, students are offered additional learning experiences under guidance of the UM Language Centre, focussed on academic writing skills as well as English language use.

Course objectives

Students are able:

- to formulate a critical research question;
- to write a complete critical review paper on academic level;
- to argument logically by developing a logical and compelling storyline;
- to write in correct English (grammar and spelling);
- to extract and compare information from different sources;
- to apply APA-guidelines;
- to evaluate and criticize papers by peer-reviewing and providing feedback;
- to familiarize themselves with the Handbook Writing Skills (Havermans, Houben, Nievelstein & Van Doorn, 2018) and apply the principles to their own writing.

IPN2144
Period 1
1 Sep 2020
4 Jun 2021
Print course description
ECTS credits:
4.0
Instruction language:
English
Coordinator:

- F.E.R.M. Nievelstein

Teaching methods:
Skills, Assignment(s)
Assessment methods:
Attendance, Final paper
Keywords:
Writing, Critical Thinking
Faculty of Psychology and Neuroscience

Practical: Portfolio Year 2 Part 1

Full course description

The portfolio part in year 2 consists of two parts: two individual mentor meetings for which as preparation the portfolio has to be updated. Emphasis is on reflection and regulation of the study and personal growth. Students have started their second year and need to analyze their study methods again This will be the main focus of the first individual meeting. In addition, students will follow elective courses in the fifth semester and will be required to submit their choices halfway through their second year. This is an excellent opportunity to develop specific skills and a broad

academic profile. This is what students will be consciously focusing on by updating their portfolios with information acquired in the second year of the programme. Students will also be required to discuss their study progress and elective course choices with their mentor. Students need to have fulfilled the requirements of the portfolio to get the credits for Skills IV.

Course objectives

Students are able:

- to analyze their personal progress in developing competences and to (self-) reflect on these skills in a portfolio;
- to set goals regarding their further development of skills;
- to make choices regarding the elective courses based on their personal goals and on the information acquired in the second year of the bachelor's programme;
- to formulate their personal development, goals, and choices in the portfolio.

Prerequisites

Having fulfilled the portfolio year 1 (IPN1139 Portfolio Year 1 Part 1 and IPN1140 Portfolio Year 1 Part 2) is a prerequisite for the portfolio part of skills IV.

IPN2142
Period 1
1 Sep 2020
18 Dec 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- E.B. de Sousa Fernandes Perna

Teaching methods:
Skills
Assessment methods:
Attendance, Portfolio
Keywords:
Personal learning goals, self-reflection, study progress
Faculty of Psychology and Neuroscience

Practical: Information Literacy: Literature Search and EndNote

Full course description

This (mandatory) practical covers two parts:

1) Searching in databases for individual literature, which builds on the Systematic Literature Search

Bachelor Psychology

practical in year 1.

2) The use of the program EndNote.

The first part consists of using several databases which support in the creation of a research question. In addition, this part will support in finding relevant literature for the academic paper as part of Skills IV.

The second part builds on the first part, in which hands-on experiences will be gained about the program EndNote. This tool can structure and update references, which in turn can be inserted within word processing programs as in-text citations, footnotes, and a reference list. Students will learn to create an own EndNote library with references, which can be used in individual documents according to a chosen citation style (APA 6th).

As preparation, students need to run through an online module.

Course objectives

Students are able:

- to find specific literature for their individual academic paper;
- to use the EndNote programme for creating references/ literature lists;
- to apply the APA citation style for references in Word-documents.

IPN2136
Period 1
1 Sep 2020
18 Dec 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- N. Siep

Teaching methods:
Assignment(s), Presentation(s)
Assessment methods:
Attendance
Keywords:
literature search, EndNote, APA style, referencing, citing
Faculty of Psychology and Neuroscience

Psychopathology

Full course description

The course Psychopathology deals with disturbed, strange, unadjusted, abnormal behaviour. Students will study prevalent clinical problems on the basis of a number of case studies and the

results of research, such as anxiety disorders, eating disorders, addictions, mood disorders and psychotic disorders.

Questions that will be discussed repeatedly during the course: What does the clinical picture look like, what are the diagnostic criteria? When does normal become abnormal? How often does this disorder arise? How does such a disorder develop? What can be done about it? In this respect, it is important to study why one person develops the disorder while another does not and how scientific research can reveal causes of disorders and insight in the mechanisms that maintain the disorder. Students will also familiarise themselves with different forms of psychotherapy and pharmacotherapy. What happens in this type of therapy and how effective is it?

After the course, students will be familiar with the clinical picture and diagnostic criteria for the most frequent psychological disorders, as well as theories on aetiology, empirical findings that support or contradict the theory, customary treatments and effectiveness of those therapies.

Course objectives

Students can:

- explain the DSM-5 classification;
- distinguish and explain the prevalence, clinical picture, and diagnostic criteria for several frequent psychological disorders: trauma- and stressor-related disorders and dissociative phenomena, anxiety and obsessive-compulsive disorders, mood disorders, psychotic disorders, eating disorders, personality disorders, addictive disorders and neurodevelopmental disorders;
- describe and discuss theories and research on the aetiology and/or maintaining mechanisms (e.g., cognitive biases, learning processes, neurotransmitters and genetic factors) for these psychological disorders;
- describe/explain customary therapies (e.g., cognitive behavioural therapy, EMDR and psychopharmacology) and their effectiveness for these psychological disorders.

IPN2024
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- G.L.T. Schyns

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Psychopathology, Psychiatry, treatment, evidence-based, DSM-5-diagnostics
Faculty of Psychology and Neuroscience

Practical: Psychiatric Anamnesis

Full course description

Students will practise obtaining a patient's psychiatric anamnesis (more specifically, anamnesis of the various complaints and symptoms and a mental state examination), determining diagnoses and classification based DSM-5, and writing a professional report. They will do so by means of a preparation lecture, instruction materials, literature and practising with each other and with simulated patients. The practical consists of four 3-hour meetings lead by a clinically experienced trainer. At every meeting, students will be given the opportunity to apply the acquired techniques to simulated patients with various psychiatric disorders. Finally, they will write a professional report based on the information provided. This practical course will be evaluated on attendance (100%) and a passing grade for the anamnesis report.

During the practical 'psychiatric anamnesis', knowledge (diagnostics, classification, disorders, symptoms, treatments) from the module 'Psychopathology' is used. Students that do not/did not follow this module are expected to gain this knowledge themselves before the start of the practical. Also, students are assumed to have knowledge of psychological conversation skills (year 1).

Course objectives

Students are able:

- to describe and apply psychological communication skills;
- to carry out an anamnestic interview along the lines of the structure of a psychiatric anamnesis;
- to carry out a mental status examination (part of the psychiatric anamnesis);
- To understand and use the DSM-5 classification for diagnosing and apply it to the cases in the practical;
- to use professional terminology (in both word and writing);
- to create a professional therapist-client relationship;
- to write a professional report of a psychiatric anamnesis using professional language.

IPN2134
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- A.A.N. Mulkens

Teaching methods:
Assignment(s), Lecture(s), Paper(s), Patient contact, Skills, Work in subgroups
Assessment methods:
Attendance, Final paper
Keywords:

Psychological conversation techniques, (complaints/ case) history, DSM-5 diagnoses and classification, professional reporting
Faculty of Psychology and Neuroscience

Functional Neuroanatomy

Full course description

The importance of neuroscientific research within the field of psychology steadily increases, in part due to the development of research techniques that allow to study in vivo the structure and function of the human brain. At a high pace, neural systems and mechanisms are revealed that are ultimately responsible for even the most complex aspects of human experience, cognition and behaviour. This implies that psychology students nowadays need to have a thorough understanding of the structural and functional organisation of the brain.

In recent decennia, it has become clear that specific behaviours and abilities cannot be linked simply to specific brain structures. Instead, behavioural abilities are implemented in brain-wide systems – the components of which are located throughout the brain at all structural levels: cortical, and subcortical. The integrated functioning of these distributed brain structures gives rise to functional systems, e.g., sensory systems, motor systems, memory systems, etc. Students will explore several functional systems involved in the generation of behaviour through multiple tutorial group meetings. Each meeting will focus on a different aspect: structural and functional organisation of the cerebral cortex, the organisation of the motor system, the basal ganglia loops, the cerebellum, and the limbic system. Students will learn how the interrelated functions are structurally and functionally implemented, with what means they can be studied and what consequences damage or dysfunction have for behaviour and psychological well-being.

In order to achieve this it is important to know where these structures are located within the brain, as well as how they are interconnected. To create an optimal blending of structural and functional knowledge of brain structures the course comprises, in addition to the six theoretical group sessions, four practical meetings (PSY2133 - Practical Neuroanatomy). They will complement the theoretical knowledge by hands-on explorations of the complex 3D form of the brain and the interrelated positioning of parts of the functional system within it.

Course objectives

Students:

- have a general understanding of the functional and structural organisation of the extended motor system with its functional subsystems;
- can use the correct neuroanatomical terminology;
- are able to explain the macroscopic organisation of the human brain;
- are able to analyse the large-scale functional subsystems, with their unique functional and structural organisation.

IPN2029
Period 2
26 Oct 2020
18 Dec 2020
Print course description

Bachelor Psychology

ECTS credits:
4.0
Instruction language:
English
Coordinator:

- P.L.J. Stiers

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Brain organisation, brain networks, basal ganglia, limbic system, cerebellum, cerebral cortex, brain stem, neural regulation
Faculty of Psychology and Neuroscience

Practical: Neuroanatomy

Full course description

In this practical students will deepen their knowledge of the neuroanatomy of and the spatial relationship between brain structures discussed in the education group meetings of the course 'Functional Neuroanatomy' (IPN2029). In these practical meetings, students will literally put their hands on the brain. They will get the chance to acquire hands-on experience in making sheep brain preparations. Studying real neurons in microscope preparations of the rat brain is a unique experience in which students will compare brain cells in different brain structures and directly observe details such as the dendritic spines - the basis of neuronal connections and brain plasticity. Finally, the experience and insights acquired with animal brains will be applied to improve our understanding of the complex structure of the human brain, with the help of brain models, brain preparations (plastinates) and MRI image visualization tools.

After studying the 3-dimensional, macroscopic (i.e., visible to the eye) organisation of the sheep brain students proceed to preparing 2-dimensional sections through the sheep brain, and study microscopic preparations of sections through the rat brain, in which individual neurons can be studied at high magnification. Throughout the practical meetings they will study a range of important structures, such as the ventricle system, the basal ganglia, hippocampus, amygdala, thalamus, hypothalamus, midbrain nuclei, cerebellum and the lobes and major sulci and gyri of the human cerebral cortex. Students will also learn about the functional relevance of these structures: perception, different forms of retention, emotion and motivation, etc. They will work through assignments using brain preparations, brain models, atlases and hand books. In addition they will use internet sites, MRI images and Brain Tutor software (Brain Voyager), to acquire familiarity with the 3-dimensional organization of the human brain

Course objectives

Students are able

- to use neuroanatomical terminology;
- to explain the 3-dimensional macroscopic organisation of the brain, the organisation of

functional brain systems and compare the brain of a rat, a sheep and a human (similarities and differences in functional brain systems);
- to identify and describe the microscopic building blocks of the brain (neurons, nuclei, fibers);
- to explain the functional relevance of a range of important structures of the brain (including hippocampal structures, basal ganglia, brain stem, thalamus and hypothalamus, midbrain, cerebral cortex and cerebellum).

IPN2133
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- P.L.J. Stiers

Teaching methods:
Assignment(s), Lecture(s), Work in subgroups
Assessment methods:
Attendance, Written exam
Keywords:
Brain organization, brain stem, basal ganglia, limbic system, cerebral cortex, dissection, microscopy
Faculty of Psychology and Neuroscience

Critical Thinking

Full course description

Tested socratically! Recommended by philosophers and education specialists! Critical thinking involves more than just a critical attitude: it is a collection of complex cognitive skills. These skills include interpretation and clarification of meanings, analysis of ideas and arguments, evaluation of statements and arguments, drawing of conclusions, disputing of proof and coming up with alternative conclusions, and the presentation of arguments.

The emphasis of this course mainly lies on the further development of two skills. First, students will extensively practise the analysis of reasoning with training in informal logic. These argumentation analyses will result in a better understanding of implicit and explicit reasoning in pieces of text, discussions, public debates and academic articles. Second, students will familiarise themselves with the basic principles of classical and modern logic. Students will also practise the use of this more formal logical tool extensively, both during the tutorial group meetings and independently at home. This basic knowledge of logic will be useful when exposing pseudo logic. Fallacies such as the well-known “I fit into my jacket, my jacket fits in my bag, so I fit into my bag” are also often used in academic articles. For example, in an argumentation where certain skills of crows (counting) are elevated via a middle term (calculating) to prove that animals possess complex skills (animals can do math); after all, the products of science have to be sold too! Finally, students will cover a number of scientific-philosophical questions: What is science? What is true?

During the course, students will practise the two basic skills argumentation analysis and logical reasoning in a more informal manner with debates, a number of puzzles and an analysis of academic texts. This will also involve practising many of the practical sub-skills that are important for critical thinking.

Course objectives

Students are able:

- to analyze and evaluate argumentations;
- to explain and apply the basic principles of classical and modern/proposition logic;
- to characterize the main approaches in the philosophy of science;
- to distinguish science from pseudoscience;
- to apply the knowledge learned in this module (formal and informal logic) in a debate.

IPN2023
Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- A.H. van der Lugt

Teaching methods:
Assignment(s), Lecture(s), Presentation(s)
Assessment methods:
Attendance, Written exam
Keywords:
Argumentation, logic, philosophy of science
Faculty of Psychology and Neuroscience

Consciousness

Full course description

Consciousness, conscious experiences and perceptions were the most important subjects of nineteenth-century psychology. With the advent of behaviourism, consciousness disappeared from the psychological agenda. Consciousness has only returned to the cognitive and neurosciences in recent decades. Today, consciousness is again regarded as one of the most important aspects of mental life. In this course students will look at both the material basis and role played by consciousness in mental life, as well as the philosophical problems relating to the relationship between conscious experiences and the processes that form the material carriers of these conscious processes. Important questions and subjects are: What is consciousness? Which philosophical problems relate to consciousness? Are there neurophysiological correlates of consciousness? Does consciousness form a unit or do split-brain patients have two separate minds or ‘consciousnesses’? Can criteria be used to establish whether or not someone is conscious? This is a problem that is of

practical importance to the question whether or not we disconnect patients or relatives in a coma or vegetative state from the equipment that is keeping them alive. However, more technical problems will be discussed too, such as: What is the relationship between attention and consciousness? Does introspection give us access to the content and processes of our consciousness? Are there important forms of mental processes, such as thinking and reasoning, which are unconscious? What do dissociative phenomena tell us about the unconscious? Is consciousness even possible without attention? Special conscious states such as dreaming and the various theories about dreams will also be discussed, as well as the research by Libet into the neurophysiological correlates of free will and criticisms to it.

Course objectives

Students are able:

- to understand that it is difficult to find a definition of consciousness;
- to retrieve the neural correlates of consciousness;
- to understand the difference between hard and easy problem of consciousness;
- to contrast attention and awareness;
- to compare phenomenal and psychological consciousness as proposed by the philosopher Chalmers;
- to differentiate between the different paradigms in consciousness research;
- to explain the unity of consciousness and its associated disorders of consciousness;
- to discuss the role of free will in moral responsibility.

IPN2025
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- T. Schuhmann

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
consciousness, split brain, Attention, unconscious processing, free will
Faculty of Psychology and Neuroscience

Man and Machine

Full course description

Psychological hypotheses are increasingly being 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 increasingly come to depend on symbolic architectures for problem-solving, reasoning and knowledge acquisition and/or on connectionist models of aspects of human learning, categorisation, perception, memory and attention. In biological psychology, theories are developed and assessed using models of the behaviour of networks of neurons. In this course, students will discuss several influential architectures and algorithms, in conjunction with various biopsychological phenomena that shaped them.

The course will start with a reflection on the nature of cognitive science and historic contributions from Turing and Marr and our ability to forecast future developments in artificial intelligence. Students will also pay attention to changes in the division of labour between man and machine. Next, students will study creativity and search models. The question "Can computers be creative?" of course also invites students to reflect on human creativity. Learning will take centre stage in problems relating to connectionist models and to ACT-R, one of the most influential cognitive architectures in which classical, symbolic and connectionist principles have been integrated. Research into higher cognitive skills based on ACT-R models has for example, led to educational innovations.

During the last part of the course, several subjects that have posed problems for classical cognitive science will be discussed. The role of emotions is discussed in an assignment relating to the theme of social robotics. Students will discuss time, a factor that is often neglected after studying examples of how dynamic systems theory is applied in psychological research (e.g. motor development and attitude polarisation). Thirdly, classical cognitive science often disregarded the physical and social environment of the subject. Hence, problem descriptions are offered that focus on distributed cognition, man-machine interaction, team cognition, autonomous agents, and ethical questions raised in the context of the development of new technologies, and the way in which people would need to cope with them.

Please note that the course assessment will result in a pass/fail grade.

Course objectives

Students are able:

- to explain how cognitive science and cognitive modelling has contributed to psychological thinking;
- to explain theories and cognitive models of learning and problem solving;
- to summarize developments in artificial intelligence and interpret their impact on man-machine interaction;
- to reflect on how cognitive scientists have faced challenges to classical cognitive science (e.g., by focusing on the role of time, emotion and the social and physical environment in cognitive models);
- to present a scientific article to peers;
- to differentiate and organise basic concepts in cognitive science in maps;
- to self-supervise their group learning process.

IPN2026
Period 4
1 Feb 2021
2 Apr 2021
Print course description

Bachelor Psychology

ECTS credits:
6.0
Instruction language:
English
Coordinator:

- H.T.H. Fonteijn

Teaching methods:
Assignment(s), Lecture(s), PBL, Presentation(s)
Assessment methods:
Attendance, Assignment, Written exam
Keywords:
Cognitive science, cognitive modelling, man-machine interaction
Faculty of Psychology and Neuroscience

Practical: Portfolio Year 2 Part 2

Full course description

The portfolio part in year 2 consists of two parts: two individual mentor meetings for which as preparation the portfolio has to be updated. Emphasis is on reflection and regulation of the study and personal growth. Students have started their second year and need to analyze their study methods again This will be the main focus of the first individual meeting. In addition, students will follow elective courses in the fifth semester and will be required to submit their choices halfway through their second year. This is an excellent opportunity to develop specific skills and a broad academic profile. This is what students will be consciously focusing on by updating their portfolios with information acquired in the second year of the programme. Students will also be required to discuss their study progress and elective course choices with their mentor. Students need to have fulfilled the requirements of the portfolio to get the credits for Skills IV.

Course objectives

Students are able:

- to analyze their personal progress in developing competences and to (self-) reflect on these skills in a portfolio;
- to set goals regarding their further development of skills;
- to make choices regarding the elective courses based on their personal goals and on the information acquired in the second year of the bachelor’s programme;
- to formulate their personal development, goals, and choices in the portfolio.

Prerequisites

Having fulfilled the portfolio year 1 (IPN1139 Portfolio Year 1 Part 1 and IPN1140 Portfolio Year 1 Part 2) is a prerequisite for the portfolio part of skills IV.

IPN2143
Period 4
1 Feb 2021

Bachelor Psychology

4 Jun 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- E.B. de Sousa Fernandes Perna

Teaching methods:
Skills
Assessment methods:
Attendance, Portfolio
Keywords:
personal learning goals, self-reflection, study progress
Faculty of Psychology and Neuroscience

Statistics II

Full course description

Within psychology, there is a tradition of experimentally oriented research, although quasi-experiments and correlational research also frequently occur. The data to be analysed are often quantitative, such as test scores and response times. The most accepted statistical analysis method for quantitative data from experimental research is analysis of variance (ANOVA), and the most common for correlational research is regression analysis. During this course, students familiarise themselves with the logic and application possibilities of analysis of variance and, to a lesser degree, with regression analysis. Treatment of these topics will build on one-way ANOVA and regression analysis as taught in the first academic year. The guiding principle here is the distinction between within subjects (WS) and between subjects (BS) designs, and the distinction between experimental, quasi-experimental and correlational research.

The course consists of six one-week modules. Students will learn about the design and corresponding analysis model through a combination of lectures, seminars, tutorials and the SPSS practical.

Module 1: Review of one-way BS design, one-way ANOVA, multiple comparisons.

Module 2: The orthogonal (‘balanced’) two-way BS design, two-way ANOVA, interaction, main effects, simple effects, relations with the unpaired t-test;

The non-orthogonal (‘unbalanced’) two-way BS design, two-way ANOVA, confounding and adjustment.

Module 3: BS experiments and quasi-experiments with a covariate, such as age or pretest score, analysis of covariance (ANCOVA), the two functions of a covariate (increasing power, correcting for confounding).

Module 4: Correlational research, regression analysis with multiple predictors.

Module 5: The one-way within subject (WS) design, repeated measures ANOVA using the univariate,

epsilon-adjusted method, or the multivariate method.

Module 6: The two-way WS design, the split-plot (BS*WS) design for BS experimentation with repeated post tests and WS experimentation with a BS factor, repeated measures ANOVA for these designs.

Course objectives

Students are able:

- to explain the logic and aspects of analysis of variance and correlational research and regression analysis (incl. one-way between group analysis of variance, multiple comparisons, orthogonal versus non-orthogonal designs, two-way between group analysis of variance, main and interaction effects, confounding problems, analysis of covariance, multiple regression analysis, one-way within groups analysis of variance, univariate versus multivariate analysis models, two-way within group analysis of variance, split plot analysis);
- to apply the methods to analyse of variance on a dataset and interpret the results;
- to perform a multiple regression analysis on a dataset and interpret the results.

Prerequisites

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

IPN2028
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- N.J. Broers

Teaching methods:
Assignment(s), Lecture(s), Skills, Work in subgroups
Assessment methods:
Attendance, Written exam
Keywords:
Experimental research, quasi experimental research, Observational research, between group design, within group design, analysis of variance, analysis of covariance, regression analysis
Faculty of Psychology and Neuroscience

Practical: SPSS II

Full course description

Psychologists that work with statistics rarely produce calculations manually, but use statistical software to produce the analyses required. SPSS (Statistical Package for the Social Sciences) is the programme that psychologists use most. During this practical, students will analyse data from actual research to further explore the theory behind statistical analysis.

Course objectives

Students are able:

- to structure data in a SPSS-file;
- to perform statistical analyses in SPSS;
- to interpret results of statistical analyses in SPSS.

IPN2135
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- N.J. Broers

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

Research Practical

Full course description

This research practical will span a period of 12 weeks during which students 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 lecture 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, test participants will be recruited. Students will start writing the research report (introduction and method);

Weeks 5-8: Data collection and continuing to write the research report;

Week 7-8: Data analysis, discussion and evaluation of the research question and interpretation of the data;

Week 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: Students will review each other's research reports

Week 12: Processing of the feedback and finishing the final draft of the research report.
Presentation of findings at the concluding symposium in the form of a poster or a lecture.

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. Students will also receive mini-workshops about how to present, how to write reviews, and statistics.

Course objectives

Students are able

- to indicate the difference between science and common sense;
- to understand the ethical directives governing psychological research;
- to distinguish and compare various research designs;
- to explain and apply the empirical cycle of research;
- to theorize on a particular topic and draw up a research question on the basis of previously acquired theoretical knowledge;
- to translate a research question into hypotheses;
- to draw up an appropriate design in order to test a specific hypothesis (i.e. operationalisation of hypotheses);
- to design quantitative research for testing a research hypothesis correctly;
- to collect and analyse research data adequately;
- to interpret and discuss the results of a piece of research, referring them back to theory and hypothesis;
- to translate research into a scientific article in writing in English and in accordance with the APA norms that apply;
- to present research clearly, in the form of a presentation or poster (See IPN2106);
- to evaluate what went all wrong during the research, and why.

Prerequisites

Admission requirement: On reference date March 15 of the relevant year, the following modules have to be completed: ‘Statistics I’ and ‘Methods and Techniques of Research’.

IPN2027
Period 5
6 Apr 2021

2 Jul 2021
Print course description
ECTS credits:
10.0
Instruction language:
English
Coordinator:

- T.A. de Graaf

Teaching methods:
Lecture(s), Paper(s), Presentation(s), Research, Work in subgroups
Assessment methods:
Attendance, Participation, Final paper, Presentation
Keywords:
research, data collecting skills, data analysis, data collection, ethics
Faculty of Psychology and Neuroscience

Practical: Student Psychology Symposium

Full course description

During the research course, students have to conduct all relevant steps in scientific research (research proposal, collecting data etc.). The final phase herein is the symposium at the end of the course in which groups of students will have to present their findings (poster or presentation) to an audience of fellow students, psychologists, and a jury. In general, some groups are invited to prepare a presentation and the other groups have to prepare a poster. A jury consisting of researchers of the faculty will look at each presentation, poster and award at the end different prices (e.g., best presentation, best research, etc.). Students are instructed to provide questions and feedback to fellow students.

Course objectives

Students are able:

- to present research findings to a scientific audience in a symposium, by creating a scientific poster or presentation;
- to ask questions and provide feedback to other students regarding their research;
- to answer questions addressed by psychologists, students, and a jury.

- Statistics for Psychologists I

IPN2106
Period 5
6 Apr 2021
2 Jul 2021
Print course description
ECTS credits:
0.0
Instruction language:

Bachelor Psychology

English
Coordinator:

- T.A. de Graaf

Teaching methods:
Presentation(s)
Assessment methods:
Attendance, Presentation
Keywords:
symposium, Psychology, poster, presentation, Science
Third year courses

Bachelor Psychology Year 3

Faculty of Psychology and Neuroscience

Skills V: Regulation and Job Application

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 feedback on their Curriculum Vitae (CV) from the UM Career Services staff.

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 Quick Career Advice from UM Career Services.

Prerequisites

See Practicals IPN3159 and IPN3160

IPN3131
Period 1
1 Sep 2020
2 Jul 2021

Bachelor Psychology

Print course description
ECTS credits:
1.0
Instruction language:
English
Coordinator:

- A.L.T. Walkowiak

Teaching methods:
Lecture(s), Skills
Assessment methods:
Attendance
Keywords:
Portfolio, QCA, Personal learning goals, self-reflection, study progress, applying, Curriculum Vitae
Faculty of Psychology and Neuroscience

Practical: Portfolio Year 3

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.

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.

Bachelor Psychology

IPN3159
Period 1
1 Sep 2020
2 Jul 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- A.L.T. Walkowiak

Teaching methods:
Skills, Lecture(s)
Assessment methods:
Attendance, Portfolio
Keywords:
Portfolio, Personal learning goals, self-reflection, study progress, applying
Faculty of Psychology and Neuroscience

Practical: Quick Career Advice

Full course description

Students receive a Quick Career Advice (QCA) from the UM Career Services staff. During the QCA, students get feedback, in small group meetings (max 6 students), on their curriculum vitae (CV) which takes about 45 minutes. Students receive detailed instructions in the lecture, via AskPsychology and via e-mail about the planning of the QCA.

Course objectives

Students:

- have knowledge about and have practiced with writing an application letter and a curriculum vitae;
- have received a 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.

IPN3160
Period 1
1 Sep 2020
2 Jul 2021
Print course description
ECTS credits:
0.0

Bachelor Psychology

Instruction language:
English
Coordinator:

- A.L.T. Walkowiak

Teaching methods:
Skills, Lecture(s)
Assessment methods:
Attendance
Keywords:
applying, Curriculum Vitae
Faculty of Psychology and Neuroscience

Statistics III

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 module 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 analysing 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 module 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 module students receive a training in exploratory factor analysis with SPSS.

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 analysing data.

Prerequisites

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

IPN3008
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- J. Schepers

Teaching methods:
Assignment(s), Lecture(s), Skills, Work in subgroups
Assessment methods:
Attendance, Written exam
Keywords:
contingency tables, logistic regression, classical and modern psychometrics, factor analysis
Faculty of Psychology and Neuroscience

Practical: SPSS III

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 the 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.

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’.

IPN3201
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- J. Schepers

Teaching methods:
Assignment(s), Skills
Assessment methods:
Attendance
Keywords:
SPSS, contingency tables, logistic regression, scale analysis, reliability, factor analysis
Faculty of Psychology and Neuroscience

Methods of Cognitive Neuroscience

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 brain 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.

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.

IPN3011
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- F.T.Y. Smulders
- L. Riecke

Teaching methods:
PBL, Lecture(s), Assignment(s)
Assessment methods:
Attendance, Written exam
Keywords:
Methods of cognitive neuroscience, experimental paradigms
Faculty of Psychology and Neuroscience

Practical: Excel for Scientists

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.

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.

IPN3153
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- E.B. de Sousa Fernandes Perna

Teaching methods:
Skills
Assessment methods:
Attendance, Assignment
Keywords:
Practical excel, signal analysis
Faculty of Psychology and Neuroscience

Practical: fMRI Data Analysis

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.

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 QC, by a systematic plan, can base their choice of statistical tests, and can interpret the end results are addressed.

IPN3154
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinators:

- F. de Martino
- G. Valente

Teaching methods:
Skills
Assessment methods:
Attendance, Final paper
Keywords:
fMRI analysis, neuroimaging, Cognitive Neuroscience
Faculty of Psychology and Neuroscience

Action

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 is the best action 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.

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).

Corequisites

- Practical: Group Decisions

IPN3012A
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
5.0
Instruction language:
English

Bachelor Psychology

Coordinator:

- P.L.J. Stiers

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Motor system, executive functions, Social cognition, decision making, prefrontal cortex, basal ganglia
Faculty of Psychology and Neuroscience

Practical: Group Decisions

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.

Course objectives

Students are able:

- to describe and abstract challenges and hindrances of decision-making in group; 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.

Corequisites

- Action

IPN3155
Period 5
5 Apr 2021
4 Jun 2021
Print course description

Bachelor Psychology

ECTS credits:
0.0
Instruction language:
English
Coordinator:

- G.J.A.M.L. Uitdewilligen

Teaching methods:
Lecture(s), Paper(s), Work in subgroups
Assessment methods:
Attendance, Final paper
Keywords:
Social cognition, decision making
Faculty of Psychology and Neuroscience

Action

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 is the best action 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.

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).

Corequisites

- Practical: Neuronal Basis of Decision Making

IPN3012B
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
5.0
Instruction language:
English
Coordinator:

- P.L.J. Stiers

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Motor system, executive functions, Social cognition, decision making, prefrontal cortex, basal ganglia
Faculty of Psychology and Neuroscience

Practical: Neuronal Basis of Decision Making

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.

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.

Corequisites

- Action

IPN3156
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- J.C. Peters

Teaching methods:
Lecture(s), Paper(s), Work in subgroups
Assessment methods:
Attendance, Final paper
Keywords:
decision making, action, analyses neuroimaging data, EEG
Faculty of Psychology and Neuroscience

Motivation and Emotion

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.

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.

IPN3013
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
5.0
Instruction language:
English
Coordinator:

- C.R. Markus

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
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
Faculty of Psychology and Neuroscience

Psychodiagnostics

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.

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.

Corequisites

- Practical: Constructing a Psychological Test

IPN3109A
Period 6
7 Jun 2021
2 Jul 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

Bachelor Psychology

- P. Brüll

Teaching methods:
Assignment(s), Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Psychometrics, bias, diagnostic cycle, Bayesian statistics, ethical professional code, test instruments
Faculty of Psychology and Neuroscience

Practical: Constructing a Psychological Test

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 either a) develop a test for a specific target group; or b) clarify why some techniques are not valid or reliable and suggest alternative tests or; 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.

Course objectives

Students are able:

- 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.

Bachelor Psychology

Corequisites

- Psychodiagnostics

IPN3157
Period 6
7 Jun 2021
2 Jul 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- P. Brüll

Teaching methods:
Work in subgroups, Skills
Assessment methods:
Attendance, Final paper
Keywords:
psychological tests, test construction, Psychometrics
Faculty of Psychology and Neuroscience

Psychodiagnostics

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.

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.

Corequisites

- Practical: The Diagnostic Cycle

IPN3109B
Period 6
7 Jun 2021
2 Jul 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- P. Brüll

Teaching methods:
Assignment(s), Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Psychometrics, bias, diagnostic cycle, Bayesian statistics, ethical professional code, test instruments
Faculty of Psychology and Neuroscience

Practical: The Diagnostic Cycle

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? 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? 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).

Course objectives

Students are able:

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

Corequisites

- Psychodiagnostics

IPN3158
Period 6
7 Jun 2021
2 Jul 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinators:

- I. Branska
- J. Pieters - Spijkerman

Teaching methods:
Work in subgroups
Assessment methods:
Attendance, Final paper

Bachelor Psychology

Keywords:
psychological tests, diagnostic cycle, referral questions

Non-Course Related Programme

Faculty of Psychology and Neuroscience

Research Participation

Full course description

Every student must have participated as a test subject in an FPN scientific research before the bachelor's exam. Students who started their psychology programme in 2009 or earlier must have acted as a test subject for a total of 10 hours. Students who started in 2010, 2011 or 2012 must have acted as a test subject for a total of 15 hours. Students who started in 2013 or later must have acted 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 a student 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 in order 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. To that end, students from cohort 2013 onwards, who have acted as a test subject for 15 hours in their first academic year will be rewarded with an exemption of the remaining 5 hours. Students from cohort 2013 onwards, who have acted as a test subject for less than 15 hours in their first academic year will have to complete the full 20 hours in other academic years of the bachelor's programme. For students from cohort 2016 onwards, there is the restriction that a maximum of seven hours of the total number of hours required can originate from online studies.

Course objectives

Students:

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

IPN3442
Year
1 Sep 2020
31 Aug 2021
Print course description
ECTS credits:
1.0
Instruction language:
English
Coordinator:

- E.L. Theunissen

Assessment methods:
Attendance

Bachelor Psychology

Keywords:
Participation in research, test subject
Elective courses

Electives

Faculty of Psychology and Neuroscience

The Professional in Psychology: An Internship

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 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 centers, schools, but also companies, such as recruitment agencies. 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.

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.

PSY3379
Semester 1
1 Sep 2020
29 Jan 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- A.L.T. Walkowiak

Teaching methods:
Assignment(s), Skills
Assessment methods:
Final paper
Keywords:
Skills, working in a relevant setting
Faculty of Psychology and Neuroscience

Intercultural Awareness 1

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.

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.

PSY3378A
Year
1 Sep 2020
31 Aug 2021
Print course description

Bachelor Psychology

ECTS credits:
0.0
Instruction language:
English
Coordinator:

- H.T.H. Fonteijn

Teaching methods:
Lecture(s), Assignment(s)
Assessment methods:
Assignment, Attendance
Keywords:
intercultural competence, reflection, Writing skills, internationalisation
Faculty of Psychology and Neuroscience

Intercultural Awareness 2

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.

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.

PSY3378B
Year
1 Sep 2020
31 Aug 2021
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- H.T.H. Fonteijn

Bachelor Psychology

Teaching methods:
Assignment(s), Lecture(s)
Assessment methods:
Assignment, Attendance
Keywords:
intercultural competence, reflection, Writing skills, internationalisation
Faculty of Psychology and Neuroscience

Psychopharmacology

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 cocaine, LSD, and ketamine.

At the end of the course there will be a written exam consisting of at least six open/essay questions.

Course objectives

After this course students are able to:

- explain pharmacokinetic processes and moderating factors;
- apply knowledge of neurotransmission to explain drug effects;
- name most frequently used drugs used for the treatment of anxiety, depression, schizophrenia and dementia;
- 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.

PSY3312
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:

Bachelor Psychology

6.0
Instruction language:
English
Coordinator:

- A. Vermeeren

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
drug effects, Antidepressants, benzodiazepines, antipsychotics, psychedelics, neurotransmission, neurobiological theories, psychopathology of depression and schizophrenia
Faculty of Psychology and Neuroscience

Forensic Psychology in a Nutshell

Full course description

This course will provide psychology (but also law and criminology) students interested in Forensic Psychology with an introduction to topics typical for this field. Examples of such topics are mental illness and violence, filicide, female offending, sex offending and prison psychology. Each tutorial, research articles and case material descriptions related to a theme will be studied and discussed.

Course objectives

By the end of this course students will be able to :

- explain terminology in Forensic Psychology
- explain the relationship between mental illness and violence;
- identify and explain a variety of themes within the scope of Forensic Psychology (e.g., filicide, sex offenders, female offending etc.);
- compare and contrast the various policing approaches and alternatives to incarceration.
- design an experiment in one of the topics dealt with in class
- criticize current policies suggest alternatives
- Additionally students will develop the ability to examine closely the literature and synthesize parts of their readings in order to interpret and explain forensic cases and controversies in this field of research.

PSY3376
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

Bachelor Psychology

- A. Sagana

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Participation, Written exam
Keywords:
mental disorders and crime, Filicide, sex offenders, prison psychology, aggression, violence, incarceration
Faculty of Psychology and Neuroscience

Child Neuropsychology

Full course description

This course focuses on brain-behaviour relationships from a developmental perspective. It aims at increasing one's understanding of how healthy children and adolescents (or brains) function and how brain disease, brain injury or developmental disorders, such as ADHD, autism 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, memory and attention), affect, 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. Normal and abnormal 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, brain functioning 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 tests, measuring the above-mentioned domains of higher cognitive functions, affective functions, and behaviour.

Course objectives

Students are able:

- to explain (ab)normal development of the brain and cognitive functions such as memory, executive function 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, brain injury) and to form hypotheses about these disorders based on case material.

PSY3359
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:

Bachelor Psychology

English
Coordinator:

- E.H.H. Keulers

Teaching methods:
Lecture(s), PBL, Work in subgroups
Assessment methods:
Attendance, Written exam
Keywords:
brain development, cognitive development, brain (dis)functioning, cognitive (dis)functioning, developmental disorders, neuropsychology
Faculty of Psychology and Neuroscience

Cognitive Enhancement

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.

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.

PSY3362
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

Bachelor Psychology

- F. Dücker

Teaching methods:
Lecture(s), PBL, Presentation(s), Work in subgroups
Assessment methods:
Attendance, Assignment, Presentation
Keywords:
cognitive enhancement, brain stimulation, smart drugs, neuro-feedback, mindfulness, ethics
Faculty of Psychology and Neuroscience

Group Dynamics

Full course description

Groups are an essential aspect 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. In that sense, any psychologist benefits from a deeper understanding of groups and their dynamics. Moreover, much of the world's work is done and most impactful decisions are made in and by groups, making it 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, it is essential understanding these dynamics and how to improve them.

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. Finally, students will work together on a paper analysing group behaviour in a realistic setting of choice as well as their own group's development throughout the course. This should improve students' ability to understand and manage groups and their dynamics.

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 behaviour;
- broader outlook on determinants of behaviour. Students of this course should learn to consider more complex interpersonal and group level processes as determinants of behaviours, 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 groups and group behaviour with using exercises in tutorials. They practice group management by facilitating exercises.

PSY3339
Period 1
1 Sep 2020
23 Oct 2020

Bachelor Psychology

Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- B.P.I. Fleuren

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Assignment, Written exam
Keywords:
groups, inclusion, cohesion, influence, leadership, power, performance, decision-making, conflict, intergroup-relations
Faculty of Psychology and Neuroscience

Manipulating Memories

Full course description

Classic memory theories suggest that our experiences are consolidated into long-term memory into a 'permafrosted' form, which does not change. Recent 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. A strong interest in research methods, cognitive science or neuroscience is highly recommended.

Course objectives

Students:

- learn about neurobiological principles of learning and memory;
- discuss, learn about and understand research methods of memory manipulation;
- will 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;
- to some extent apply methods of memory manipulation.

Prerequisites

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

PSY3372
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- V.G. van de Ven

Teaching methods:
Lecture(s), PBL, Presentation(s)
Assessment methods:
Attendance, Presentation, Take home exam
Keywords:
memory consolidation, memory manipulation, brain stimulation, skill learning, hippocampus, cortex, enhancement
Faculty of Psychology and Neuroscience

Neuropsychology and Law

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.

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.

PSY3375
Period 1

Bachelor Psychology

1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- M. Jelicic

Teaching methods:
Lecture(s), PBL
Assessment methods:
Assignment, Written exam, Attendance
Keywords:
forensic neuropsychology, Psychiatry, brain disorders, criminal offences
Faculty of Psychology and Neuroscience

Aggression

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.

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 I-cubed model, 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 and EMDR; 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.

PSY3384
Period 1

Bachelor Psychology

1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- J. Lobbestael

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Presentation, Written exam
Keywords:
aggression; GAM; aggression subtypes; aggression assessment; aggression therapy; biological and psychological correlates
Faculty of Psychology and Neuroscience

Applied Social Psychology

Full course description

What is applied social psychology

In (social) psychology, we see researchers focusing 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 – we need all three types of research. But given this distinction, in this course we focus 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, we highlight the core processes for developing theory-and evidence-based interventions. We discuss several topics in the field of applied psychology (for example obesity, sexual behaviours, but also topics like traffic safety, and pro-environmental behaviours). Additionally, we provide you with applications of more fundamental insights (e.g., emotion regulation, stigma), and first-hand examples of existing behaviour change programs: From problems they target and who are involved, to theory and empirical evidence, to development, implementation and evaluation.

Course objectives

After this course, you:

- know what kind of problems are the focus of an applied psychologist (e.g., health, environment, safety, work);

- are able to describe (and apply) the route from problem analysis to intervention development, implementation, and evaluation;
- are familiar with the causal logic of real life problems and solutions;
- are familiar with often used models and protocols of planned behaviour change;
- are acquainted with examples of successful interventions;
- acknowledge the relation between fundamental and applied psychology.

PSY3389
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- G.A. ten Hoor

Teaching methods:
Lecture(s), PBL, Skills, Presentations, Work in subgroups
Assessment methods:
Attendance, Presentation, Assignment
Keywords:
ecological approaches, environment, evolutionary explanations of behavior, health behaviours, individual and environmental determinants of behavior, program planning, problem oriented, prejudice & stigma, risk & safety behaviours, sustainability; theory and evidence based methods for changing behaviour
Faculty of Psychology and Neuroscience

Social Neuroscience

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, decision making and moral judgement. Students will gain insight into the neural correlates of social behaviour and acquire knowledge about designing a functional MRI study.

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.

PSY3332
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- T. Otto

Teaching methods:
PBL
Assessment methods:
Written exam, Attendance
Keywords:
neural correlates, self-reflection, emotion regulation, attitudes, mirror-neuron system, social decision making, moral judgments, fMRI
Faculty of Psychology and Neuroscience

Human Behaviour in Organisations

Full course description

This course will make students familiar with various aspects of human behaviour in organisations. 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? 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, assignments and a group project in which students focus on one of the topics mentioned above. At the end there will be a 'mini-conference' in which groups present the results of their group work. This course forms an excellent introduction for the Master's programme 'Work and Organisational Psychology'. N.B. there will be no tutorial groups.

Course objectives

Students will be able to understand and think of practical aspects in organisations, such as selection of employees, Human Resources practices, the role of leadership, work motivation, team processes and performance, employee health and well-being, work stress, and relate these to relevant theories. In addition, students will learn about the peer-review process (providing feedback).

Bachelor Psychology

PSY3344
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- F.R.H. Zijlstra

Teaching methods:
Lecture(s), Presentation(s), Paper(s), Work in subgroups
Assessment methods:
Assignment, Presentation
Keywords:
employee motivation, employee selection, leadership, work stress, employee health, team functioning
Faculty of Psychology and Neuroscience

Politics of Decision Making

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.

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.

PSY3357
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- P. Brüll

Teaching methods:
Lecture(s), PBL
Assessment methods:
Take home exam, Presentation, Attendance
Keywords:
Political psychology, war crimes, human rights violation, groups, behaviour, decision making, personality
Faculty of Psychology and Neuroscience

Sexuality

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 4 lectures and 4 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, 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.

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;
- 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;
- students can administer a sexual anamnesis.

PSY3367
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- M.V.E. Dewitte

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

Bachelor Psychology

Attendance, Written exam, Assignment
Keywords:
sexual response cycles, sexual problems, biopsychosocial, evidence-based, sexology research
Faculty of Psychology and Neuroscience

Adult Neuropsychology: An Introduction

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 catchwords in this context are behaviour, higher cognitive functions (e.g., memory, attention, executive functioning, 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.

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.

PSY3369
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- C.M. van Heugten
- W.J. Jansen

Teaching methods:
Lecture(s), PBL, Skills, Assignment(s)
Assessment methods:
Assignment, Written exam, Attendance
Keywords:
brain (dis)functioning, cognitive (dis)functioning, brain injury, aging, Neuropsychology,

Bachelor Psychology

neuropsychiatry
Faculty of Psychology and Neuroscience

Hormones, the Brain and Behaviour

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.

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 hormones in ‘normal’ behaviour and psychiatric disorders.

PSY3370
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
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
Faculty of Psychology and Neuroscience

Cognitive Neuroscience of Language

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. In this course, we zoom into the hidden cognitive complexity and mysteries and will study language from different scientific angles. At the end, we integrate all and practice an "application of our knowledge".

During the first part of the course, we study the theoretical background of language processing and learn how it received empirical support from psycholinguistics – mainly based on behavioural experiments. We add insights that are more recent from cognitive neuroscience, with a focus on information transfer within the language network. During reading and open discussion, 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 – as in Aphasia after stroke, or in developmental dyslexia. We also will learn that not all is known yet. We will read papers that bring first answers, using methods such as eCog, EEG, fMRI, and anatomical and functional connectivity.

This knowledge will be applied in writing of an individual research proposal that addresses a certain open issue in language, ranging from fundament to applied topics (such as in Aphasia after stroke, or dyslexia).

Course objectives

- knowledge of theoretical background of cognitive neuroscience of language with regard to content (psycholinguistic model, dual route model) and methods (design, acquisition techniques: RT, EEG, fMRI, analysis teaching techniques: ERP components, frequency analysis, fMRI region of interest and network analysis). Criteria, content, writing process of a research proposal following provided guideline;
- making informed choices of a theme for a research proposal based on reading of language and disorder literature, ranging from fundamental cognitive neuroscience to translation into clinics or societal application;
- apply Critical thinking to evaluate the literature (limits, shortcomings, 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 in writing to peers, peer reviewing during weekly panel discussions in a fair and constructive manner.

PSY3373
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- B.M. Jansma

Teaching methods:

Bachelor Psychology

Assignment(s), Lecture(s), Presentation(s), PBL
Assessment methods:
Presentation, Attendance, Assignment
Keywords:
Cognitive Neuroscience, language, Research proposal, peer review
Faculty of Psychology and Neuroscience

Legal Psychology in a Nutshell

Full course description

This course will provide psychology (but also law) students with a brief introduction to topics typical of the Legal Psychology field. But what is legal psychology anyway? The psychology of the law is a part of applied psychology that deals with investigating human functioning related to the whole legal system. More precisely, legal psychology focuses on functions such as perception, memory and decision-making. This is important because human law is specifically designed to be of influence on human behaviour. Therefore, the task of a legal psychologist is twofold: (1) to study how law influences human behaviour and (2) to study human behaviour under the influence of law.

For example, students will learn about genetic influence on aggression, sleep disorders that are related to violence and assessment of responsibility; Deceptive behavior of children in court; criminal profiling; biases influencing legal decision making; Radicalization and terrorism (theories, cognitive distortions, prevention of radicalization).

During each tutorial, research articles and case material descriptions related to the aforementioned themes will be studied and discussed.

Course objectives

At the end of this course students

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

PSY3377
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- G. Bogaard

Bachelor Psychology

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
warrior gene, sleepwalking, deception, profiling, biases in legal decision making, radicalization and terrorism
Faculty of Psychology and Neuroscience

Connecting Brains and Computers: Theory, Practice and Applications

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 and present seminal papers of recent BCI work – implementing both electrical and hemodynamic brain signals. 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 will start with a demonstration of a BCI experiment. Finally, the students will analyze fNIRS data in simulated real-time 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. Finally, future BCI developments will be discussed.

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.

Prerequisites

There are no specific prerequisites. A general interest in the topic and an affinity with of neuroscientific research methods is sufficient.

PSY3381
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- B. Sorger

Teaching methods:
Lecture(s), Presentation(s), Work in subgroups
Assessment methods:
Attendance, Presentation, Assessment
Keywords:
brain-computer interface (BCI), online/real-time data analysis, mental states, brain reading, brain-based communication and control, neuro feedback (therapy), self-modulation, Translational Neuroscience
Faculty of Psychology and Neuroscience

Psychedelic Medicine: The therapeutic Potential of mind-altering Substances

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.

Course objectives

After you have finished this course you will know:

- what psychedelics are;
- about the history of psychedelics and research into this;
- about the neurobiological mechanism of a selection of psychedelic substances;
- about the positive and negative, acute and long-term effects on cognition, mood and social behaviour;
- how psychedelics could be of use in a therapeutic setting;
- what kind of psychiatric indications could benefit from psychedelic treatment;
- how to do research with psychedelics.

PSY3382
Period 2
26 Oct 2020
18 Dec 2020
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- K.P.C. Kuypers

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
psychedelics, emotion, cognition, treatment, psychiatric disorders
Faculty of Psychology and Neuroscience

Behavioural Problems in Childhood and Adolescence

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.

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.

PSY3341
Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- L.M. Jonkman

Teaching methods:
Lecture(s), PBL, Presentation(s), Assignment(s)
Assessment methods:
Written exam, Attendance
Keywords:
Developmental psychopathology, attachment theory, epigenetics, neurobiology of socio-emotional development
Faculty of Psychology and Neuroscience

Sleep and Sleep Disorders

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.

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.

PSY3349
Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- A. Vermeeren

Teaching methods:
Lecture(s), Presentation(s), PBL, Assignment(s)
Assessment methods:
Written exam, Attendance
Keywords:
Sleep, circadian rhythm, insomnia, daytime sleepiness, parasomnias
Faculty of Psychology and Neuroscience

Positive Psychology

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 and ‘fixing what is wrong’ towards including protective factors and ‘building what is strong. Positive psychology is concerned with both making the lives of people fulfilling as with healing and preventing pathology. Especially focusing on building strengths (e.g., optimism, courage) instead of correcting weaknesses

can protect against 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).

Course objectives

After you have finished this course:

- you will have gained a general understanding about topics such as 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;
- you know several measurement tools that are applied in positive psychology;
- you will have improved your ability to examine the relation between the discussed topics, and you can explain how certain ideas/theories/empirical findings connect to, or contrast with one another;
- you have gained the ability to use gained knowledge in practice, by participating and applying different positive psychology techniques to enhance subjective well-being.

PSY3385
Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- M.M. Hanssen

Teaching methods:
Assignment(s), Lecture(s), PBL
Assessment methods:
Attendance, Assignment, Final paper
Keywords:
positive psychology, optimism, resilience, protective factors, well-being, Motivation, Theory, practice
Faculty of Psychology and Neuroscience

Introduction to Computational Neuroscience

Full course description

Many scientists regard the human brain by as the most complex object in the known universe. It is not surprising therefore that studying the brain and its function is a challenging task. Any successful attempt at it requires neuroscientists to tackle it from several perspectives, each offering complementary insights. If we want to understand the brain and its structures, we need to identify their function: what do these structures do and why? A second requirement for understanding neural structures is identification of potential mechanisms describing how a certain function can be

brought about: what kind of information processing is carried out? Finally, we need to identify how such information processing can be implemented in a neural structure as opposed to, for example, a personal computer: what are the physical and biological constraints under which the brain implements function?

Computational neuroscience integrates across these three points as it studies the information processing carried out by different structures of the nervous system in terms of biologically constrained models of brain function.

In this course students will receive an overview of the basic principles of connectionism, spiking neuron models, and dynamical systems theory; learn how these concepts are applied for studying brain function (exemplified for decision making as well as for the structure-function relationship in the cortex); and discuss computational neuroscience from a philosophy of science perspective.

Course objectives

Students are able:

- to design and train neural networks able to perform logical inferences;
- to explain and simulate a range of typical models used in computational neuroscience, such as the Hopfield model of memory formation and the Hodgkin-Huxley spiking neuron model;
- to interpret model simulations in light of empirical data;
- to engage in discussions about the relevance of computational neuroscience for the understanding of the human brain.

PSY3365
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- M. Senden

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Participation, Assignment
Keywords:
connectionism, spiking neuron models, dynamical systems, neuroscience, philosophy of science
Faculty of Psychology and Neuroscience

Creating Apps: Programs & Algorithms in Python

Full course description

"Being able to program is an advantage for any scientist"

R. Goebel, Professor Cognitive Neurosciences, BrainVoyager.com, UM

"Understanding algorithms definitely helps to understand cognitive psychology."

G.J. Peters. Ph.D. Health and Social Psychology, gjyp.nl, OU

When the computer became commonplace in universities, companies and homes, psychologists gained a powerful tool. The computer and the computer metaphor influenced the creation of a new field in psychology: cognitive psychology. Psychology and informatics became intertwined. The computer became very important in the daily work and research of a psychologist. By learning to program, you not only acquire the ability to make computers do what you want them to do, but you learn a new way of thinking as well. Programming is not very hard once you have learned this way of thinking. One of the most important skills learnt 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. If you want the computer to solve the problem for you, you will have to translate the algorithm to a language the computer understands. This is not very hard either; the language used in this course consists of only 15 syntactic structures. With these basic structures, we can construct every imaginable algorithm. First, we are going to introduce you the most important principles of programming. Subsequently, you will learn to disentangling complex problems into smaller problems: algorithmic thinking. Furthermore, we teach you how to visualise these algorithms in a formal, non-technical way. With this knowledge, we are going to write increasingly complex programs, which help us solve psychological relevant problems. We will teach you the programing language Python but mostly its underlying logic, so you will be able to learn other script- and programming languages more easily after successfully completing this course.

Course objectives

- knowledge of variables, types, type-conversion, operators algorithms, control-flow, subroutines, arguments and parameters, modularity, call by reference, arrays, dynamic arrays, records, data-structures, file operation;
- being able to read and write pseudo-code, flowcharts and NSDs;
- being able to debug and error-proof a program;
- mostly: being able to read other peoples' code and create your own code, to make functional applications.

PSY3387
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- M. Capalbo

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Assignment, Final paper
Keywords:
Procedural programming, Computational thinking, Algorithms

Marble Research

Faculty of Psychology and Neuroscience

Marble Research

PSY3501
Year
1 Sep 2020
31 Aug 2021
Print course description
ECTS credits:
12.0
Coordinator:

- A.H. van der Lugt

Teaching methods:
Research
Thesis

Bachelor's Thesis

Faculty of Psychology and Neuroscience

Bachelor's Thesis

Full course description

Students are required to write a bachelor thesis to conclude the Bachelor phase. The thesis is either an article in which students report on a literature research or the thesis reports on a study that they carried out under supervision of a staff member. For both types of thesis, 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 that provides 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.

Course objectives

Students:

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

IPN3014

Bachelor Psychology

Year
1 Sep 2020
4 Jun 2021
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- J.A.Y. van Diesen

Teaching methods:
Paper(s), Skills
Assessment methods:
Final paper
Keywords:
Writing skills, research report, empirical cycle, scientific communication
Honours Programme

Honours

Faculty of Psychology and Neuroscience

Honours+

Full course description

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

HONH021
Year
1 Sep 2020
31 Aug 2021
Print course description
ECTS credits:
5.0
Instruction language:
English
Assessment methods:
Assignment, Attendance, Participation
Faculty of Psychology and Neuroscience

Introduction to Honour's Programme

Full course description

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

Bachelor Psychology

HONH020
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
1.0
Instruction language:
English
Coordinator:

- M. Capalbo

Assessment methods:
Written exam
Faculty of Psychology and Neuroscience

Behavioural Economics

Full course description

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

HONH017
Period 1
1 Sep 2020
23 Oct 2020
Print course description
ECTS credits:
2.0
Coordinator:

- M. Strobel

Teaching methods:
PBL
Faculty of Psychology and Neuroscience

Genetics

Full course description

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

HONH011
Period 2
26 Oct 2020
18 Dec 2020
Print course description

Bachelor Psychology

ECTS credits:
2.0
Instruction language:
English
Coordinator:

- H.E. Smit

Teaching methods:
PBL
Faculty of Psychology and Neuroscience

Philosophy and Psychology of Consciousness

Full course description

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

HONH015
Period 3
4 Jan 2021
29 Jan 2021
Print course description
ECTS credits:
2.0
Instruction language:
English
Coordinator:

- M.A.J.F. Heins

Teaching methods:
PBL
Faculty of Psychology and Neuroscience

Deep Reading

Full course description

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

HONH012
Period 4
1 Feb 2021
2 Apr 2021
Print course description
ECTS credits:
2.0
Coordinator:

Bachelor Psychology

- P. Vermeer

Teaching methods:
PBL
Faculty of Psychology and Neuroscience

Computational Models

Full course description

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

HONH016
Period 5
5 Apr 2021
4 Jun 2021
Print course description
ECTS credits:
2.0
Coordinator:

- M. Capalbo

Teaching methods:
PBL
Faculty of Psychology and Neuroscience

(Historical) Book Review

Full course description

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

HONH019
Period 6
7 Jun 2021
2 Jul 2021
Print course description
ECTS credits:
2.0
Coordinator:

- A.H. van der Lugt

Teaching methods:
PBL