

# Psychology

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 practise 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 group sessions will focus on practising problem tasks on the basis of the 'seven step' method. 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

Knowledge of: Introduction to PBL, seven steps method, learning to function in groups, developing communication skills, leading a discussion, team building, reflecting on group processes, reflecting on own functioning in groups.

### IPN1131

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

2.0

#### Instruction language:

English

#### Coordinator:

[W.H.J. van Mansum](#)

#### Teaching methods:

PBL, Training(s), Work in subgroups

**Assessment methods:**

Attendance

**Keywords:**

PBL, communication skills, teambuilding, feedback

**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.

### **Course objectives**

Knowledge of: Information skills (recognising references, finding books and articles), library services and support, learning and resource centre.

## **IPN1123**

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[L.J.J. Theunissen - Limpens](#)

**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**

# 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, an introduction is given into the classical themes for 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

Knowledge of: Group processes, stereotypes and prejudices, social influence, attitudes, attributions, the self, social cognition, aggression, prosocial behaviour, affiliation and attraction, classic and recent social-psychological theories and insights, research methods in social psychology.

## Recommended reading

Hogg, M. A., & Vaughan, G. M. (2014). Social psychology (Seventh edition.). Harlow, England: Pearson. - ISBN 978-0-273-76459-5. This book is also available as an e-book.

### IPN1021

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[K. Massar](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam, Assignment

#### Keywords:

Social psychology, attitudes, social influence, Social cognition, interpersonal processes

# Practical: Social Networks

## Full course description

In this practical a number of topics discussed in the course 'Social Behavior' will be reconsidered within the specific context of online social network sites (e.g., Facebook). This, however, requires 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

Knowledge of: Network analysis, social networks, doing research.

## Recommended reading

E-reader.

### IPN1124

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

0.0

#### Instruction language:

English

#### Coordinator:

[P.V.N. Verduyn](#)

#### Teaching methods:

Assignment(s), Lecture(s), Research, Skills

#### Assessment methods:

Attendance, Computertest, Observation

#### 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. This course covers the most important steps for good research. First, the empirical cycle will be explained. 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 study 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? This course teaches students how to examine such matters.

Of course, research should preferably be conducted as 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, which is crucial.

## Course objectives

Knowledge of: Kinds of arguments, empirical cycle, scientific theory, research ethics, questionnaires, observational research, selecting participants, reliability and validity, correlations, linear regression, relationships and causality, experimental research, between-subjects designs, within-subjects designs, quasi-experimental design, factorial design.

## Recommended reading

E-reader, textbooks research methods and statistics.

### **IPN1022**

#### **Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### **ECTS credits:**

6.0

#### **Instruction language:**

English

#### **Coordinator:**

[L. Riecke](#)

**Teaching methods:**

Lecture(s), PBL

**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

Knowledge of: Basic neuroanatomy, anatomical views and positions, anatomy and function of a neuron, foundations of neurotransmission, mechanisms of medication, sensorimotor system, reflex arc, systems neuroscience, sleep and sleep stadia, circadian rhythms, hunger and thirst, homeostasis, conditioning, addiction, basic genetics, hormones, sexual development, overview of research methods in neuroscience.

### Recommended reading

Breedlove, S.M., Rosenzweig, M.R., & Watson, N.V. (2007). Biological psychology (5th ed.). Sunderland, MA: Sinauer Associates;

Pinel, J.P.J. (2008). Biopsychology (7th ed.). Upper Saddle River, NJ: Prentice Hall;

Carlson, N.R. (2013). Physiology of Behavior (11th revised ed.). Boston, MA: Pearson Education;

E-reader.

## IPN1023

### Period 2

31 Oct 2016

23 Dec 2016

[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, neuropharmacology, 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 will help you locate the different parts and structures. Each section contains a task and/or questions. Your workbook will be checked.

## Course objectives

Knowledge of: Directions and planes in the brain, hemispheres and lobes, gyri and sulci, cortical areas, functional areas, ducts and nerves, commissures and ventricles, structural MRI.

## Recommended reading

Carlson, N.R. (2013). *Physiology of Behavior* (11th revised ed.). Boston, MA: Pearson Education;

Pinel, J. P. J. (2011). *Biopsychology + MYPsychLab* (8th ed.). Boston, MA: Pearson Education;

Breedlove, S. M., Watson, N. V., & Rosenzweig, M. R. (2010). *Biological psychology: an introduction to behavioral, cognitive, and clinical neuroscience* (6th ed.). Sunderland, MA: Sinauer Associates, Inc.

## IPN1129

### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

### ECTS credits:

0.0

### Instruction language:

English

### Coordinator:

[M. Capalbo](#)

### Teaching methods:

Assignment(s)

### Assessment methods:

Take home exam

### 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, the foundations of inferential statistics will be covered. 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 X<sup>2</sup> 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

Knowledge of: 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, z-test, t-tests, ANOVA, MSG and MSE, population and sample proportion, X<sup>2</sup>-goodness of fit test, X<sup>2</sup>-test for contingency tables, assumptions of statistical tests, robustness against violations of assumptions.

## Recommended reading

Moore, D.S., McCabe, G.P., & Craig, B.A. (2014). Introduction to the practice of statistics (8th ed.). New York: W.H. Freeman and Company.

### IPN1024

#### Period 2

31 Oct 2016

23 Dec 2016

[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

Knowledge of: Data entry in SPSS, how to run statistical analyses from 'Statistics for psychologists I' in SPSS, correct interpretation of SPSS-output.

## Recommended reading

Syllabus IBM SPSS in practice.

## IPN1121

### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

### ECTS credits:

0.0

### Instruction language:

English

### Coordinator:

[A. Cassese](#)

### Teaching methods:

Assignment(s), Training(s)

### Assessment methods:

Attendance

### Keywords:

SPSS, statistical software

## 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 4 times during Skills II. The focus of the first meeting in period 1 will be on study skills like reading, summarizing and mind and/or concept mapping. Also in this meeting students practice answering mc questions. After the first meeting, students will write an abstract for a scientific article. The mentor will provide feedback on the abstract.

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. Finally, the students will complete the practical trainings Data Processing via SPSS, Observing behaviour, and Systematic Literature Review.

## Course objectives

Knowledge of: Study skills: summarising, multiple choice questions, learning strategies, writing an abstract.

Research skills: observing, observational research, research design, research report, writing, presenting.

## Recommended reading

The literature will be available through EleUM and is in part incorporated in the manual.

### IPN1132

**Period 1**

5 Sep 2016

3 Feb 2017

[Print course description](#)

**ECTS credits:**

2.0

**Instruction language:**

English

**Coordinator:**

[I.P.A. Kokx](#)

**Teaching methods:**

Assignment(s), Lecture(s), Paper(s), PBL, Presentation(s), Research, Skills, Work in subgroups

**Assessment methods:**

Attendance, Computertest, Final paper, Observation, Participation, 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 such 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 course, students will learn how to draw systematic observations using computer tasks.

## Course objectives

Knowledge of: Behavioural observation techniques: The Observer, systematic behavioural observation, behavioural classification system, reliability of observations.

## Recommended reading

The literature will be available through EleUM and is in part incorporated in the manual.

### IPN1128

**Period 1**

5 Sep 2016

3 Feb 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[K. Massar](#)

**Teaching methods:**

Assignment(s), Lecture(s), Research, Skills

**Assessment methods:**

Attendance, Computertest

**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, the research group conducts observations and processes these in the programme SPSS. During the practical 'Data Analysis via SPSS', the group analyses the observations using an analysis protocol and with the support of SPSS trainers.

### **Course objectives**

Knowledge of: Analysis protocol: formulation of research questions, independent and dependent variables, measurement level, hypotheses, research design, statistical test.

## **IPN1130**

**Period 1**

5 Sep 2016

3 Feb 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[J. Schepers](#)

**Teaching methods:**

Training(s), 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.

### **Course objectives**

Knowledge of: PsycINFO, literature research, thesaurus, search strategy.

## **IPN1137**

**Period 1**

5 Sep 2016

3 Feb 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[L.J.J. Theunissen - Limpens](#)

**Teaching methods:**

Assignment(s), Presentation(s), Skills

**Assessment methods:**

Attendance, Participation

**Keywords:**

PsycINFO, literature research, thesaurus, search strategy

## Faculty of Psychology and Neuroscience

# Discover Psychology

### Full course description

What are your options when studying psychology? What kind of research is conducted at our faculty? These are questions that the average bachelor student will only find answered late during the programme. Although the curriculum does adequately prepare students for follow-up programmes within psychology eventually, students often do not have a clear image of what psychology has to offer in terms of content. Discover Psychology is meant to help students find their bearings in the field. Additionally, students will have the opportunity to explore a specific theme.

During the third period, students will be offered a choice between a number of brief courses, provided by staff members from various departments. The convergence of expertise from various research groups guarantees variation within this course. Students will have the option of exploring one specific aspect of psychology during this period.

In addition they will be introduced to the research carried out across the FPN departments. That way, students can also gain knowledge on other aspects of psychology, regardless of the course they choose. During this period, professors will be invited to talk to the students about the research they conduct at our faculty.

### Course objectives

Knowledge of: Applied psychology, cognitive control, cognitive neuroscience, psychopharmacology, body image, media influence, research in psychology.

### Recommended reading

E-reader;

Online sources.

## IPN1029

### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

### ECTS credits:

3.0

### Instruction language:

English

### Coordinator:

N. Bien

### Teaching methods:

Lecture(s), PBL

**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? Do cultural differences play a role here? 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 and the development of shame and aggression. 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

Knowledge of: Development theories, methods of research, cognitive development, pre- and postnatal brain development, perceptual development, attachment, temperament, emotional and social development, language acquisition, information processing, moral development, learning theories and social cognition.

### Recommended reading

Leman, R.D & Bremner, A. (2012). Developmental psychology. London, McGraw-Hill;

Siegler, R.S., Deloache, J.S., & Eisenberg, N., Saffran (2014). How children develop (4th ed.). New York: Worth;

Smith, P.K., Cowie, H. & Blades, M. (2015). Understanding children's development (6th ed). Chichester, Wiley;

E-reader.

## IPN1025

**Period 4**

6 Feb 2017

7 Apr 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[J.E.A. Stauder](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Attendance, Written exam

**Keywords:**

Development, cognition, Perception, emotion, language

## Faculty of Psychology and Neuroscience

# Perception

### Full course description

How does our brain construct a picture of the world around us? The ease 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 give detailed consideration to 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. At the end of the course, students will "design" a new perceptual system (the sense of touch) based on basic functional and structural principles of visual and auditory perception.

### Course objectives

Knowledge of: Perception and research methods, structure and function of the eye, perception of colours and colour-blindness, subcortical and cortical visual pathways, brain damage and visual object recognition, Gestalt psychology and visual illusions, perception of depth and size, structure and function of the ear, subcortical and cortical auditory pathways, hearing problems, auditory scene analysis, structural and functional principles of perception.

### Recommended reading

Goldstein, E. (2014). Sensation and perception (9th ed). Wadsworth, Cengage learning;

Wolfe, J.M., Kluender, K.R, Levi, D.M. et al. (2015). Sensation and perception (4th ed.). Sunderland: Sinauer associates, Inc;

## IPN1026

### Period 4

6 Feb 2017

7 Apr 2017

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinator:

[M.L. Bonte](#)

### Teaching methods:

Assignment(s), Lecture(s), PBL

### Assessment methods:

Attendance, Written exam

### Keywords:

Perception, brain, visual perception, auditory perception, psychophysics, neuroimaging, Neuropsychology

## 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

Knowledge of: Origin of humanity, scientific revolution, dualism: mind-body problem, Darwin and theory of evolution, psychology as a discipline, behaviourism and cognitive psychology, Freud and psychoanalysis, the influence of brain research, balance between approaches.

## Recommended reading

Brysbart, M., & Rastle, K. (2013). Historical and conceptual issues in psychology (2nd ed.). Harlow: Pearson.

### IPN1027

**Period 5**

10 Apr 2017

9 Jun 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[A. Blokland](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Attendance, Written exam

**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 at around the same age. Later on in our lives, we learn how to drive a car or motorcycle. Interestingly, we may also remember the precise circumstances of our first driving lesson, or our first day in high school. For some, high school may elicit happy memories, for others the very idea of walking on the schoolyard again will elicit anxiety, for example because having been bullied. When telling a friend about some things that happened in the past, being interrupted by a phone call will not prevent you from continuing where you left off.

In this course we will learn about generally applicable stages in learning and memory, namely encoding, storage, and retrieval. But we will also learn about differences among different kinds of memory, and about the different brain areas and structures that contribute to the different types of memory. In addition, we will study the different ways in which individual neurons and neural populations can maintain memory traces for shorter or longer durations. We will learn that memories are often not as robust as we think. They can be forgotten, or interfered with by many factors, and what we remember may not even be true!

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.

The course will have a biological orientation and will use insights from behavioural and neurophysiological research in animals to better understand human learning and memory.

## Course objectives

Knowledge of: Types of learning and memory, cognitive models of memory, anatomy of memory, neuronal changes in the brain after learning, forgetting, interference, consolidation, clinical and educational applications

## Recommended reading

An e-reader has been compiled. Relevant textbooks can be consulted in the learning and resource centre.

### IPN1028

#### Period 5

10 Apr 2017

9 Jun 2017

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinators:

[P.H.M. de Weerd](#)

[V.G. van de Ven](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam

#### 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 selection of complex verbal and visual case studies. 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

Knowledge of: Neuropsychology, diagnostic cycle, practical experience, interpretation of test results, observing.

## Recommended reading

The literature will be handed out at the meetings.

### IPN1125

**Period 5**

10 Apr 2017

9 Jun 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[I. Winkens](#)

**Teaching methods:**

Training(s)

**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 selection of complex verbal and visual case studies. 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

Knowledge of: Neuropsychology, diagnostic cycle, practical experience, interpretation of test results, observing.

## Recommended reading

The literature will be handed out at the meetings.

### IPN1126

#### Period 5

10 Apr 2017

9 Jun 2017

[Print course description](#)

#### ECTS credits:

0.0

#### Instruction language:

English

#### Coordinator:

G.F. Lange

#### Teaching methods:

Training(s)

#### Assessment methods:

Attendance

#### 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 selection of complex verbal and visual case studies. 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

Knowledge of: Neuropsychology, diagnostic cycle, practical experience, interpretation of test results, observation.

## Recommended reading

The literature will be handed out at the meetings.

### IPN1127

#### Period 5

10 Apr 2017

9 Jun 2017

[Print course description](#)

#### ECTS credits:

0.0

#### Instruction language:

English

#### Coordinator:

C. Resch

#### Teaching methods:

Training(s)

#### Assessment methods:

Attendance

#### Keywords:

Cognitive models, neuropsychological tests, clinical applications, diagnostic cycle

## 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 audiovisually 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

Knowledge of: self reflection, writing, communicating, presenting.

## Recommended reading

E-reader.

### IPN1133

**Period 4**

6 Feb 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

2.0

**Instruction language:**

English

**Coordinator:**

N. Bien

**Teaching methods:**

Assignment(s), Lecture(s), Paper(s), Skills

**Assessment methods:**

Attendance, Final paper, Portfolio, Presentation

**Keywords:**

Portfolio, Writing skills, communication, mentorate

## Faculty of Psychology and Neuroscience

# Practical: Writing Assignment 1

## Full course description

In periods four and five, students will practise academic writing. 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.

The first assignment involves providing useful feedback to an academic text. Students will receive a clear instruction and will provide their feedback under direct supervision of teaching staff.

## Course objectives

Knowledge of: Writing, communicating, feedback.

### IPN1134

**Period 4**

6 Feb 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

N. Bien

**Teaching methods:**

Assignment(s)

**Assessment methods:**

Attendance

**Keywords:**

Writing skills, communication

## Faculty of Psychology and Neuroscience

# Practical: Writing Assignment 2

## Full course description

In periods four and five, students will practise academic writing. 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.

The second assignment involves practice in clearly describing and consequently interpreting experimental studies, and formulating their own critical conclusion.

The assignment involves reading, and summarising two (seemingly) contradictory papers and coming to a well-founded, critical conclusion about the meaning of these articles. Students will perform this task under direct supervision of teaching staff.

## Course objectives

Knowledge of: Writing, communicating science, research.

### IPN1135

**Period 4**

6 Feb 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

N. Bien

**Teaching methods:**

Assignment(s)

**Assessment methods:**

Attendance

**Keywords:**

Writing skills

**Faculty of Psychology and Neuroscience**

## **Practical: Writing Assignment 3**

### **Full course description**

In periods four and five, students will practise academic writing. 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 individual written assignments.

The third assignment involves writing a blog about at least one study in Psychological Science. The challenge is to describe a scientific study in such a way that it appeals to a larger audience. Students are invited to comment on each other's work as taught during 'Writing assignment 1' (IPN1134). Students are given the opportunity to edit their own blog on the basis of the feedback they received.

### **Course objectives**

Knowledge of: Writing, reading comprehension, feedback, communicating science.

## **IPN1136**

**Period 4**

6 Feb 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

N. Bien

**Teaching methods:**

Assignment(s)

**Assessment methods:**

Attendance

**Keywords:**

Writing skills

**Faculty of Psychology and Neuroscience**

## **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, and how to use this knowledge in order to explain psychological phenomena.

Darwin's theory of evolution teaches us that the human psyche originated gradually. Genetics explains that selection of genetic variation in populations has been the driving force of this process. That is why knowledge of evolution and genetics is required in order to understand the evolution of the psyche. We 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?), and population genetics (how are traits selected in a population?). Based on these principles, we will examine the evolutionary explanations of the psyche. We will discuss the evolution of cooperation (inclusive fitness theory), and the question why humans take up a special position in the animal kingdom. The emphasis will be placed on concrete examples that 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 clearer image of how the evolutionary approach contributes to a better understanding of psychological phenomena.

### **Course objectives**

Knowledge of: Principles of Mendelian genetics, molecular genetics and population genetics. Insight into the inclusive fitness theory and how this theory can be used to explain (the evolution of) behaviour, and the psyche. Understanding the distinction between ultimate and proximate explanations and how they can be applied to psychological phenomena.

### **Recommended reading**

E-reader.

## **IPN1030**

**Period 6**

12 Jun 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

3.0

**Instruction language:**

English

**Coordinators:**

[M.M.L. Moerel](#)

M. Gerards

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Attendance, Written exam

**Keywords:**

Natural selection, Genetics, inclusive fitness, man as a unique being

**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**

Knowledge of: Various online information sources and resources for students. General understanding of available systems. Basic knowledge of UM and FPN regulations.

### **Recommended reading**

Exam- and Education Regulation <http://go.askpsy.nl/regulations>;

ICTS manuals <http://go.askpsy.nl/icts>;

Ask Psychology.

**IPN1138**

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[W.G.J.J. Teeling](#)

**Teaching methods:**

Assignment(s), Presentation(s), Training(s)

**Assessment methods:**

Attendance, Assignment

**Keywords:**

Study facilities, ICT systems, UM-card, student portal, electronic learning environment, rules and regulations, introduction week

**Faculty of Psychology and Neuroscience**

**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 or sports achievements, or influencing consumer behavior? This track reflects the important contribution that psychological science makes to everyday society - both with regard to explaining behavior, and solving problems.

**Course objectives**

Knowledge of: Applied psychology, media influence, research in psychology.

**Recommended reading**

E-reader;

Online sources.

## IPN1029A

### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

### ECTS credits:

3.0

### Instruction language:

English

### Coordinator:

[G.C. Kraag](#)

### Teaching methods:

Lecture(s), PBL

### Assessment methods:

Attendance, Written exam

### Keywords:

Social psychology, Work psychology, Cognitive Neuroscience, neuropsychology, clinical research

## Faculty of Psychology and Neuroscience

# 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 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 'Meet your Brain' presents several intriguing examples of how brain and behavior mutually influence each other, and thus demonstrates how studying the brain helps psychologists explain, predict and finally influence behavior. The use of several newer methods such as fMRI, neurofeedback and non-invasive brain stimulation are highlighted, both with regard to research and in the clinical context.

## Course objectives

Knowledge of:

Cognitive neuroscience, cognitive control, research in psychology.

## Recommended reading

E-reader;

Online sources.

### IPN1029B

#### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

#### ECTS credits:

3.0

#### Instruction language:

English

#### Coordinator:

G.F. Lange

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam

#### Keywords:

Social psychology, Work psychology, Cognitive Neuroscience, neuropsychology, clinical research

## Faculty of Psychology and Neuroscience

# 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 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 '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

Knowledge of:

## Recommended reading

E-reader;

online sources.

### IPN1029C

#### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

#### ECTS credits:

3.0

#### Instruction language:

English

#### Coordinator:

[K.P.C. Kuypers](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam

#### Keywords:

Social psychology, Work psychology, Cognitive Neuroscience, neuropsychology, clinical research

## Faculty of Psychology and Neuroscience

# 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 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 '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 anxiety. How does a negative body image arise? How can this be aggravated, 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

Knowledge of:

Body image, media influence, research in psychology.

### IPN1029D

#### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

#### ECTS credits:

3.0

#### Instruction language:

English

#### Coordinator:

[J.M. Alleva](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam

#### Keywords:

Social psychology, Work psychology, Cognitive Neuroscience, neuropsychology, clinical research

## 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 during 'Skills II'.

There will have individual meetings on their study progress with the mentor during the first, third and fifth 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

Knowledge of: Self-Reflection: portfolio, study behaviour and study progress, SMART goals.

### IPN1139

#### Period 1

5 Sep 2016

3 Feb 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[I.P.A. Kokx](#)

**Teaching methods:**

Skills

**Assessment methods:**

Attendance

**Keywords:**

personal learning goals, self-reflection, study progress

**Faculty of Psychology and Neuroscience**

## **Practical: Portfolio Year 1 Part 2**

### **Course objectives**

Knowledge about: Self-reflection, portfolio, self-regulation, competences analysis, formulating and pursuing goals, informing about electives. Students need to have fulfilled the requirements of IPN1140 portfolio year 1 part 2 to get the credits for Skills III.

## **IPN1140**

**Period 4**

6 Feb 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[I.P.A. Kokx](#)

**Teaching methods:**

Skills

**Assessment methods:**

Attendance

**Keywords:**

Personal learning goals, self-reflection, study progress

Second year courses

## Bachelor Psychology Year 2

Faculty of Psychology and Neuroscience

### Skills IV: Academic Writing

#### Full course description

During the course Skills IV, students will continue to develop their writing skills by producing a short critical review paper. Writing their first full, individual article 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 certain supervisors. Under their guidance, and supported by their peers, students formulate a critical research question related to the theme of their group/supervisor, and address this 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 writing skills, but it also encourages the development of critical thinking. By peer-reviewing the paper of a fellow group member at various stages, 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.

During a single supervised writing session they will additionally translate the research question of their critical review paper into a hypothetical research proposal, containing information on methods, design, proposed analysis, projected outcomes, and relevance and/or valorisation.

#### Course objectives

Knowledge of: Writing, critical thinking, argumentation, peer-reviewing, referencing, research, English grammar, and spelling.

### IPN2131

#### Period 1

5 Sep 2016

9 Jun 2017

[Print course description](#)

#### ECTS credits:

4.0

#### Instruction language:

English

#### Coordinator:

N. Bien

#### Teaching methods:

Assignment(s)

**Assessment methods:**

Attendance, Final paper

**Keywords:**

Writing, Critical Thinking

**Faculty of Psychology and Neuroscience**

**Practical: Portfolio Year 2**

**Full course description**

The portfolio part in year 2 consists of two parts: updating the portfolio that was made in year 1 and an individual mentor meeting. Emphasis is on reflection and regulation of the. 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**

Knowledge of: Self-reflection, portfolio, self-regulation, competences analysis, formulating and pursuing goals, informing about electives.

**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.

**IPN2138**

**Period 1**

5 Sep 2016

9 Jun 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[I.P.A. Kokx](#)

**Teaching methods:**

Skills

**Assessment methods:**

Attendance

**Keywords:**

Personal learning goals, self-reflection, study progress

**Faculty of Psychology and Neuroscience**

# Complex Cognition

## Full course description

Human cognition can be viewed as a "fast track" along which we are constantly adapting to our changing environment, in addition to the "slow track" methods of genetic mutation and (operant) conditioning. This course supplements the first-year course Learning and Memory and offers an 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 often underlies these processes. Finally, the focus of this course is the question of what role cultural differences play in research into cognition.

The course starts with several questions about knowledge representation and language: How do we store the meaning of words? How do we recognise words? How do we categorise objects? 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? That 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. Game-theoretic and social-neuroeconomic research also play a central part in studying cooperative behaviour. Theories on the role of complex cognitive processes in the development of applied psychological disciplines will also be touched upon. Attention will be paid to problems in educational psychology and work and organisational psychology. Throughout the course, students will focus on and map relations between theories.

## Course objectives

Knowledge of: Cultural psychology, categorising, knowledge representation, perceptual categorisation, word recognition, language production, language and thinking, inductive reasoning, deductive reasoning, dual system theory, problem solving, heuristics and biases, utility theory, decision making, moral reasoning, emotion and decision making, negotiation, social neuro-economics, game theory, trust, cooperation, negotiation, metacognition.

## Recommended reading

Students are encouraged to actively search for relevant scientific articles;

E-reader.

## IPN2021

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[H.T.H. Fonteijn](#)

**Teaching methods:**

Assignment(s), Lecture(s), PBL, Work in subgroups

**Assessment methods:**

Assignment, Attendance, Written exam

**Keywords:**

Categorising, language decision making, reasoning, Culture

**Faculty of Psychology and Neuroscience**

## **Personality and Individual Differences**

### **Full course description**

Structure of the course:

The course is divided into four parts. The **first part** of the course will provide 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** we will look at 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**, we 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**, we 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.

### **Course objectives**

Knowledge of: The most important scientific theories about personality, individual differences and intelligence, changes in personality, personality tests, genetics, personality disorders, evolutionary

explanations, life outcomes.

## Recommended reading

The following textbooks are recommended as an introduction to the field:

Ashton, M. C. (2013). Individual differences and personality (2nd ed.). Burlington, MA: Elsevier Academic Press;

OR

Larsen, R. J., Buss, D. M., & Wismeijer, A. (2013). Personality Psychology: Domains of knowledge about human nature. Berkshire, UK: McGraw Hill Higher Education;

AND

Deary, I. J. (2001). Intelligence: A very short introduction. Oxford, UK: Oxford University Press;

E-reader.

## IPN2022

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinator:

[A. Nübold](#)

### Teaching methods:

Skills, Lecture(s), PBL

### Assessment methods:

Attendance, Written exam

### Keywords:

personality, intelligence, measurement, antecedents, consequences

## Faculty of Psychology and Neuroscience

# Personality Diagnostics

## Full course description

The goal of this practical is to 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 are to fill in an observer's personality questionnaire about this person. Students learn how this information is processed and how t-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.

## Course objectives

Knowledge of: Personality assessment, self and observer reports of personality, taking and interpreting personality questionnaires and observer reports, calculating personality scores (T-values), trait / multivariate paradigm, reporting the results in a formal report.

## Recommended reading

Ashton, M. C. (2013). Individual differences and personality (2nd ed.). Burlington, MA: Elsevier Academic Press;

Costa, P. T., & Piedmont, R. L. (2003). Multivariate assessment: NEO PI-R profiles of Madeline G: Self, partner, and an integrated perspective. In Wiggins, J. S. (Ed.), Paradigms of personality assessment (pp. 262-280). New York: Guilford;

De Vries, R. E., Lee, K., Ashton, M. C. (2008). The Dutch HEXACO personality inventory: Psychometric properties, self-other agreement, and relations with psychopathy among low and high acquaintanceship dyads. *Journal of Personality Assessment*, 90, 142-151. doi: 10.1080/00223890701845195;

Piedmont, R.L. (2005). Understanding personality and its assessment from a trait perspective (pp. 65-90). In B.T. Erford (Ed.), *The counsellor's guide to clinical, personality, and behavioural assessment*. Lahaska, PA: Lahaska/Harcourt-Brace.

## IPN2137

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

### ECTS credits:

0.0

### Instruction language:

English

### Coordinator:

[E.J.E. Heynen](#)

### Teaching methods:

Assignment(s), Lecture(s), Paper(s), Skills, Training(s)

### Assessment methods:

Final paper

### Keywords:

Personality assessment, self and observer reports, reporting on results, trait paradigm, questionnaires

## Faculty of Psychology and Neuroscience

# Psychopathology

### Full course description

The course Psychopathology deals with disturbed, strange, unadjusted, abnormal behaviour. Important clinical pictures will be studied on the basis of a number of case studies and the results of existing experimental research, such as different 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? 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. When discussing this, students will 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

Knowledge of: DSM-5, more specifically ADHD and autism, obsessive compulsive disorder, addiction, eating disorders, panic disorder, mood disorders, borderline personality disorder, schizophrenia and sexual dysfunctions. Of these disorders, prevalence and diagnostic criteria, causes (including cognitive biases, learning processes, attachment, neurotransmitters and genetic factors) and therapies (including cognitive and behavioural therapy, schema focused therapy and psychopharmacology).

### Recommended reading

E-reader;

Davey, G. (2014). Psychopathology: Research, assessment and treatment in clinical psychology. Second edition. Chichester: John Wiley & Sons, Ltd.;

Nolen-Hoeksema, S. (2014). Abnormal Psychology, sixth edition. Boston: McGraw-Hill.

## IPN2024

### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

### ECTS credits:

6.0

**Instruction language:**

English

**Coordinator:**

[C. Nederkoorn](#)

**Teaching methods:**

Lecture(s), PBL, Work in subgroups

**Assessment methods:**

Attendance, Written exam

**Keywords:**

Psychopathology, Psychiatry, (cognitive) behavioural therapy, psychopharmaca, 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 status examination), determining DSM-diagnoses, 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 an 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, 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**

Knowledge of: Psychological conversation techniques, building / structure of (case) history, DSM-diagnostics, mental status examination, professional terminology.

Skills: Psychological conversation techniques, ability to structurally execute a psychiatric anamnestic conversation, professional client relation, diagnosing, professional language, written reports.

### **Recommended reading**

Morrison, J. ( 2014). The first interview. New York: The Guilford Press;

American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). Washington, DC: Author.

**IPN2134**

**Period 2**

31 Oct 2016

3 Feb 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinators:**

[A.A.N. Mulkens](#)

[S. Stutterheim](#)

**Teaching methods:**

Assignment(s), Lecture(s), Paper(s), Patient contact, Skills, Training(s), Work in subgroups

**Assessment methods:**

Attendance, Final paper

**Keywords:**

Psychological conversation techniques, (complaints/ case) history, DSM-IV and DSM-5 diagnoses, professional reporting

**Faculty of Psychology and Neuroscience**

## **Functional Neuroanatomy**

### **Full course description**

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

In recent decades it has become clear that specific behaviours and abilities cannot be simply linked 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. You will explore several functional systems involved in the generation of behaviour through six 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. You 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

Knowledge of: General understanding of the functional and structural organisation of the extended motor system with its functional subsystems. You should acquire the correct neuroanatomical terminology. You should understand the macroscopic organisation of the human brain. You should be able to parcellate the brain into its large-scale functional subsystems. You should understand the functional and structural organisation of these subsystems.

### IPN2029

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

4.0

#### Instruction language:

English

#### Coordinator:

[P.L.J. Stiers](#)

#### Teaching methods:

Assignment(s), Lecture(s), Work in subgroups

#### Assessment methods:

Attendance, Written exam

#### Keywords:

Brain 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 you will deepen your 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 you will literally put your hands on the brain. You 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 you 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

you 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 you 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. You will also learn about the functional relevance of these structures: perception, different forms of retention, emotion and motivation, etc. You will work through assignments using brain preparations, brain models, atlases and hand books. In addition you 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

Knowledge of: Becoming familiar with neuroanatomical terminology, and the macroscopic organization of the brain. Understand the organization of functional brain systems, and the similarities and differences between the brain of a rat, a sheep and a human. Learn about the microscopic building blocks of the brain (neurons, nuclei, fibres), hippocampal structures, basal ganglia, brain stem, thalamus and hypothalamus, midbrain, cerebral cortex and cerebellum.

### IPN2133

#### Period 2

31 Oct 2016

23 Dec 2016

[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, we 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. We 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, we will cover a number of scientific-philosophical questions: What is science? What is true?

During the course, we 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

Knowledge of: Argumentation analysis, evaluation of argumentations, sophisms, classical logic, proposition logic, science versus pseudoscience, rhetoric, debating, philosophy of science.

## Recommended reading

Hurley, P.J. (2015). A concise introduction to logic (12th ed.). London, UK: Cengage learning.

### IPN2023

#### Period 3

9 Jan 2017

3 Feb 2017

[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

# 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. This course 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

Knowledge about: Difficult and easy problems, vegetative state patients, brain hemispheres, unconscious processing, dreams and consciousness, free will and the brain, introspection, attention and consciousness.

## Recommended reading

E-reader.

### IPN2025

#### Period 4

6 Feb 2017

7 Apr 2017

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[T. Schuhmann](#)

#### Teaching methods:

Lecture(s), PBL

**Assessment methods:**

Attendance, Written exam

**Keywords:**

Introspection, split brain, Attention, unconscious processing, freedom

**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, several influential architectures and algorithms will be discussed, 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. We will also pay attention to developments in artificial intelligence and the resulting changes in the division of duties between man and machine, examined in cognitive ergonomics and socio-technical systems. Next, students will study creativity and search models. The question "Can computers be creative?" is, of course, also an invitation for students to consider human creativity. Learning will be the key in two assignments relating to connectionist models. Additionally, students will look at 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 practical 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. Time, a factor that is often neglected, is considered in an assignment dedicated to the application of the dynamic system theory in psychological research (e.g. motor development and attitude polarisation). A third point of criticism in relation to cognitive science is the lack of attention for the physical and social environment of the subject. This is a key point in assignments 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 virtually need to cope with it by means of brain-machine interfaces or stimulated by other means to enhance cognition. Virtual cooperation within teams will also be examined by means of a group assignment.

### **Course objectives**

Knowledge of: Cognition science, computational models, Marr's tri-level hypothesis, Turing test, human factors, man-machine interaction, functional allocation, human mistakes, adaptive interfaces, neuro-ergonomics, creativity, Newell and Simon's problem space hypothesis, ACT-R, information retrieval, connectionism, lateral inhibition, Hebbian learning, competitive learning, auto associative networks, pattern association, optimisation, dynamic system theory, discontinuity, catastrophe

theory, attitude polarisation, transactive memory, distributed cognition, social robotics, emotions, artificial intelligence, swarm intelligence, persuasive technology, virtual collaboration.

## Recommended reading

E-reader.

### IPN2026

**Period 4**

6 Feb 2017

7 Apr 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[H.T.H. Fonteijn](#)

**Teaching methods:**

Assignment(s), Lecture(s), PBL, Presentation(s)

**Assessment methods:**

Attendance, Presentation, Written exam

**Keywords:**

Cognitive science, cognitive modelling, man-machine interaction

## 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. Each module will introduce a 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

Knowledge of: 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.

## Prerequisites

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

## Recommended reading

Field, A. (2013). *Discovering statistics using SPSS* (4th ed.). London, UK: Sage;

Van Breukelen, G. J., & Broers, N. J. (2001). *Variante-analyse en covariante-analyse*;

Van Breukelen, G. J., & Broers, N. J. (2009). *Regressie analyse*;

Broers, N. J. (2015). *A short guide to the use of Gpower*.

## IPN2028

### Period 5

10 Apr 2017

9 Jun 2017

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

**Coordinator:**

[N.J. Broers](#)

**Teaching methods:**

Assignment(s), Lecture(s), Skills, Training(s), 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**

Knowledge about: Structuring data files, performing statistical analyses, interpreting results.

**Recommended reading**

Syllabus IBM SPSS in practice;

Field, A. (2013). Discovering statistics using SPSS (4th ed.). London, UK: Sage.

**IPN2135**

**Period 5**

10 Apr 2017

9 Jun 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[N.J. Broers](#)

**Teaching methods:**

Assignment(s), Training(s)

**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 Psychology Ethics Committee (ECP) for approval. After obtaining ECP 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: Writing the research report in English (consisting of: introduction, method, results and discussion in line with the APA format for an academic article);

Week 10-11: Assessment of research reports by the tutor. The students will also act as each other's reviewers;

Week 12: Feedback on the research reports by fellow students. 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 impressive experiments within psychology, 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 two blogs per group. Students will also receive mini-workshops about how to present, how to write reviews, and statistics.

### Course objectives

Knowledge of: Empirical cycle, development basic research skills, translating research question into hypotheses, operationalisation of hypotheses, collecting research data, analysing research data, interpreting and discussing results, writing a research report, making a scientific poster, making a scientific presentation.

### 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'.

## Recommended reading

During this module the student needs to find relevant literature for his own research.

### IPN2027

**Period 5**

10 Apr 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

10.0

**Instruction language:**

English

**Coordinator:**

[C. Nederkoorn](#)

**Teaching methods:**

Lecture(s), Paper(s), PBL, Presentation(s), Research, Work in subgroups

**Assessment methods:**

Attendance, Final paper

**Keywords:**

research, data collecting skills, data analysis, data collection, ethics

## Faculty of Psychology and Neuroscience

# Practical: EndNote Introduction

## Full course description

This (mandatory) practical covers the use of the programme EndNote to create your own literature file and to provide a project/document (Word) with quotes and a literature list according to the desired citation style. Attention will be paid to plagiarism and APA citation style.

## Course objectives

Knowledge and use of: The EndNote programme, including adding references in Word-documents according to APA-style.

### IPN2136

**Period 5**

10 Apr 2017

9 Jun 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[L.J.J. Theunissen - Limpens](#)

**Teaching methods:**

Assignment(s), Presentation(s)

**Assessment methods:**

Attendance

**Keywords:**

EndNote, APA style, referencing, citing

**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, ECP, 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, 10 groups are invited to prepare a presentation and the other groups have to prepare a poster. A poster session is included too and a jury consisting of researchers of the faculty will look at each presentation and poster and award at the end different prizes (e.g., best presentation, best research, etc.). Students are instructed to provide questions and feedback to fellow students.

### **Course objectives**

Knowledge of:

1. Being able to prepare a scientific poster or presentation.
2. Being able to present findings to a scientific audience.
3. Being to provide feedback to other students.
4. Being able to answer questions addressed by psychologists, students, and the jury.
5. Being acquainted with the specific details of a symposium.

## **IPN2106**

**Period 5**

10 Apr 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[C. Nederkoorn](#)

**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 the student updates 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 a feedback on their Curriculum Vitae (CV) from the UM Career Services staff.

#### Course objectives

Knowledge of: Self-reflection, portfolio, self-regulation, formulating and pursuing goals, explaining choices about study, writing Curriculum Vitae and application letter, applying , Quick Career Advice.

#### Prerequisites

See Practicals IPN3159 and IPN3160

### IPN3131

**Period 1**

5 Sep 2016

7 Jul 2017

[Print course description](#)

**ECTS credits:**

1.0

**Instruction language:**

English

**Coordinator:**

[L.T.E. Kessels](#)

**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

# 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 a solid statistical preparation for the course 'Psychodiagnostics'.

The course includes 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. The course offers 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. The course offers training in exploratory factor analysis with SPSS.

### Course objectives

Knowledge of: Three-way cross tables, logistic regression, confounding and interaction, classical psychometrics, reliability, item analysis, modern psychometrics, item response theory, Rasch model, validity, agreement, explorative factor analysis.

## Prerequisites

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

## Recommended reading

M. Berger, Tj. Imbos & M. Janssen (Eds.), Methodologie en statistiek deel II. Maastricht: Universitaire Pers. Chapters 13, 14, 16, 17.

### IPN3008

**Period 4**

6 Feb 2017

7 Apr 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[J. Schepers](#)

**Teaching methods:**

Assignment(s), Lecture(s), Skills, Training(s), 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 practical classes, one for each of the subjects contingency tables, logistic regression, classical psychometrics, and factor analysis. During these classes, the corresponding statistical technique will be practiced 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, this should be done during the practical.

## Course objectives

Knowledge of: Contingency table analysis with SPSS, logistic regression with SPSS, reliability analysis with SPSS, factor analysis with SPSS.

## Prerequisites

Good SPSS skills based on SPSS practicals for modules IPN1024 'Statistics I' and IPN2028 'Statistics II'.

## Recommended reading

Syllabus IBM SPSS in practice (see IPN1121);

Field, A (2009). Discovering statistics using SPSS. London: SAGE (3rd ed.).

### IPN3201

#### Period 4

6 Feb 2017

7 Apr 2017

[Print course description](#)

#### ECTS credits:

0.0

#### Instruction language:

English

#### Coordinator:

[J. Schepers](#)

#### Teaching methods:

Assignment(s), Training(s)

#### 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.

The most important methods are covered. 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 for 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 more insensitive 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 time and spatial precision.

## Course objectives

Knowledge of: Conventional experimental paradigms which are used to isolate cognitive functions, and the research methods that are used to investigate them. We will scrutinise the biological basis of the measurements, and the way it informs us about the functioning of the brain.

### **IPN3011**

#### **Period 4**

6 Feb 2017

7 Apr 2017

[Print course description](#)

#### **ECTS credits:**

6.0

#### **Instruction language:**

English

#### **Coordinator:**

[F.T.Y. Smulders](#)

#### **Teaching methods:**

Assignment(s), Lecture(s), PBL

#### **Assessment methods:**

Attendance, Written exam

#### **Keywords:**

Methods of cognitive neuroscience, experimental paradigms

## 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

Knowledge of: Learning to work with a standard modern spreadsheet to process and display data from experiments. Increasing insight into analyses by setting them up your self in a spreadsheet.

## IPN3153

### Period 4

6 Feb 2017

7 Apr 2017

[Print course description](#)

### ECTS credits:

0.0

### Instruction language:

English

### Coordinator:

[E.L. Theunissen](#)

### Teaching methods:

Training(s)

### Assessment methods:

Assignment, Attendance

### 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 yourself 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.

During the first session, 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. During the second session, students receive data from another experiment and a detailed description of its procedures (stimulation protocol, etc.), and analyse these by following the steps learnt in the first session.

## Course objectives

Knowledge of: Learning elementary steps of the analysis of MRI data. Disturbances of the signal, choice of statistical tests and interpreting the end results are addressed.

### IPN3154

**Period 4**

6 Feb 2017

7 Apr 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinators:**

[F. de Martino](#)

[G. Valente](#)

**Teaching methods:**

Training(s)

**Assessment methods:**

Attendance, Final paper

**Keywords:**

fMRI analysis, neuroimaging, Cognitive Neuroscience

## 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. The goals of this project are to 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

Knowledge of: Decision making in groups;

Skills: formulating a model, data analysis, scientific reporting.

## Recommended reading

Part of the literature will be provided, but students are also expected to search for relevant literature for themselves.

### IPN3155

#### Period 5

10 Apr 2017

9 Jun 2017

[Print course description](#)

#### 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

# Motivation and Emotion

## Full course description

Motivation and emotion are two central concepts in psychology. Motivation is a process that affects the direction, persistence and strength of goal-oriented behaviour. Emotions are feelings or affective experiences that are shaped by a pattern of cognitive, physiological and behavioural responses to

specific stimuli. Motivation and emotion are closely related: emotions are the result of situations in which our motives and goals are satisfied, threatened or frustrated. Both concepts are studied from different perceptions within psychology and the ultimate goal is to understand their role in explaining human behaviour. The module starts with the classic theories of motivation and emotion, continues with the cognitive aspects of expectancies and rewards, their impact on intrinsic and extrinsic motivation, and the disorder apathy. We focus on the role of motivation in social behaviour, with particular attention paid to processes of subconscious goal activation and pursuing goals. The module discusses meta-cognitions on the role of motivation in personal development with special focus on satisfying basal needs and Maslow's hierarchy of motivation. Emotions will be discussed according to a functional approach, as discussed by emeritus faculty Nico Frijda. The module also focuses on the (evolutionary) functions of emotions and the fundamental motives that (still) play a role in the behaviour of the modern human. Finally, the module discusses risk perception.

## Course objectives

Knowledge of: Influence of motivation on behaviour, influence of emotion on behaviour, hormonal, neural, cognitive and social processes, application of theory.

## Recommended reading

E-reader.

### IPN3013

#### Period 5

10 Apr 2017

9 Jun 2017

[Print course description](#)

#### ECTS credits:

5.0

#### Instruction language:

English

#### Coordinator:

[L.T.E. Kessels](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam

#### Keywords:

Motivation, emotion, self-determination, limbic system, needs/urges, motives, action tendencies, risk perception, application of theories, preferences

## Faculty of Psychology and Neuroscience

# Action

## Full course description

The cognitive and neural basis of our actions and decisions to act is the central point of this course. What does the term "action" imply? What is the difference between voluntary action and a reflex? Most actions use the motor system on some level. The hierarchical organisation of this system is examined. The role of spinal reflexes, basal ganglia circuits and the parieto-frontal cortex in selection, planning, initiation, control and inhibition of action will be discussed. The relation between movement and cognition is discussed based on cognitive (in)flexibility and impulsiveness in patients with Parkinson's. Additionally, we shed light on the effect of expected reward and punishment for actions and decisions. Students will compare optimal theoretical decision processes with decisions in the real world where risks, uncertainty and time pressure play a role. Finally, actions and decisions are put in a moral and social context.

This course consists of lectures and tutorials.

## Course objectives

Knowledge of: Role of (sub-)cortical structures for movement and action selection, motor/cognitive impairment in Parkinson's, prefrontal cortex, somatic marker hypothesis, cognitive biases, prospect theory, (lack of) inhibition of behaviour, social cognition, moral decisions, altruistic and cooperative behaviour.

## Recommended reading

Students are expected to search for (prescribed) relevant literature on PubMed and in the library. Selected chapters from Gazzaniga, M.S., Ivry, R.B., Mangun, G. R. (2013) Cognitive neuroscience: the biology of the mind. New York, NY: Norton, are part of the prescribed literature.

### IPN3012A

**Period 5**

10 Apr 2017

9 Jun 2017

[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:**

## Faculty of Psychology and Neuroscience

# Action

### Full course description

The cognitive and neural basis of our actions and decisions to act is the central point of this course. What does the term "action" imply? What is the difference between voluntary action and a reflex? Most actions use the motor system on some level. The hierarchical organisation of this system is examined. The role of spinal reflexes, basal ganglia circuits and the parieto-frontal cortex in selection, planning, initiation, control and inhibition of action will be discussed. The relation between movement and cognition is discussed based on cognitive (in)flexibility and impulsiveness in patients with Parkinson's. Additionally, we shed light on the effect of expected reward and punishment for actions and decisions. Students will compare optimal theoretical decision processes with decisions in the real world where risks, uncertainty and time pressure play a role. Finally, actions and decisions are put in a moral and social context.

This course consists of lectures and tutorials.

### Course objectives

Knowledge of: Role of (sub-)cortical structures for movement and action selection, motor/cognitive impairment in Parkinson's, prefrontal cortex, somatic marker hypothesis, cognitive biases, prospect theory, (lack of) inhibition of behaviour, social cognition, moral decisions, altruistic and cooperative behaviour.

### Recommended reading

Students are expected to search for (prescribed) relevant literature on PubMed and in the library. Selected chapters from Gazzaniga, M.S., Ivry, R.B., Mangun, G. R. (2013) Cognitive neuroscience: the biology of the mind. New York, NY: Norton, are part of the prescribed literature.

## IPN3012B

### Period 5

10 Apr 2017

9 Jun 2017

[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

**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 assumed to be controlled by different neuronal networks in the brain. The purpose of this practical is to give the students some hands-on experience with and to learn them to 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 (EEG and /or TMS). During the practical, students are provided with tests and data sets and are asked to practice with these tests (in a small group) and to analyze data from an existing set of neuroimaging data. The data set includes data obtained by means of EEG and /or TMS methods (depending on the availability of a dataset). 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? Can we observe differences between individuals (e.g., explained by differences in age or gender) in neuroimaging data or test performances when looking at the behavior? In small groups, the students will perform statistical analyzes on the data sets and write a brief report.

## Course objectives

Knowledge of: Neuroimaging techniques, cognitive functions underlying action and decision making.

Skills: Formulating a model, data analyses, interpretation of data, scientific writing.

## Recommended reading

Part of the literature will be provided, but students are also expected to search for relevant literature for themselves.

## IPN3156

**Period 5**

10 Apr 2017

9 Jun 2017

[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, TMS

## 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 that 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. Then we 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. We 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, this course attempts to deepen the insight into the principles and measurement problems in psychology.

### Course objectives

Knowledge of: Reliability, test theory, validity, test development and construction, standardization/norms, interpretation and distortion of test results, multicultural testing, projective techniques, empirical and diagnostic cycle, cognitive heuristics, Bayesian statistics, sensitivity, specificity, ethical professional code.

### Prerequisites

Admission requirement: 'Statistics I' has to be completed.

## Recommended reading

E-reader.

### IPN3109A

**Period 6**

12 Jun 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[C.M.G. Meesters](#)

**Teaching methods:**

Assignment(s), Lecture(s), PBL, Training(s)

**Assessment methods:**

Attendance, Written exam

**Keywords:**

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

## 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 that 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. Then we 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. We 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, this course attempts to deepen the insight into the principles and measurement problems in psychology.

## Course objectives

Knowledge of: Reliability, test theory, validity, test development and construction, standardization/norms, interpretation and distortion of test results, multicultural testing, projective techniques, empirical and diagnostic cycle, cognitive heuristics, Bayesian statistics, sensitivity, specificity, ethical professional code.

## Prerequisites

Admission requirement: 'Statistics I' has to be completed.

## Recommended reading

E-reader.

### IPN3109B

#### Period 6

12 Jun 2017

7 Jul 2017

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[C.M.G. Meesters](#)

#### Teaching methods:

Assignment(s), Lecture(s), PBL, Training(s)

#### 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. 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 don't 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). 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 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 be asked during the practical to work in small groups while developing a test for a specific target group. This test will then be piloted and the students will be writing a plan on how to test the psychometric properties of this new instrument.

## Course objectives

Knowledge of: Test development/-construction; psychometric qualities of tests.

Skills: Formulating a model, scientific writing.

## Recommended reading

Part of the literature will be provided, but students are also expected to search for relevant literature for themselves.

### IPN3157

#### Period 6

12 Jun 2017

7 Jul 2017

[Print course description](#)

#### ECTS credits:

0.0

#### Instruction language:

English

#### Coordinator:

[G.C. Kraag](#)

#### Teaching methods:

Lecture(s), Paper(s), Work in subgroups

#### Assessment methods:

Attendance, Final paper

**Keywords:**

psychological tests, test construction, Psychometrics

**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 be asked to 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, administering, 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 be asked, as a group, to write a report on this process (including a reflection on it).

## Course objectives

Knowledge of: Diagnostic cycle; ethics.

Skills: Formulating a model, test administration, observations, scientific writing.

## Recommended reading

Part of the literature will be provided, but students are also expected to search for relevant literature for themselves.

### IPN3158

**Period 6**

12 Jun 2017

7 Jul 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[E.H.H. Keulers](#)

**Teaching methods:**

Lecture(s), Paper(s), Work in subgroups

**Assessment methods:**

Attendance, Final paper

**Keywords:**

psychological tests, diagnostic cycle, referral questions

## 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

Knowledge of: Portfolio, self-reflection, self-regulation, competences analysis, formulating and pursuing goals, informing about choice of a master's programme, writing an application letter and a curriculum vitae.

### Prerequisites

Having fulfilled the portfolio year 2 (IPN2138 portfolio Year 2) is a prerequisite for the portfolio part of skills V.

## IPN3159

**Period 1**

5 Sep 2016

7 Jul 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[L.T.E. Kessels](#)

**Teaching methods:**

Skills, Lecture(s)

**Assessment methods:**

Attendance

**Keywords:**

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 on their Curriculum Vitae (CV) which takes about 15 minutes. Students receive detailed instructions in the lecture and via eleum about the planning of the QCA.

### **Course objectives**

Knowledge of: Applying: Curriculum Vitae, Quick Career Advice.

### **Prerequisites**

Having fulfilled the portfolio year 2 (IPN2138 portfolio Year 2) is a prerequisite for the portfolio part of skills V.

## **IPN3160**

**Period 1**

5 Sep 2016

7 Jul 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[L.T.E. Kessels](#)

**Teaching methods:**

Skills, Lecture(s)

**Assessment methods:**

Attendance

**Keywords:**

applying, Curriculum Vitae

## 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.

#### IPN3442

**Year**

1 Sep 2016

31 Aug 2017

[Print course description](#)

**ECTS credits:**

1.0

**Instruction language:**

English

**Coordinator:**

[E.L. Theunissen](#)

**Assessment methods:**

Attendance

**Keywords:**

Participation in research, test subject

## Electives

### 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 better understand these theories. This course primarily aims at facilitating the understanding of therapeutic and side-effects of psycho-active 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 recreational drugs - such as cocaine, LSD, and ketamine.

### Course objectives

Knowledge of: Neurotransmission; pharmacokinetics, pharmacodynamics;;; antidepressants, anxiolytics, antipsychotics; neurobiology of depression, neurobiology of psychosis; alcohol, stimulants; psychedelics drugs;;; therapeutic effects, side-effects.

### Recommended reading

Advokat CD, Comaty JE, Julien RM (2014). Julien's primer of drug action, 13th ed. Worth Publishers, New York;

Meyer JS, Quenzer LF (2013) Psychopharmacology: drugs, the brain, and behavior. (2nd Ed.) Sunderland MA, Sinauer;

E-reader.

## PSY3312

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinator:

[A. Vermeeren](#)

### Teaching methods:

Lecture(s), PBL

**Assessment methods:**

Attendance, Written exam

**Keywords:**

Antidepressants, benzodiazepines, antipsychotics, alcohol, psychedelics, psychiatric drugs, recreational drugs, neurotransmission, neurobiological theories

**Faculty of Psychology and Neuroscience**

# Evolutionary Social Psychology

## Full course description

The aim of the course is to provide an overview of study evolutionary theory and its applications within, predominantly, social psychology. Evolutionary psychologists view most human behaviors as the products of evolved psychological adaptations - or solutions - to recurring problems in the ancestral environment. Evolutionary psychology offers many insightful explanations for social behavior, such as interpersonal attraction, prejudice, and healthy (and unhealthy) behaviors. Moreover, emotions are considered to have evolved in humans because they are functional and ultimately enhance your chances for survival and reproduction - for example, fear makes you avoid certain life-threatening situations, and jealousy makes you protect your relationship. In this course students will study recent developments within the field of evolutionary social psychology. They will investigate what causes the differences between the two sexes (sexual selection), how (pro-)social behaviour can be explained by evolutionary theory, and how we are to some extent still governed by 'hard-wired' motives, like a drive for social status and reputation.

## Course objectives

Knowledge of: Essentials of evolutionary psychological processes, principles of sexual selection and the methods used for studying sexual selection in humans, evolutionary psychological reasoning about prejudice, health behaviour, and emotions.

## Recommended reading

E-reader.

### PSY3308

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[K. Massar](#)

**Teaching methods:**

PBL

**Assessment methods:**

Assignment, Presentation

**Keywords:**

Evolutionary social psychology, reproductive success, sexual selection, ultimate causation, motives, sex differences, emotions

**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**

Knowledge of: fMRI, 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.

Skills: Writing skills, designing a functional MRI study, presenting skills.

### **Recommended reading**

E-reader.

## **PSY3332**

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[T. Otto](#)

**Teaching methods:**

PBL

**Assessment methods:**

Written exam

**Keywords:**

neural correlates, self-reflection, emotion regulation, attitudes, mirror-neuron system, social decision making, moral judgments, fMRI

**Faculty of Psychology and Neuroscience**

## Group Dynamics

### Full course description

Forsyth (2013): Groups are important. On a psychological level, individuals' actions, thoughts and emotions cannot be understood without taking into consideration the groups they belong to and the groups that surround them. On a sociological level, all kinds of societies (hunting/gathering, horticultural, pastoral, industrial, and postindustrial) are defined by the characteristics of the small groups that compose them. On a practical level, much of the world's work is done by groups, so by understanding groups we move forward toward making them more efficient. Finally, on a personal level, you spend your entire life surrounded by and embedded in groups. In this course students will reflect more elaborately on groups, in the format of a workshop. They will read a recent edition of an excellent book on group dynamics. The meetings will be used to understand and discuss the text. Preparation involves answering essay questions and writing a colon applying group dynamics to real life issues.

### Course objectives

Knowledge of: Theories, studies and empirical findings pertinent to groups, such as: inclusion, cohesion, power, leadership, group performance, decision making, team work, intergroup relations, and collective behaviour. Skills: Overcome the natural tendency to consider individuals as primary causes and instead begin to consider in more detail complex interpersonal, group-level processes.

### Recommended reading

Forsyth, D.R., 2013. Group dynamics, 6th ed. Thomson Learning, London, UK. [The 5th ed. (2010 or 2009) is also acceptable];

E-reader.

## PSY3339

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[B.P.I. Fleuren](#)

**Teaching methods:**

Lecture(s)

**Assessment methods:**

Attendance, Computertest

**Keywords:**

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

**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, 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

Knowledge of: Developmental psychopathology, internalising and externalising childhood disorders, adolescence, socio-emotional development, moral development, epigenetics of developmental disorders, attachment theory, suicide and depression, narcissistic personality traits.

## Recommended reading

Journal articles;

Book chapters.

## PSY3341

**Period 3**

9 Jan 2017

3 Feb 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[L.M. Jonkman](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Written exam

**Keywords:**

developmental psychopathology, attachment theory, epigenetics, socio-emotional development

**Faculty of Psychology and Neuroscience**

# Human Behaviour in Organisations

## Full course description

This course will make students familiar with diverse 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 study 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 team work. The course consists of lectures, assignment and a group project in which students conduct an empirical study on one of the topics mentioned above. This course forms an excellent introduction for the Master's programme 'Work and Organisational Psychology'.

## Course objectives

Knowledge of: Work and organisational psychology, selection of employees, Human Resources practices, the role of leadership, work motivation, team processes and performance, employee health and well-being, work stress.

## Recommended reading

Arnold J. et al (2005). Work psychology - understanding human behaviour in the work place. 5th Edition. New York, Prentice Hall;

Anderson, N. Ones, D.S., Sinangil, H.K., & Viswesvaran, C. (2001). Handbook of industrial, work & organizational Psychology (Volumes 1 & 2). London: Sage.

## PSY3344

**Period 2**

31 Oct 2016

23 Dec 2016

[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:**

Attendance, Written exam, Assignment

**Keywords:**

employee motivation, employee selection, leadership, work stress, team functioning

**Faculty of Psychology and Neuroscience**

# The Learning Brain: From Perception to Memory Formation

## Full course description

This course takes a purely biological view of a set of interconnected topics in the field of learning and memory. All learning and memory formation is dependent on changes in functional connections between neurons. The course starts with seminal findings illustrating this principle in *Aplysia*, from Kandel and co-workers. These findings are then compared with mechanisms of Long-Term Potentiation (LTP) and Depression (LTD). In a number of papers, and accompanying lectures, students will gain insight in molecular mechanisms to manipulate intra-cellular processes contributing to LTP, LTD, and neural plasticity, at the genomic, RNA, and protein levels. In parallel, students will learn about some landmark neurophysiological findings that have been crucial in our current understanding of memory formation. With this background in mind, students will start reading studies in which molecular tools are used to modulate memory formation and their neurophysiological correlates. The course will focus mainly on two forms of learning, namely episodic memory, and skill learning. Most of the papers focus on animal models of learning, using molecular and neurophysiological approaches, but there are also papers on human and non-human primate learning. The lectures provide crucial background to understand the papers, and in a broad sense could provide topics for exam questions. The course is challenging, and so a background in neuroscience and/or (cellular) biology is very strongly recommended for this course. Further, students must have a genuine interest in biological approaches of learning and memory.

## Course objectives

Knowledge of: Elementary cellular mechanisms of plasticity, long-term potentiation (LTP), genes, RNA, proteins, neurophysiological concepts, skill learning, episodic memory formation, working memory.

## Recommended reading

E-reader.

## PSY3345

### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinators:

[P.H.M. de Weerd](#)

[V.G. van de Ven](#)

### Teaching methods:

Lecture(s), PBL

### Assessment methods:

Attendance, Written exam

### Keywords:

Learning, Memory, biology, genes, neurons, behaviour, rats, mice, monkeys

## Faculty of Psychology and Neuroscience

# Health Psychology

## Full course description

The World Health Organization defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1984). Obviously, mental and social well-being will influence our physical well-being and vice versa. Health psychologists are primarily interested in the psychological and behavioural factors influencing health and illness. Why do people engage in unhealthy behaviour, such as smoking or excessive drinking? How can we prevent or intervene in unhealthy behaviour? What is the role of social support or environmental changes in the prevention and recovery of illness? How does stigmatisation or ostracism influence our well-being? In this course we will try to find the answers to these and many more questions.

## Course objectives

Knowledge of: Pain and fear-avoidance model, mindset and placebo effect, social exclusion and peer influence, social support and social norms-approach, conditioning and environmental factors, interventions and health promotion programs.

Skills: Popular science writing.

## Recommended reading

E-reader.

## PSY3346

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinator:

[P.M.H. Bongers](#)

### Teaching methods:

Lecture(s), PBL

### Assessment methods:

Assignment, Presentation, Written exam

### Keywords:

pain, mindset, eating behavior and addictions, conditioning, health promotion

## 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; various sleep disorders, like insomnia, narcolepsy, sleep apnea and sleep walking; and the biological mechanisms involved.

## Course objectives

Knowledge of: Normal sleep; sleep architecture, REM, NREM; sleep need; homeostatic sleep drive; circadian processes; effects of sleep deprivation; measuring sleep and daytime sleepiness; developmental changes in sleep; sleep disorders; insomnia; excessive daytime sleepiness; narcolepsy, sleep apnea; parasomnia; sleep walking; restless legs syndrome; REM behaviour disorder; night terrors; nightmares; circadian rhythm disorders, jet lag; neurobiology of sleep and circadian rhythm; function of sleep; sleep and cognition.

## Recommended reading

E-reader.

## PSY3349

**Period 3**

9 Jan 2017

3 Feb 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[A. Vermeeren](#)

**Teaching methods:**

Lecture(s), Presentation(s), PBL

**Assessment methods:**

Written exam

**Keywords:**

Sleep, circadian rhythm, insomnia, daytime sleepiness, parasomnias

**Faculty of Psychology and Neuroscience**

# Algorithmic Thinking & Programming

## Full course description

"Being able to program is an advantage for any scientist" R. Goebel, Professor Cognitive Neurosciences, BrainVoyager.com, UM

"Understanding algorithmic 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, students not only acquire the ability to make computers do what they want them to do, but they learn a new way of thinking as well. Programming isn't very hard once you've 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 isn't 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're 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're going to write increasingly complex programs, which help us solve psychological relevant problems. We will teach you a programming language 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: Reading program code, properties, objects, components, methods, variables, types, type-conversion, operators, commenting, algorithms, pseudo-code, flowcharts, NSDs, debugging, error-proofing, control-flow, subroutines, arguments and parameters, modularity, call by reference, arrays, dynamic arrays, records, data-structures, file operation.

## Recommended reading

tba

### PSY3353

#### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[M. Capalbo](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Assignment, Computertest

#### Keywords:

Procedural programming, Computational thinking, Algorithms

## Faculty of Psychology and Neuroscience

# Political Psychology: What's behind Gross Human Rights Violations?

## 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 Jozéfów 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 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, scrutinizing complex information critically, identifying concepts and theories used in political psychology during everyday life situations, critical independent thinking.

## Recommended reading

Cottam M, Dietz-Uhler B (2016) Introduction to Political Psychology (3rd edition). Routledge;

Smeulers A, Grunfeld F (2011) International Crimes and Other Gross Human Rights Violations: A Multi- and Interdisciplinary Textbook. Brill Academic Pub;

E-reader.

## PSY3357

### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinator:

[P. Brüll](#)

### Teaching methods:

Lecture(s), PBL

**Assessment methods:**

Take home exam, Presentation

**Keywords:**

Political psychology, war crimes, human rights violation, groups, behaviour, decision making, Personality

**Faculty of Psychology and Neuroscience**

# Psychology & Entrepreneurship

## Full course description

This course will familiarize you with diverse aspects of entrepreneurship within the broad field of psychology, both theoretically and practically. Questions that will be addressed during the course are: What is entrepreneurship? How could I be a Psychologist- entrepreneur? Is entrepreneurship in Psychology a suitable future career option for me? How do I come up with ideas for startups? How do I find out whether my idea is a good one? Is the market ready for my idea? How do I write a business case? How do I convince others (future investors or clients) of my idea? To answer these questions we will study an array of different topics in Psychology and entrepreneurship. You will write your own business case and you'll learn how to pitch your plans.

The course consists of lectures, assignments and presentations. You'll study current leading research literature on entrepreneurship, as well as hands on methods of how to write your own business plan. We will end the course with a business case competition, in which students and an external jury will choose the winning business plan. This course forms an excellent opportunity to find out whether entrepreneurship is something for you.

## Course objectives

Knowledge of: Business models, kinds of entrepreneurs, theories of entrepreneurship.

Skills: writing and pitching your own business plan.

Self-reflection: knowing whether you want to pro-actively pursue a future in entrepreneurship.

## Recommended reading

Osterwalder, A., Pigneur, Y., & Clark, T. (2010). Business model generation: A handbook for visionaries, game changers, and challengers. Hoboken, NJ: Wiley.

## PSY3358

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

A.S. Maris

**Teaching methods:**

Assignment(s), Lecture(s), PBL, Presentation(s), Skills, Training(s), Work in subgroups

**Assessment methods:**

Assignment, Attendance, Portfolio, Presentation, Final paper

**Keywords:**

Entrepreneurship, intrapreneurship, startup, Business plan, elevator pitch, future career

**Faculty of Psychology and Neuroscience**

## **Cognitieve Gedragstherapie (CGT)**

### **Full course description**

Cognitieve gedragstherapie (CGT) is de meest onderzochte en effectiefste behandelstrategie voor vele psychologische problemen en psychische stoornissen, zoals angststoornissen, stemmingsproblemen en eetstoornissen. CGT wordt meestal toegepast in gestructureerde en relatief kortdurende therapieën. Deze therapieën gaan over klachten in het hier en nu.

In het blok psychopathologie heeft de student al kennis gemaakt met het bestaan ervan maar de kennis is nog tamelijk summier.

In deze keuzemodule zal worden ingegaan op zowel de theoretische uitgangspunten van CGT als op de praktische uitvoering ervan. Het gehele proces van cognitieve gedragstherapie komt aan bod: allereerst van diagnose tot behandelplan.

De student maakt kennis met het maken van analyses van de klachten van een cliënt in de vorm van de functionele analyse en de holistische theorie. Tevens wordt een behandelplan gemaakt en gekozen voor een therapeutische techniek binnen het arsenaal van CGT. Vervolgens komt de uitvoering van de diverse CGT technieken aan bod. Hoe doe je nou eigenlijk cognitieve therapie? En een goede exposure? Daarnaast staan de veronderstelde werkingsmechanismen van de diverse technieken centraal in deze module. Waarom werkt CGT? Wat weten we daarvan?

De keuzemodule bestaat enerzijds uit het bestuderen van theoretische vraagstukken en materiaal en anderzijds in het oefenen met het maken van analyses en het uitvoeren van therapeutische technieken.

### **Course objectives**

Kennis over: Het proces van de cognitieve gedragstherapie: de verschillende soorten analyses zoals functionele analyse en holistische theorie.

Het maken van een behandelplan

De diverse CGT behandeltechnieken; De keuze van een CGT behandeltechniek; De uitvoering van diverse CGT technieken zoals exposure en cognitieve therapie; De veronderstelde werkingsmechanismen van CGT; De effectiviteit van CGT bij diverse stoornissen.

## Prerequisites

Blok Psychopathologie en practicum anamnese (jaar 2) dienen afgetekend te zijn.

## Recommended reading

Recente literatuur (tekstboeken en wetenschappelijke artikelen) over cognitieve gedragstherapie.

### PSY3360

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

Dutch

#### Coordinator:

[A.A.N. Mulkens](#)

#### Teaching methods:

Assignment(s), PBL, Skills, Training(s), Work in subgroups

#### Assessment methods:

Assignment, Attendance, Presentation

#### Keywords:

cognitieve gedragstherapie, gedragstherapie, cognitieve therapie, exposure, werkzaamheid, werkingsmechanismen, effectiviteit

## 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, 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 pre-schoolers, 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

Knowledge of: Brain development, diagnostics, neuropsychological assessment, ADHD, behavioural disorders, executive functions and attention, memory, dyslexia, non-verbal learning disorder, autism, brain injury, treatment.

## Recommended reading

E-reader.

### PSY3359

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[E.H.H. Keulers](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Written exam

#### Keywords:

brain development, Cognitive development, brain (dis)functioning, cognitive (dis)functioning, developmental disorders, Neuropsychology

## Faculty of Psychology and Neuroscience

# Nutritional Neuroscience: Evaluating claims about Food, the Brain and Behaviour

## Full course description

Always wanted to know if there is sound scientific support for the claim that sugar enhances hyperactivity, that carbohydrates improve one's mood or that certain herbs will make you brighter?

There has been a growing scientific and commercial interest in the field of Nutritional Neuroscience; the discipline that explores the effects of dietary components -like vitamins, carbohydrates, herbs or fats- on the brain and behaviour. This interest particularly accelerated by findings that certain foods can enter the brain and influence neurological functioning. As a consequence, a broad range of

nutrients and dietary supplements are nowadays recommended for their beneficial effects while others are highly discouraged because of their health-declining consequences. Yet, although most of these claims seem to be founded on 'theoretically sound' mechanisms of action (e.g.; anti-oxidation, neuro-protection, neurotransmitter function) many of them seem to suffer from inadequate scientific-empirical support.

The aim of the current course is to evaluate a selection of today's most frequent food-brain-behaviour claims on the basis of whether or not there is a sound suggested mechanisms of action and, hence, whether they comply with the scientific literature.

## Course objectives

Knowledge of: Current claims of food-brain-behavior (e.g. related to performance, mood-depression, food addiction, hyperactivity, sleep, sexuality) and how to critically evaluate the experimental results.

## Recommended reading

E-reader.

### PSY3361

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[C.R. Markus](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam

#### Keywords:

Nutritional neuroscience, Food-Brain-Behaviour, nutraceuticals, Functional brain foods, food claims, scientific evaluation, debate

## 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, and 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

Knowledge of: Application of neuroscience methods in cognitive enhancement, cortical excitability, entrainment, neurotransmitters, smart drugs, self-regulation, mindfulness, attention, memory, perception, ethics, theoretical aspects of cognitive enhancement.

## Recommended reading

Journal articles

### PSY3362

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

F. Dücker

#### Teaching methods:

Lecture(s), PBL, Presentation(s)

#### Assessment methods:

Attendance, Written exam, Presentation

#### Keywords:

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

Faculty of Psychology and Neuroscience

## Introduction to Computational Neuroscience

## Full course description

The human brain is regarded by many scientists 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 lies at the junction of these three points with a strong focus on the second. Specifically, it studies the information processing carried out by different structures of the nervous system by investigating biologically plausible models of brain function. In this course students will receive an overview of the basic principles of connectionism and neural networks ranging from simple to complex models of neurons and their interconnections; learn how these models are used to study brain function for a wide range of topics including learning, decision making, and vision; and learn how computational neuroscience and more empirical fields such as neuroimaging and psychophysics can benefit from each other.

## Course objectives

Knowledge of: A range of typical models used in computational neuroscience; how these models advance our understanding of the brain; the relation of these models to empirical research; the advantages and limitations of individual models as well as of the field as a whole.

## Recommended reading

E-reader.

### PSY3365

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[M. Senden](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Final paper, Participation

#### Keywords:

connectionism, neural networks, neuroscience, interdisciplinary integration

## Faculty of Psychology and Neuroscience

# Neuroscience of Consciousness

### Full course description

What makes us conscious? What is that thing called 'consciousness' and how does it relate to our brains? Fun questions to philosophize about? Sure, but, also valid scientific questions at the center of one of the most exciting neuroscientific disciplines today. Welcome to a no-nonsense course on consciousness.

'Consciousness' is often described as some mysterious entity that is impossible to really understand. But the tools of neuroscience have changed the game so much, that some of the supposedly unsolvable problems are now actually being solved. Students will learn that in fact one can determine whether or not someone is conscious, one can deduce from brain activity what they are conscious of, and overall one can study how a conscious percept is built by the brain.

In this course we discuss the current state of research on the (cognitive) neuroscience of consciousness. We will take an empirical perspective, which means there is only minimal attention to philosophy of mind, and a strong focus on the actual research, as well as recent theories, of consciousness in the brain.

This course will introduce the methodology of consciousness neuroscience, including different consciousness stimuli and paradigms, as well as the latest neuroimaging and brain stimulation tools. Primary focus will be on studies using healthy human subjects.

At the end of the course students will have an understanding of the latest findings and insights in consciousness science, will have developed substantial skills in understanding neuroscientific tools and literature, and will be up to date on the neurocognitive mechanisms underlying conscious and unconscious processing.

### Course objectives

Knowledge of: Notions of consciousness, latest neuroscientific tools; neuroimaging, brain stimulation, recent neuroscientific models, state versus content consciousness, paradigms of consciousness research, the role of primary cortices, the role of frontoparietal cortex, the roles of ventral and dorsal pathways, better understanding of visual processing in the brain, biological basis of unconscious processing, limitations of (current tools in) neuroscience of consciousness, promising future directions, the latest findings in consciousness neuroscience research.

## PSY3366

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

**Coordinator:**

[T.A. de Graaf](#)

**Teaching methods:**

Lecture(s), PBL, Presentation(s)

**Assessment methods:**

Attendance, Written exam, Presentation

**Keywords:**

Vision, conscious processing, unconscious processing, neuroimaging, brain stimulation, consciousness paradigms, neural correlates of consciousness

**Faculty of Psychology and Neuroscience**

## **Sport & Exercise Psychology**

### **Full course description**

The many positive benefits of physical activity for physical and mental health are widely acknowledged. In this sport & exercise psychology elective, we will focus on the psychology behind athletic performance, as well as on physical (in)activity levels in the general population. Sport and exercise are often considered a largely physical endeavor (strength, speed, stamina, flexibility et cetera). However, it is widely acknowledged that sport performances and physical activity behaviour are also influenced by psychological factors. Therefore, in this course, we will attend to the biology of sport performances and physical exercise, but primarily on their behavioral determinants, motivations, pressure and stress, and ultimately we look at possible venues for behaviour change.

### **Course objectives**

Knowledge of: Theories about behavior and behavior change, Determinants of sport and exercise behavior, Influences on task performance (e.g. mental techniques), Biological aspects of physical activity, Team performance and social support.

### **Recommended reading**

Biddle, S. J., Mutrie, N., & Gorely, T. (2015). Psychology of physical activity: Determinants, well-being and interventions. Routledge;

Weinberg R.S., & Gould, D. (2014) Foundations of Sport and Exercise Psychology – 6th edition. Human Kinetics.

## **PSY3368**

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

G.A. ten Hoor

**Teaching methods:**

Lecture(s), PBL, Training(s)

**Assessment methods:**

Written exam, Presentation

**Keywords:**

(Determinants of) Physical activity, Biology of physical activity, Mental techniques and performance enhancement, Neurological bases, team performance and social support

## Faculty of Psychology and Neuroscience

# Seksualiteit

### Full course description

In dit blok worden zowel de psychologische als de biologische en maatschappelijke achtergronden van seksualiteit en seksuele problemen belicht. Studenten zullen in dit blok kennis nemen van het terrein van de seksualiteit vanuit een evidence-based benadering. Dit blok bestaat uit een aantal onderwijsgroep-bijeenkomsten waarin telkens een klacht of een verzameling klachten centraal staat en aanvullende colleges waarin dieper wordt ingegaan op een aantal specifieke klachten of problemen binnen het desbetreffende aandachtsgebied. Het is de bedoeling dat bij elk van deze klachten de theoretische achtergrond m.b.t. werkingsmechanismen, biopsychosociale determinanten en behandelingsmogelijkheden, diagnostische criteria en epidemiologische aspecten bestudeerd worden. Behandeld worden: (biologische en psychologische) theorieën over seksualiteit, de seksuele levensloop, seksuele diversiteit (o.a. genderverschillen), seksuele problemen bij mannen, seksuele problemen bij vrouwen, seksualiteit bij ziekte en verstandelijke beperking en de rol van hechting in seksueel functioneren. Na afloop van het blok kunnen studenten de scheidslijn trekken tussen normale versus pathologische seksuele ontwikkeling en een gefundeerde mening hebben over de theoretische basis en empirische ondersteuning voor verschillende behandelvormen bij seksuele problemen.

Daarnaast wordt een korte training gegeven in het afnemen van een seksuele anamnese. Na afloop zijn de studenten in staat om met cliënten te communiceren over seksualiteit en seksuele problemen en kunnen ze een gestructureerde seksuele anamnese afnemen. Er is ook een kort onderzoekspracticum waarin studenten vertrouwd geraken met de verschillende meetmethoden en mogelijke onderzoeksdesigns binnen de seksuologie.

### Course objectives

Kennis van: De normale seksuele ontwikkeling van de mens, De seksuele respons-cyclus van de mens, Het biopsychosociale model met betrekking tot seksuele stoornissen, Theorieën en bevindingen over ontstaan en instandhouding van seksuele stoornissen, De diagnostische criteria (DSM-V en overige criteria) voor de verschillende seksuele stoornissen, De incidentie, prevalentie en het beloop van seksuele stoornissen, De verschillende behandelingsmogelijkheden, voor seksuele stoornissen, De invloed van ziekte op seksualiteit, De rol van hechting bij seksualiteit, Toepassing van kennis op geselecteerde casussen vanuit de hulpverlenersrol.

## Recommended reading

Seksuologie handboek (Gijs et al, 2009), selecte literatuur (wetenschappelijke literatuur) die aangeboden wordt als e-reader.

### PSY3367

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

Dutch

**Coordinator:**

[M.V.E. Dewitte](#)

**Teaching methods:**

Lecture(s), PBL, Skills, Training(s)

**Assessment methods:**

Attendance, Participation, Written exam

**Keywords:**

seksuele response cyclus, seksuele problemen, biopsychosociaal, evidence-based, seksuele anamnese

## 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

Knowledge of: Neuroanatomy, diagnostics, neuropsychological assessment, , behavioural disorders, executive functions and attention, memory, brain injury, aging, neuropsychiatry, motivation, emotion,

coping, insight.

## Recommended reading

E-reader

### PSY3369

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinators:

[S.Z. Stapert](#)

C.M. van Heugten

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Assignment, Written exam

#### Keywords:

brain (dis)functioning, cognitive (dis)functioning, brain injury, aging, Neuropsychology, 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

Knowledge of: Hormones and major endocrine organs, methods to study hormone-behaviour relations and limitations, role of hormones in 'normal' behaviour and psychiatric disorders.

## Recommended reading

Books chapters and peer-reviewed articles.

### PSY3370

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[K.P.C. Kuypers](#)

#### Teaching methods:

PBL

#### Assessment methods:

Written exam

#### Keywords:

Social, stress and sex hormones, brain, Memory, social behaviour, depression, autism spectrum disorder.

## Faculty of Psychology and Neuroscience

# Pleasure & Pain

## Full course description

Apart from offering sensory feedback for object manipulation and movement, the somatosensory system also provides signals that are intrinsically rewarding or punishing. The behavioral drive to seek pleasure and to avoid pain are of crucial importance for survival and partly rely on the same neurochemical circuitry. This elective will discuss the neurobiological basis of aversive and pleasant somatosensory processing. Would it be possible to live without feeling pain or pleasure? How do context, emotion and cognition modulate the experience of pleasure and pain? Brain circuits involved in nociception and analgesia as well as theories and treatments of chronic pain will be discussed. The role of touch in development and social bonding will be highlighted. Evidence for somatosensory responses to pleasure and pain in other people will be discussed in light of theories on empathy.

## Course objectives

Knowledge of: Functional anatomy of the somatosensory system, neurobiology of pleasure and pain, top-down modulation, social aspects of touch, theories and treatments of chronic pain.

## Recommended reading

E-reader.

### PSY3371

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[A.L. Kaas](#)

#### Teaching methods:

Lecture(s), PBL, Presentation(s)

#### Assessment methods:

Attendance, Presentation, Final paper

#### Keywords:

Somatosensory system, pleasant touch, nociception, mirror neurons, fear-avoidance model of chronic pain

## Faculty of Psychology and Neuroscience

# Manipulating Memories

## Full course description

Classic memory theories suggest that sensory/motor or emotional experiences are consolidated into long-term memory into a 'permafrosted' form. That is, experiences that are encoded into long-term memory do not change. Recent neurobiological and cognitive research has resurrected an old alternative notion that all memories - independent of their 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 memories and how they can be changed, and discuss important research methods and behavioral 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

Knowledge of: Episodic memory; skill learning; cognitive and molecular neuroscience of memory; methods of manipulation; reconsolidation; traumatic memories.

## Prerequisites

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

## Recommended reading

E-reader.

### PSY3372

#### Period 2

31 Oct 2016

23 Dec 2016

[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, Written exam

#### Keywords:

memory consolidation, memory manipulation, brain stimulation, skill learning, hippocampus, cortex, enhancement

## 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 behavioral experiments. We add more

recent insights 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 ranging from fundamental cognitive neuroscience to translation into clinics or societal application, Application of critical thinking to evaluate the studies, Application of knowledge in writing of a research proposal about an investigation of a "still open" issue in language research, Students will learn to write and present the proposal to peers, Students will learn how to be a peer reviewer, and how to evaluate proposals in a fair and constructive manner.

## Recommended reading

E-reader.

### PSY3373

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[B.M. Jansma - Schmitt](#)

#### Teaching methods:

Assignment(s), Lecture(s), PBL, Presentation(s)

#### Assessment methods:

Assignment, Presentation

#### Keywords:

Cognitive Neuroscience, language, Research proposal, peer review

## Faculty of Psychology and Neuroscience

# Eating Behaviours

## Full course description

We all eat, every day, a couple of times a day. Eating is a main activity in our lives. It is often thought that our motivation to eat is purely biological: we are hungry and need nutrients. Though hunger and nutritional needs might have been good reasons for hunting and eating in the early days, currently we mostly eat for other reasons: because we are used to eat at a certain time, for social reasons, or simply for enjoyment.

In this course we will study psychological mechanisms of eating. For example, we will study why we prefer certain foods over others, why we experience appetite or desire to eat without being physically hungry, how our social environment influences food intake, and which brain mechanisms are related to food intake. Topics such as food addiction, obesity, dieting, and eating disorders will also be discussed.

## Course objectives

Knowledge of: The psychology of hunger and appetite; the learning of food preferences; the learning of eating desires; brain mechanisms related to eating; external influences over food intake; dieting and body weight regulation; food addiction; eating disorders and obesity.

## Recommended reading

Scientific Articles.

### PSY3374

**Period 3**

9 Jan 2017

3 Feb 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[K. van den Akker](#)

**Teaching methods:**

Assignment(s), Lecture(s), PBL

**Assessment methods:**

Assignment, Attendance, Written exam

**Keywords:**

Eating, Learning, Motivation, dieting, appetite, reward, eating disorders, obesity

# 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

Knowledge of: Brain structure and function, psychiatric and neurological disorders that predispose to criminal offences, witnesses with brain disorders.

## Recommended reading

E-reader.

### PSY3375

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[M. Jelicic](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Assignment, Written exam

#### Keywords:

forensic neuropsychology, Psychiatry, brain disorders, criminal offences

## Faculty of Psychology and Neuroscience

# Intercultural Awareness

## Full course description

Study abroad does not automatically build intercultural competence (ICC). 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 subcompetences (i.e., what knowledge, skills and attitudes) will be the focus of attention. During their study abroad, students gather evidence to illustrate development of intercultural competence 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

Boost intercultural competence by focusing on student selected learning goals related to specific knowledge, skills and attitudes that are deemed important

## Recommended reading

Articles

### PSY3378

**Year**

1 Sep 2016

31 Aug 2017

[Print course description](#)

**ECTS credits:**

0.0

**Instruction language:**

English

**Coordinator:**

[H.T.H. Fonteijn](#)

**Teaching methods:**

Lecture(s), Paper(s)

**Assessment methods:**

Take home exam

**Keywords:**

intercultural competence, reflection, Writing skills, internationalisation

**Faculty of Psychology and Neuroscience**

# Forensic Psychology in a Nutshell

## Full course description

This course will provide psychology (but also law) students interested in Forensic Psychology with an introduction to topics typical for this field. Examples of such topics are mental illness and violence, filicide, sex offenders, autism spectrum disorder, and prison psychology. Each tutorial, research articles and case material descriptions related to a theme will be studied and discussed. The examination will consist of writing a paper about a topic related to the field of Forensic Psychology and an exam.

Maximum number of students enrolled = unlimited

## Course objectives

Knowledge of: Mental illness and relationship to violence (are people with a mental illnesses more prone to aggression); Intoxicated suspects and amnesia for crime (the influence of alcohol on memory); Sex offenders (typologies, legislation, treatment); The role of postpartum psychosis, depression and substance abuse in filicide; Autism spectrum disorders and violence (focus on Asperger Syndrome, co-morbidity/differential diagnosis); The effects of long and short term imprisonment on the mental health of offenders (Post Incarceration Syndrome [PICS] and treatment).

## Recommended reading

E-reader.

### PSY3376

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[A. Sagana](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Final paper, Written exam

#### Keywords:

sex offending, mental disorders and crime, risk assessment, Filicide, autism and prison psychology

# Legal Psychology in a Nutshell

## Full course description

This course will provide psychology (but also law) students interested in Legal Psychology with an introduction to topics typical for this field. Examples of such topics are Genetic predispositions to violence, sleepwalking and the law, (cyber) stalking, Biases in profiling, lie detection, factors influencing juror decisions etc.. Each tutorial, research articles and case material descriptions related to a theme will be studied and discussed. The examination will consist of writing a paper about a topic related to the field of Legal Psychology and an exam.

Maximum number of students enrolled = unlimited.

## Course objectives

Knowledge of: Influence on aggression), Sleepwalking (Sleep disorders that are related to violence, assessment of responsibility); detecting lies and deceit (belief versus scientific evidence about lie detection, experts versus laypeople, detecting high stake lies); (cyber) stalking behaviour (typologies, legislation, psychological effects on victims); detecting and reporting child abuse; Profiling (typologies, accuracy, biases underlying the popularity of profiling); Factors influencing juror decisions (change blindness; stereotypes in the court room); false memories in court.

## Recommended reading

E-reader.

### PSY3377

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[G. Bogaard](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Final paper, Written exam

#### Keywords:

warrior gene, sleepwalking, stalking, profiling, lie detection, juror decisions, false memories, child abuse

Minor

## Minor Applied Psychology

Faculty of Psychology and Neuroscience

### Evolutionary Social Psychology

#### Full course description

The aim of the course is to provide an overview of study evolutionary theory and its applications within, predominantly, social psychology. Evolutionary psychologists view most human behaviors as the products of evolved psychological adaptations - or solutions - to recurring problems in the ancestral environment. Evolutionary psychology offers many insightful explanations for social behavior, such as interpersonal attraction, prejudice, and healthy (and unhealthy) behaviors. Moreover, emotions are considered to have evolved in humans because they are functional and ultimately enhance your chances for survival and reproduction - for example, fear makes you avoid certain life-threatening situations, and jealousy makes you protect your relationship. In this course students will study recent developments within the field of evolutionary social psychology. They will investigate what causes the differences between the two sexes (sexual selection), how (pro-)social behaviour can be explained by evolutionary theory, and how we are to some extent still governed by 'hard-wired' motives, like a drive for social status and reputation.

#### Course objectives

Knowledge of: Essentials of evolutionary psychological processes, principles of sexual selection and the methods used for studying sexual selection in humans, evolutionary psychological reasoning about prejudice, health behaviour, and emotions.

#### Recommended reading

E-reader.

### PSY3308

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[K. Massar](#)

#### Teaching methods:

PBL

#### Assessment methods:

Assignment, Presentation

**Keywords:**

Evolutionary social psychology, reproductive success, sexual selection, ultimate causation, motives, sex differences, emotions

**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**

Knowledge of: fMRI, 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.

Skills: Writing skills, designing a functional MRI study, presenting skills.

**Recommended reading**

E-reader.

**PSY3332**

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[T. Otto](#)

**Teaching methods:**

PBL

**Assessment methods:**

Written exam

**Keywords:**

neural correlates, self-reflection, emotion regulation, attitudes, mirror-neuron system, social decision making, moral judgments, fMRI

**Faculty of Psychology and Neuroscience**

## **Group Dynamics**

### **Full course description**

Forsyth (2013): Groups are important. On a psychological level, individuals' actions, thoughts and emotions cannot be understood without taking into consideration the groups they belong to and the groups that surround them. On a sociological level, all kinds of societies (hunting/gathering, horticultural, pastoral, industrial, and postindustrial) are defined by the characteristics of the small groups that compose them. On a practical level, much of the world's work is done by groups, so by understanding groups we move forward toward making them more efficient. Finally, on a personal level, you spend your entire life surrounded by and embedded in groups. In this course students will reflect more elaborately on groups, in the format of a workshop. They will read a recent edition of an excellent book on group dynamics. The meetings will be used to understand and discuss the text. Preparation involves answering essay questions and writing a colon applying group dynamics to real life issues.

### **Course objectives**

Knowledge of: Theories, studies and empirical findings pertinent to groups, such as: inclusion, cohesion, power, leadership, group performance, decision making, team work, intergroup relations, and collective behaviour. Skills: Overcome the natural tendency to consider individuals as primary causes and instead begin to consider in more detail complex interpersonal, group-level processes.

### **Recommended reading**

Forsyth, D.R., 2013. Group dynamics, 6th ed. Thomson Learning, London, UK. [The 5th ed. (2010 or 2009) is also acceptable];

E-reader.

## **PSY3339**

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[B.P.I. Fleuren](#)

**Teaching methods:**

Lecture(s)

**Assessment methods:**

Attendance, Computertest

**Keywords:**

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

**Faculty of Psychology and Neuroscience**

## **Human Behaviour in Organisations**

### **Full course description**

This course will make students familiar with diverse 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 study 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 team work. The course consists of lectures, assignment and a group project in which students conduct an empirical study on one of the topics mentioned above. This course forms an excellent introduction for the Master's programme 'Work and Organisational Psychology'.

### **Course objectives**

Knowledge of: Work and organisational psychology, selection of employees, Human Resources practices, the role of leadership, work motivation, team processes and performance, employee health and well-being, work stress.

### **Recommended reading**

Arnold J. et al (2005). Work psychology - understanding human behaviour in the work place. 5th Edition. New York, Prentice Hall;

Anderson, N. Ones, D.S., Sinangil, H.K., & Viswesvaran, C. (2001). Handbook of industrial, work & organizational Psychology (Volumes 1 & 2). London: Sage.

## **PSY3344**

**Period 2**

31 Oct 2016

23 Dec 2016

[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:**

Attendance, Written exam, Assignment

**Keywords:**

employee motivation, employee selection, leadership, work stress, team functioning

**Faculty of Psychology and Neuroscience**

**Health Psychology**

**Full course description**

The World Health Organization defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (World Health Organization, 1984). Obviously, mental and social well-being will influence our physical well-being and vice versa. Health psychologists are primarily interested in the psychological and behavioural factors influencing health and illness. Why do people engage in unhealthy behaviour, such as smoking or excessive drinking? How can we prevent or intervene in unhealthy behaviour? What is the role of social support or environmental changes in the prevention and recovery of illness? How does stigmatisation or ostracism influence our well-being? In this course we will try to find the answers to these and many more questions.

**Course objectives**

Knowledge of: Pain and fear-avoidance model, mindset and placebo effect, social exclusion and peer influence, social support and social norms-approach, conditioning and environmental factors, interventions and health promotion programs.

Skills: Popular science writing.

**Recommended reading**

E-reader.

**PSY3346**

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[P.M.H. Bongers](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Assignment, Presentation, Written exam

**Keywords:**

pain, mindset, eating behavior and addictions, conditioning, health promotion

**Faculty of Psychology and Neuroscience**

# Algorithmic Thinking & Programming

## Full course description

"Being able to program is an advantage for any scientist" R. Goebel, Professor Cognitive Neurosciences, BrainVoyager.com, UM

"Understanding algorithmic 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, students not only acquire the ability to make computers do what they want them to do, but they learn a new way of thinking as well. Programming isn't very hard once you've 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 isn't 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're 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're going to write increasingly complex programs, which help us solve psychological relevant problems. We will teach you a programming language 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: Reading program code, properties, objects, components, methods, variables, types, type-conversion, operators, commenting, algorithms, pseudo-code, flowcharts, NSDs, debugging, error-proofing, control-flow, subroutines, arguments and parameters, modularity, call by reference, arrays, dynamic arrays, records, data-structures, file operation.

## Recommended reading

tba

### PSY3353

#### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[M. Capalbo](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Assignment, Computertest

#### Keywords:

Procedural programming, Computational thinking, Algorithms

## Faculty of Psychology and Neuroscience

# Political Psychology: What's behind Gross Human Rights Violations?

## 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 Jozéfów 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 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, scrutinizing complex information critically, identifying concepts and theories used in political psychology during everyday life situations, critical independent thinking.

## Recommended reading

Cottam M, Dietz-Uhler B (2016) Introduction to Political Psychology (3rd edition). Routledge;

Smeulers A, Grunfeld F (2011) International Crimes and Other Gross Human Rights Violations: A Multi- and Interdisciplinary Textbook. Brill Academic Pub;

E-reader.

## PSY3357

### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinator:

[P. Brüll](#)

### Teaching methods:

Lecture(s), PBL

### Assessment methods:

Take home exam, Presentation

### Keywords:

Political psychology, war crimes, human rights violation, groups, behaviour, decision making, Personality

## Full course description

This course will familiarize you with diverse aspects of entrepreneurship within the broad field of psychology, both theoretically and practically. Questions that will be addressed during the course are: What is entrepreneurship? How could I be a Psychologist- entrepreneur? Is entrepreneurship in Psychology a suitable future career option for me? How do I come up with ideas for startups? How do I find out whether my idea is a good one? Is the market ready for my idea? How do I write a business case? How do I convince others (future investors or clients) of my idea? To answer these questions we will study an array of different topics in Psychology and entrepreneurship. You will write your own business case and you'll learn how to pitch your plans.

The course consists of lectures, assignments and presentations. You'll study current leading research literature on entrepreneurship, as well as hands on methods of how to write your own business plan. We will end the course with a business case competition, in which students and an external jury will choose the winning business plan. This course forms an excellent opportunity to find out whether entrepreneurship is something for you.

## Course objectives

Knowledge of: Business models, kinds of entrepreneurs, theories of entrepreneurship.

Skills: writing and pitching your own business plan.

Self-reflection: knowing whether you want to pro-actively pursue a future in entrepreneurship.

## Recommended reading

Osterwalder, A., Pigneur, Y., & Clark, T. (2010). Business model generation: A handbook for visionaries, game changers, and challengers. Hoboken, NJ: Wiley.

### PSY3358

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

A.S. Maris

#### Teaching methods:

Assignment(s), Lecture(s), PBL, Presentation(s), Skills, Training(s), Work in subgroups

#### Assessment methods:

**Keywords:**

Entrepreneurship, intrapreneurship, startup, Business plan, elevator pitch, future career

**Faculty of Psychology and Neuroscience**

# Cognitieve Gedragstherapie (CGT)

## Full course description

Cognitieve gedragstherapie (CGT) is de meest onderzochte en effectiefste behandelstrategie voor vele psychologische problemen en psychische stoornissen, zoals angststoornissen, stemmingsproblemen en eetstoornissen. CGT wordt meestal toegepast in gestructureerde en relatief kortdurende therapieën. Deze therapieën gaan over klachten in het hier en nu.

In het blok psychopathologie heeft de student al kennis gemaakt met het bestaan ervan maar de kennis is nog tamelijk summier.

In deze keuzemodule zal worden ingegaan op zowel de theoretische uitgangspunten van CGT als op de praktische uitvoering ervan. Het gehele proces van cognitieve gedragstherapie komt aan bod: allereerst van diagnose tot behandelplan.

De student maakt kennis met het maken van analyses van de klachten van een cliënt in de vorm van de functionele analyse en de holistische theorie. Tevens wordt een behandelplan gemaakt en gekozen voor een therapeutische techniek binnen het arsenaal van CGT. Vervolgens komt de uitvoering van de diverse CGT technieken aan bod. Hoe doe je nou eigenlijk cognitieve therapie? En een goede exposure? Daarnaast staan de veronderstelde werkingsmechanismen van de diverse technieken centraal in deze module. Waarom werkt CGT? Wat weten we daarvan?

De keuzemodule bestaat enerzijds uit het bestuderen van theoretische vraagstukken en materiaal en anderzijds in het oefenen met het maken van analyses en het uitvoeren van therapeutische technieken.

## Course objectives

Kennis over: Het proces van de cognitieve gedragstherapie: de verschillende soorten analyses zoals functionele analyse en holistische theorie.

Het maken van een behandelplan

De diverse CGT behandeltechnieken; De keuze van een CGT behandeltechniek; De uitvoering van diverse CGT technieken zoals exposure en cognitieve therapie; De veronderstelde werkingsmechanismen van CGT; De effectiviteit van CGT bij diverse stoornissen.

## Prerequisites

Blok Psychopathologie en practicum anamnese (jaar 2) dienen afgetekend te zijn.

## Recommended reading

Recente literatuur (tekstboeken en wetenschappelijke artikelen) over cognitieve gedragstherapie.

## PSY3360

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

Dutch

### Coordinator:

[A.A.N. Mulkens](#)

### Teaching methods:

Assignment(s), PBL, Skills, Training(s), Work in subgroups

### Assessment methods:

Assignment, Attendance, Presentation

### Keywords:

cognitieve gedragstherapie, gedragstherapie, cognitieve therapie, exposure, werkzaamheid, werkingsmechanismen, effectiviteit

## 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, and 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

Knowledge of: Application of neuroscience methods in cognitive enhancement, cortical excitability, entrainment, neurotransmitters, smart drugs, self-regulation, mindfulness, attention, memory, perception, ethics, theoretical aspects of cognitive enhancement.

## Recommended reading

Journal articles

### PSY3362

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

F. Dücker

#### Teaching methods:

Lecture(s), PBL, Presentation(s)

#### Assessment methods:

Attendance, Written exam, Presentation

#### Keywords:

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

## Faculty of Psychology and Neuroscience

## Sport & Exercise Psychology

### Full course description

The many positive benefits of physical activity for physical and mental health are widely acknowledged. In this sport & exercise psychology elective, we will focus on the psychology behind athletic performance, as well as on physical (in)activity levels in the general population. Sport and exercise are often considered a largely physical endeavor (strength, speed, stamina, flexibility et cetera). However, it is widely acknowledged that sport performances and physical activity behaviour are also influenced by psychological factors. Therefore, in this course, we will attend to the biology of sport performances and physical exercise, but primarily on their behavioral determinants, motivations, pressure and stress, and ultimately we look at possible venues for behaviour change.

### Course objectives

Knowledge of: Theories about behavior and behavior change, Determinants of sport and exercise behavior, Influences on task performance (e.g. mental techniques), Biological aspects of physical activity, Team performance and social support.

### Recommended reading

Biddle, S. J., Mutrie, N., & Gorely, T. (2015). Psychology of physical activity: Determinants, well-being

and interventions. Routledge;

Weinberg R.S., & Gould, D. (2014) Foundations of Sport and Exercise Psychology – 6th edition. Human Kinetics.

## **PSY3368**

### **Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

### **ECTS credits:**

6.0

### **Instruction language:**

English

### **Coordinator:**

G.A. ten Hoor

### **Teaching methods:**

Lecture(s), PBL, Training(s)

### **Assessment methods:**

Written exam, Presentation

### **Keywords:**

(Determinants of) Physical activity, Biology of physical activity, Mental techniques and performance enhancement, Neurological bases, team performance and social support

## **Faculty of Psychology and Neuroscience**

# **Eating Behaviours**

## **Full course description**

We all eat, every day, a couple of times a day. Eating is a main activity in our lives. It is often thought that our motivation to eat is purely biological: we are hungry and need nutrients. Though hunger and nutritional needs might have been good reasons for hunting and eating in the early days, currently we mostly eat for other reasons: because we are used to eat at a certain time, for social reasons, or simply for enjoyment.

In this course we will study psychological mechanisms of eating. For example, we will study why we prefer certain foods over others, why we experience appetite or desire to eat without being physically hungry, how our social environment influences food intake, and which brain mechanisms are related to food intake. Topics such as food addiction, obesity, dieting, and eating disorders will also be discussed.

## **Course objectives**

Knowledge of: The psychology of hunger and appetite; the learning of food preferences; the learning of eating desires; brain mechanisms related to eating; external influences over food intake; dieting and body weight regulation; food addiction; eating disorders and obesity.

## Recommended reading

Scientific Articles.

### PSY3374

#### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[K. van den Akker](#)

#### Teaching methods:

Assignment(s), Lecture(s), PBL

#### Assessment methods:

Assignment, Attendance, Written exam

#### Keywords:

Eating, Learning, Motivation, dieting, appetite, reward, eating disorders, obesity

## Faculty of Psychology and Neuroscience

# Legal Psychology in a Nutshell

## Full course description

This course will provide psychology (but also law) students interested in Legal Psychology with an introduction to topics typical for this field. Examples of such topics are Genetic predispositions to violence, sleepwalking and the law, (cyber) stalking, Biases in profiling, lie detection, factors influencing juror decisions etc.. Each tutorial, research articles and case material descriptions related to a theme will be studied and discussed. The examination will consist of writing a paper about a topic related to the field of Legal Psychology and an exam.

Maximum number of students enrolled = unlimited.

## Course objectives

Knowledge of: Influence on aggression), Sleepwalking (Sleep disorders that are related to violence, assessment of responsibility); detecting lies and deceit (belief versus scientific evidence about lie detection, experts versus laypeople, detecting high stake lies); (cyber) stalking behaviour (typologies, legislation, psychological effects on victims); detecting and reporting child abuse; Profiling (typologies, accuracy, biases underlying the popularity of profiling); Factors influencing juror decisions (change blindness; stereotypes in the court room); false memories in court.

## Recommended reading

E-reader.

### PSY3377

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[G. Bogaard](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Final paper, Written exam

#### Keywords:

warrior gene, sleepwalking, stalking, profiling, lie detection, juror decisions, false memories, child abuse

## Minor Biological Psychology

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

Knowledge of: fMRI, 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.

## Recommended reading

E-reader.

### PSY3332

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[T. Otto](#)

#### Teaching methods:

PBL

#### Assessment methods:

Written exam

#### Keywords:

neural correlates, self-reflection, emotion regulation, attitudes, mirror-neuron system, social decision making, moral judgments, fMRI

## Faculty of Psychology and Neuroscience

# The Learning Brain: From Perception to Memory Formation

## Full course description

This course takes a purely biological view of a set of interconnected topics in the field of learning and memory. All learning and memory formation is dependent on changes in functional connections between neurons. The course starts with seminal findings illustrating this principle in *Aplysia*, from Kandel and co-workers. These findings are then compared with mechanisms of Long-Term Potentiation (LTP) and Depression (LTD). In a number of papers, and accompanying lectures, students will gain insight in molecular mechanisms to manipulate intra-cellular processes contributing to LTP, LTD, and neural plasticity, at the genomic, RNA, and protein levels. In parallel, students will learn about some landmark neurophysiological findings that have been crucial in our current understanding of memory formation. With this background in mind, students will start reading studies in which molecular tools are used to modulate memory formation and their neurophysiological correlates. The course will focus mainly on two forms of learning, namely episodic memory, and skill learning. Most of the papers focus on animal models of learning, using molecular and neurophysiological approaches, but there are also papers on human and non-human primate learning. The lectures provide crucial background to understand the papers, and in a broad sense could provide topics for exam questions.

The course is challenging, and so a background in neuroscience and/or (cellular) biology is very strongly recommended for this course. Further, students must have a genuine interest in biological approaches of learning and memory.

## Course objectives

Knowledge of: Elementary cellular mechanisms of plasticity, long-term potentiation (LTP), genes, RNA, proteins, neurophysiological concepts, skill learning, episodic memory formation, working memory.

## Recommended reading

E-reader.

### PSY3345

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinators:

[P.H.M. de Weerd](#)

[V.G. van de Ven](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam

#### Keywords:

Learning, Memory, biology, genes, neurons, behaviour, rats, mice, monkeys

## Faculty of Psychology and Neuroscience

# Algorithmic Thinking & Programming

## Full course description

"Being able to program is an advantage for any scientist" R. Goebel, Professor Cognitive Neurosciences, BrainVoyager.com, UM

"Understanding algorithmic 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, students not only acquire the ability to make computers do what they want them to do, but they learn a new way of thinking as well. Programming isn't very hard once you've 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 isn't 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're 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're going to write increasingly complex programs, which help us solve psychological relevant problems. We will teach you a programming language 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: Reading program code, properties, objects, components, methods, variables, types, type-conversion, operators, commenting, algorithms, pseudo-code, flowcharts, NSDs, debugging, error-proofing, control-flow, subroutines, arguments and parameters, modularity, call by reference, arrays, dynamic arrays, records, data-structures, file operation.

## Recommended reading

tba

### PSY3353

#### Period 3

9 Jan 2017

3 Feb 2017

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[M. Capalbo](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Assignment, Computertest

#### Keywords:

Procedural programming, Computational thinking, Algorithms

# Nutritional Neuroscience: Evaluating claims about Food, the Brain and Behaviour

## Full course description

Always wanted to know if there is sound scientific support for the claim that sugar enhances hyperactivity, that carbohydrates improve one's mood or that certain herbs will make you brighter?

There has been a growing scientific and commercial interest in the field of Nutritional Neuroscience; the discipline that explores the effects of dietary components -like vitamins, carbohydrates, herbs or fats- on the brain and behaviour. This interest particularly accelerated by findings that certain foods can enter the brain and influence neurological functioning. As a consequence, a broad range of nutrients and dietary supplements are nowadays recommended for their beneficial effects while others are highly discouraged because of their health-declining consequences. Yet, although most of these claims seem to be founded on 'theoretically sound' mechanisms of action (e.g.; anti-oxidation, neuro-protection, neurotransmitter function) many of them seem to suffer from inadequate scientific-empirical support.

The aim of the current course is to evaluate a selection of today's most frequent food-brain-behaviour claims on the basis of whether or not there is a sound suggested mechanisms of action and, hence, whether they comply with the scientific literature.

## Course objectives

Knowledge of: Current claims of food-brain-behavior (e.g. related to performance, mood-depression, food addiction, hyperactivity, sleep, sexuality) and how to critically evaluate the experimental results.

## Recommended reading

E-reader.

### PSY3361

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[C.R. Markus](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Attendance, Written exam

**Keywords:**

Nutritional neuroscience, Food-Brain-Behaviour, nutraceuticals, Functional brain foods, food claims, scientific evaluation, debate

## 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, and 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

Knowledge of: Application of neuroscience methods in cognitive enhancement, cortical excitability, entrainment, neurotransmitters, smart drugs, self-regulation, mindfulness, attention, memory, perception, ethics, theoretical aspects of cognitive enhancement.

### Recommended reading

Journal articles

## PSY3362

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

F. Dücker

**Teaching methods:**

Lecture(s), PBL, Presentation(s)

**Assessment methods:**

Attendance, Written exam, Presentation

**Keywords:**

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

**Faculty of Psychology and Neuroscience**

# Introduction to Computational Neuroscience

## Full course description

The human brain is regarded by many scientists 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 lies at the junction of these three points with a strong focus on the second. Specifically, it studies the information processing carried out by different structures of the nervous system by investigating biologically plausible models of brain function. In this course students will receive an overview of the basic principles of connectionism and neural networks ranging from simple to complex models of neurons and their interconnections; learn how these models are used to study brain function for a wide range of topics including learning, decision making, and vision; and learn how computational neuroscience and more empirical fields such as neuroimaging and psychophysics can benefit from each other.

## Course objectives

Knowledge of: A range of typical models used in computational neuroscience; how these models advance our understanding of the brain; the relation of these models to empirical research; the advantages and limitations of individual models as well as of the field as a whole.

## Recommended reading

E-reader.

### PSY3365

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[M. Senden](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Attendance, Final paper, Participation

**Keywords:**

connectionism, neural networks, neuroscience, interdisciplinary integration

## Faculty of Psychology and Neuroscience

# Neuroscience of Consciousness

## Full course description

What makes us conscious? What is that thing called 'consciousness' and how does it relate to our brains? Fun questions to philosophize about? Sure, but, also valid scientific questions at the center of one of the most exciting neuroscientific disciplines today. Welcome to a no-nonsense course on consciousness.

'Consciousness' is often described as some mysterious entity that is impossible to really understand. But the tools of neuroscience have changed the game so much, that some of the supposedly unsolvable problems are now actually being solved. Students will learn that in fact one can determine whether or not someone is conscious, one can deduce from brain activity what they are conscious of, and overall one can study how a conscious percept is built by the brain.

In this course we discuss the current state of research on the (cognitive) neuroscience of consciousness. We will take an empirical perspective, which means there is only minimal attention to philosophy of mind, and a strong focus on the actual research, as well as recent theories, of consciousness in the brain.

This course will introduce the methodology of consciousness neuroscience, including different consciousness stimuli and paradigms, as well as the latest neuroimaging and brain stimulation tools. Primary focus will be on studies using healthy human subjects.

At the end of the course students will have an understanding of the latest findings and insights in consciousness science, will have developed substantial skills in understanding neuroscientific tools and literature, and will be up to date on the neurocognitive mechanisms underlying conscious and unconscious processing.

## Course objectives

Knowledge of: Notions of consciousness, latest neuroscientific tools; neuroimaging, brain stimulation, recent neuroscientific models, state versus content consciousness, paradigms of consciousness research, the role of primary cortices, the role of frontoparietal cortex, the roles of ventral and dorsal pathways, better understanding of visual processing in the brain, biological basis of unconscious processing, limitations of (current tools in) neuroscience of consciousness, promising future directions, the latest findings in consciousness neuroscience research.

## PSY3366

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinator:

[T.A. de Graaf](#)

### Teaching methods:

Lecture(s), PBL, Presentation(s)

### Assessment methods:

Attendance, Written exam, Presentation

### Keywords:

Vision, conscious processing, unconscious processing, neuroimaging, brain stimulation, consciousness paradigms, neural correlates of consciousness

## 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

Knowledge of: Hormones and major endocrine organs, methods to study hormone-behaviour relations and limitations, role of hormones in 'normal' behaviour and psychiatric disorders.

## Recommended reading

Books chapters and peer-reviewed articles.

## PSY3370

### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

### ECTS credits:

6.0

### Instruction language:

English

### Coordinator:

[K.P.C. Kuypers](#)

### Teaching methods:

PBL

### Assessment methods:

Written exam

### Keywords:

Social, stress and sex hormones, brain, Memory, social behaviour, depression, autism spectrum disorder.

## Faculty of Psychology and Neuroscience

# Pleasure & Pain

## Full course description

Apart from offering sensory feedback for object manipulation and movement, the somatosensory system also provides signals that are intrinsically rewarding or punishing. The behavioral drive to seek pleasure and to avoid pain are of crucial importance for survival and partly rely on the same neurochemical circuitry. This elective will discuss the neurobiological basis of aversive and pleasant somatosensory processing. Would it be possible to live without feeling pain or pleasure? How do context, emotion and cognition modulate the experience of pleasure and pain? Brain circuits involved in nociception and analgesia as well as theories and treatments of chronic pain will be discussed. The role of touch in development and social bonding will be highlighted. Evidence for somatosensory responses to pleasure and pain in other people will be discussed in light of theories on empathy.

## Course objectives

Knowledge of: Functional anatomy of the somatosensory system, neurobiology of pleasure and pain, top-down modulation, social aspects of touch, theories and treatments of chronic pain.

## Recommended reading

E-reader.

## PSY3371

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[A.L. Kaas](#)

**Teaching methods:**

Lecture(s), PBL, Presentation(s)

**Assessment methods:**

Attendance, Presentation, Final paper

**Keywords:**

Somatosensory system, pleasant touch, nociception, mirror neurons, fear-avoidance model of chronic pain

**Faculty of Psychology and Neuroscience**

## **Manipulating Memories**

### **Full course description**

Classic memory theories suggest that sensory/motor or emotional experiences are consolidated into long-term memory into a 'permafrosted' form. That is, experiences that are encoded into long-term memory do not change. Recent neurobiological and cognitive research has resurrected an old alternative notion that all memories - independent of their 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 memories and how they can be changed, and discuss important research methods and behavioral 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**

Knowledge of: Episodic memory; skill learning; cognitive and molecular neuroscience of memory; methods of manipulation; reconsolidation; traumatic memories.

## Prerequisites

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

## Recommended reading

E-reader.

### PSY3372

#### Period 2

31 Oct 2016

23 Dec 2016

[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, Written exam

#### Keywords:

memory consolidation, memory manipulation, brain stimulation, skill learning, hippocampus, cortex, enhancement

## 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 behavioral experiments. We add more recent insights 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 fundamental to applied topics (such as in Aphasia after stroke, or dyslexia).

## Course objectives

Knowledge of: Theoretical background of cognitive neuroscience of language ranging from fundamental cognitive neuroscience to translation into clinics or societal application, Application of critical thinking to evaluate the studies, Application of knowledge in writing of a research proposal about an investigation of a "still open" issue in language research, Students will learn to write and present the proposal to peers, Students will learn how to be a peer reviewer, and how to evaluate proposals in a fair and constructive manner.

## Recommended reading

E-reader.

### PSY3373

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[B.M. Jansma - Schmitt](#)

#### Teaching methods:

Assignment(s), Lecture(s), PBL, Presentation(s)

#### Assessment methods:

Assignment, Presentation

#### Keywords:

Cognitive Neuroscience, language, Research proposal, peer review

## Minor Marble Research

Faculty of Psychology and Neuroscience

### Marble Research

### PSY3501

**Year**

1 Sep 2016

31 Aug 2017

[Print course description](#)

**ECTS credits:**

12.0

**Coordinator:**

[A.H. van der Lugt](#)

**Teaching methods:**

Research

## 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 themselves, under supervision of a staff member. For both types of theses, students must 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 must then answer this question in the thesis according to the present rules of the art. Additionally, students will write a blog about their thesis targeted at a broader reader audience. Students must start well in advance to prepare the bachelor thesis, ideally at the start of the third year. Students must approach a potential supervisor for their thesis via the bachelor thesis matching system. Students must consult "www.askpsy.nl" 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

Knowledge of: Research report, scientific communication.

### Recommended reading

Handbook writing skills.

## PSY3014

**Period 1**

5 Sep 2016

3 Feb 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

Dutch

**Coordinator:**

[R.R.A. van Doorn](#)

**Teaching methods:**

Paper(s), Skills

**Assessment methods:**

Final paper

**Keywords:**

Writing skills, research report, empirical cycle, scientific communication

## Minor Clinical Psychology

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 better understand these theories. This course primarily aims at facilitating the understanding of therapeutic and side-effects of psycho-active 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 recreational drugs - such as cocaine, LSD, and ketamine.

#### Course objectives

Knowledge of: Neurotransmission; pharmacokinetics, pharmacodynamics;;; antidepressants, anxiolytics, antipsychotics; neurobiology of depression, neurobiology of psychosis; alcohol, stimulants; psychedelics drugs;;; therapeutic effects, side-effects.

#### Recommended reading

Advokat CD, Comaty JE, Julien RM (2014). Julien's primer of drug action, 13th ed. Worth Publishers, New York;

Meyer JS, Quenzer LF (2013) Psychopharmacology: drugs, the brain, and behavior. (2nd Ed.) Sunderland MA, Sinauer;

E-reader.

**PSY3312**

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[A. Vermeeren](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Attendance, Written exam

**Keywords:**

Antidepressants, benzodiazepines, antipsychotics, alcohol, psychedelics, psychiatric drugs, recreational drugs, neurotransmission, neurobiological theories

**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, 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

Knowledge of: Developmental psychopathology, internalising and externalising childhood disorders, adolescence, socio-emotional development, moral development, epigenetics of developmental disorders, attachment theory, suicide and depression, narcissistic personality traits.

## Recommended reading

Journal articles;

Book chapters.

**PSY3341**

**Period 3**

9 Jan 2017

3 Feb 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[L.M. Jonkman](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Written exam

**Keywords:**

developmental psychopathology, attachment theory, epigenetics, 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; various sleep disorders, like insomnia, narcolepsy, sleep apnea and sleep walking; and the biological mechanisms involved.

## Course objectives

Knowledge of: Normal sleep; sleep architecture, REM, NREM; sleep need; homeostatic sleep drive; circadian processes; effects of sleep deprivation; measuring sleep and daytime sleepiness; developmental changes in sleep; sleep disorders; insomnia; excessive daytime sleepiness; narcolepsy, sleep apnea; parasomnia; sleep walking; restless legs syndrome; REM behaviour disorder; night terrors; nightmares; circadian rhythm disorders, jet lag; neurobiology of sleep and circadian rhythm; function of sleep; sleep and cognition.

## Recommended reading

E-reader.

## PSY3349

**Period 3**

9 Jan 2017

3 Feb 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[A. Vermeeren](#)

**Teaching methods:**

Lecture(s), Presentation(s), PBL

**Assessment methods:**

Written exam

**Keywords:**

Sleep, circadian rhythm, insomnia, daytime sleepiness, parasomnias

## Faculty of Psychology and Neuroscience

# Cognitieve Gedragstherapie (CGT)

## Full course description

Cognitieve gedragstherapie (CGT) is de meest onderzochte en effectiefste behandelstrategie voor vele psychologische problemen en psychische stoornissen, zoals angststoornissen, stemmingsproblemen en eetstoornissen. CGT wordt meestal toegepast in gestructureerde en relatief kortdurende therapieën. Deze therapieën gaan over klachten in het hier en nu.

In het blok psychopathologie heeft de student al kennis gemaakt met het bestaan ervan maar de kennis is nog tamelijk summier.

In deze keuzemodule zal worden ingegaan op zowel de theoretische uitgangspunten van CGT als op de praktische uitvoering ervan. Het gehele proces van cognitieve gedragstherapie komt aan bod: allereerst van diagnose tot behandelplan.

De student maakt kennis met het maken van analyses van de klachten van een cliënt in de vorm van de functionele analyse en de holistische theorie. Tevens wordt een behandelplan gemaakt en gekozen voor een therapeutische techniek binnen het arsenaal van CGT. Vervolgens komt de uitvoering van de diverse CGT technieken aan bod. Hoe doe je nou eigenlijk cognitieve therapie? En een goede exposure? Daarnaast staan de veronderstelde werkingsmechanismen van de diverse technieken centraal in deze module. Waarom werkt CGT? Wat weten we daarvan?

De keuzemodule bestaat enerzijds uit het bestuderen van theoretische vraagstukken en materiaal en anderzijds in het oefenen met het maken van analyses en het uitvoeren van therapeutische technieken.

## Course objectives

Kennis over: Het proces van de cognitieve gedragstherapie: de verschillende soorten analyses zoals functionele analyse en holistische theorie.

Het maken van een behandelplan

De diverse CGT behandeltechnieken; De keuze van een CGT behandeltechniek; De uitvoering van diverse CGT technieken zoals exposure en cognitieve therapie; De veronderstelde werkingsmechanismen van CGT; De effectiviteit van CGT bij diverse stoornissen.

## Prerequisites

Blok Psychopathologie en practicum anamnese (jaar 2) dienen afgetekend te zijn.

## Recommended reading

Recente literatuur (tekstboeken en wetenschappelijke artikelen) over cognitieve gedragstherapie.

### PSY3360

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

Dutch

#### Coordinator:

[A.A.N. Mulkens](#)

#### Teaching methods:

Assignment(s), PBL, Skills, Training(s), Work in subgroups

#### Assessment methods:

Assignment, Attendance, Presentation

#### Keywords:

cognitieve gedragstherapie, gedragstherapie, cognitieve therapie, exposure, werkzaamheid, werkingsmechanismen, effectiviteit

## 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, 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 pre-schoolers, 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

Knowledge of: Brain development, diagnostics, neuropsychological assessment, ADHD, behavioural disorders, executive functions and attention, memory, dyslexia, non-verbal learning disorder, autism, brain injury, treatment.

## Recommended reading

E-reader.

### PSY3359

#### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

#### ECTS credits:

6.0

#### Instruction language:

English

#### Coordinator:

[E.H.H. Keulers](#)

#### Teaching methods:

Lecture(s), PBL

#### Assessment methods:

Written exam

#### Keywords:

brain development, Cognitive development, brain (dis)functioning, cognitive (dis)functioning, developmental disorders, Neuropsychology

## Faculty of Psychology and Neuroscience

# Nutritional Neuroscience: Evaluating claims about Food, the Brain and Behaviour

## Full course description

Always wanted to know if there is sound scientific support for the claim that sugar enhances hyperactivity, that carbohydrates improve one's mood or that certain herbs will make you brighter?

There has been a growing scientific and commercial interest in the field of Nutritional Neuroscience;

the discipline that explores the effects of dietary components -like vitamins, carbohydrates, herbs or fats- on the brain and behaviour. This interest particularly accelerated by findings that certain foods can enter the brain and influence neurological functioning. As a consequence, a broad range of nutrients and dietary supplements are nowadays recommended for their beneficial effects while others are highly discouraged because of their health-declining consequences. Yet, although most of these claims seem to be founded on 'theoretically sound' mechanisms of action (e.g.; anti-oxidation, neuro-protection, neurotransmitter function) many of them seem to suffer from inadequate scientific-empirical support.

The aim of the current course is to evaluate a selection of today's most frequent food-brain-behaviour claims on the basis of whether or not there is a sound suggested mechanisms of action and, hence, whether they comply with the scientific literature.

## Course objectives

Knowledge of: Current claims of food-brain-behavior (e.g. related to performance, mood-depression, food addiction, hyperactivity, sleep, sexuality) and how to critically evaluate the experimental results.

## Recommended reading

E-reader.

### **PSY3361**

#### **Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### **ECTS credits:**

6.0

#### **Instruction language:**

English

#### **Coordinator:**

[C.R. Markus](#)

#### **Teaching methods:**

Lecture(s), PBL

#### **Assessment methods:**

Attendance, Written exam

#### **Keywords:**

Nutritional neuroscience, Food-Brain-Behaviour, nutraceuticals, Functional brain foods, food claims, scientific evaluation, debate

## Faculty of Psychology and Neuroscience

# Seksualiteit

## Full course description

In dit blok worden zowel de psychologische als de biologische en maatschappelijke achtergronden van seksualiteit en seksuele problemen belicht. Studenten zullen in dit blok kennis nemen van het terrein van de seksualiteit vanuit een evidence-based benadering. Dit blok bestaat uit een aantal onderwijsgroep-bijeenkomsten waarin telkens een klacht of een verzameling klachten centraal staat en aanvullende colleges waarin dieper wordt ingegaan op een aantal specifieke klachten of problemen binnen het desbetreffende aandachtsgebied. Het is de bedoeling dat bij elk van deze klachten de theoretische achtergrond m.b.t. werkingsmechanismen, biopsychosociale determinanten en behandelingsmogelijkheden, diagnostische criteria en epidemiologische aspecten bestudeerd worden. Behandeld worden: (biologische en psychologische) theorieën over seksualiteit, de seksuele levensloop, seksuele diversiteit (o.a. genderverschillen), seksuele problemen bij mannen, seksuele problemen bij vrouwen, seksualiteit bij ziekte en verstandelijke beperking en de rol van hechting in seksueel functioneren. Na afloop van het blok kunnen studenten de scheidslijn trekken tussen normale versus pathologische seksuele ontwikkeling en een gefundeerde mening hebben over de theoretische basis en empirische ondersteuning voor verschillende behandelvormen bij seksuele problemen.

Daarnaast wordt een korte training gegeven in het afnemen van een seksuele anamnese. Na afloop zijn de studenten in staat om met cliënten te communiceren over seksualiteit en seksuele problemen en kunnen ze een gestructureerde seksuele anamnese afnemen. Er is ook een kort onderzoekspracticum waarin studenten vertrouwd geraken met de verschillende meetmethoden en mogelijke onderzoeksdesigns binnen de seksuologie.

## Course objectives

Kennis van: De normale seksuele ontwikkeling van de mens, De seksuele respons-cyclus van de mens, Het biopsychosociale model met betrekking tot seksuele stoornissen, Theorieën en bevindingen over ontstaan en instandhouding van seksuele stoornissen, De diagnostische criteria (DSM-V en overige criteria) voor de verschillende seksuele stoornissen, De incidentie, prevalentie en het beloop van seksuele stoornissen, De verschillende behandelingsmogelijkheden, voor seksuele stoornissen, De invloed van ziekte op seksualiteit, De rol van hechting bij seksualiteit, Toepassing van kennis op geselecteerde casussen vanuit de hulpverlenersrol.

## Recommended reading

Seksuologie handboek (Gijs et al, 2009), selecte literatuur (wetenschappelijke literatuur) die aangeboden wordt als e-reader.

### PSY3367

#### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

#### ECTS credits:

6.0

**Instruction language:**

Dutch

**Coordinator:**

[M.V.E. Dewitte](#)

**Teaching methods:**

Lecture(s), PBL, Skills, Training(s)

**Assessment methods:**

Attendance, Participation, Written exam

**Keywords:**

seksuele response cyclus, seksuele problemen, biopsychosociaal, evidence-based, seksuele anamnese

**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**

Knowledge of: Neuroanatomy, diagnostics, neuropsychological assessment, , behavioural disorders, executive functions and attention, memory, brain injury, aging, neuropsychiatry, motivation, emotion, coping, insight.

### **Recommended reading**

E-reader

## **PSY3369**

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinators:**

[S.Z. Stapert](#)

C.M. van Heugten

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Assignment, Written exam

**Keywords:**

brain (dis)functioning, cognitive (dis)functioning, brain injury, aging, Neuropsychology, neuropsychiatry

## Faculty of Psychology and Neuroscience

# Pleasure & Pain

### Full course description

Apart from offering sensory feedback for object manipulation and movement, the somatosensory system also provides signals that are intrinsically rewarding or punishing. The behavioral drive to seek pleasure and to avoid pain are of crucial importance for survival and partly rely on the same neurochemical circuitry. This elective will discuss the neurobiological basis of aversive and pleasant somatosensory processing. Would it be possible to live without feeling pain or pleasure? How do context, emotion and cognition modulate the experience of pleasure and pain? Brain circuits involved in nociception and analgesia as well as theories and treatments of chronic pain will be discussed. The role of touch in development and social bonding will be highlighted. Evidence for somatosensory responses to pleasure and pain in other people will be discussed in light of theories on empathy.

### Course objectives

Knowledge of: Functional anatomy of the somatosensory system, neurobiology of pleasure and pain, top-down modulation, social aspects of touch, theories and treatments of chronic pain.

### Recommended reading

E-reader.

## PSY3371

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[A.L. Kaas](#)

**Teaching methods:**

Lecture(s), PBL, Presentation(s)

**Assessment methods:**

Attendance, Presentation, Final paper

**Keywords:**

Somatosensory system, pleasant touch, nociception, mirror neurons, fear-avoidance model of chronic pain

**Faculty of Psychology and Neuroscience**

## **Eating Behaviours**

### **Full course description**

We all eat, every day, a couple of times a day. Eating is a main activity in our lives. It is often thought that our motivation to eat is purely biological: we are hungry and need nutrients. Though hunger and nutritional needs might have been good reasons for hunting and eating in the early days, currently we mostly eat for other reasons: because we are used to eat at a certain time, for social reasons, or simply for enjoyment.

In this course we will study psychological mechanisms of eating. For example, we will study why we prefer certain foods over others, why we experience appetite or desire to eat without being physically hungry, how our social environment influences food intake, and which brain mechanisms are related to food intake. Topics such as food addiction, obesity, dieting, and eating disorders will also be discussed.

### **Course objectives**

Knowledge of: The psychology of hunger and appetite; the learning of food preferences; the learning of eating desires; brain mechanisms related to eating; external influences over food intake; dieting and body weight regulation; food addiction; eating disorders and obesity.

### **Recommended reading**

Scientific Articles.

## **PSY3374**

**Period 3**

9 Jan 2017

3 Feb 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[K. van den Akker](#)

**Teaching methods:**

Assignment(s), Lecture(s), PBL

**Assessment methods:**

Assignment, Attendance, Written exam

**Keywords:**

Eating, Learning, Motivation, dieting, appetite, reward, eating disorders, obesity

**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**

Knowledge of: Brain structure and function, psychiatric and neurological disorders that predispose to criminal offences, witnesses with brain disorders.

### **Recommended reading**

E-reader.

## **PSY3375**

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[M. Jelicic](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Assignment, Written exam

**Keywords:**

forensic neuropsychology, Psychiatry, brain disorders, criminal offences

**Faculty of Psychology and Neuroscience**

## Forensic Psychology in a Nutshell

### Full course description

This course will provide psychology (but also law) students interested in Forensic Psychology with an introduction to topics typical for this field. Examples of such topics are mental illness and violence, filicide, sex offenders, autism spectrum disorder, and prison psychology. Each tutorial, research articles and case material descriptions related to a theme will be studied and discussed. The examination will consist of writing a paper about a topic related to the field of Forensic Psychology and an exam.

Maximum number of students enrolled = unlimited

### Course objectives

Knowledge of: Mental illness and relationship to violence (are people with a mental illnesses more prone to aggression); Intoxicated suspects and amnesia for crime (the influence of alcohol on memory); Sex offenders (typologies, legislation, treatment); The role of postpartum psychosis, depression and substance abuse in filicide; Autism spectrum disorders and violence (focus on Asperger Syndrome, co-morbidity/differential diagnosis); The effects of long and short term imprisonment on the mental health of offenders (Post Incarceration Syndrome [PICS] and treatment).

### Recommended reading

E-reader.

## PSY3376

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[A. Sagana](#)

**Teaching methods:**

Lecture(s), PBL

**Assessment methods:**

Final paper, Written exam

**Keywords:**

sex offending, mental disorders and crime, risk assessment, Filicide, autism and prison psychology

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 themselves, under supervision of a staff member. For both types of theses, students must 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 must then answer this question in the thesis according to the present rules of the art. Additionally, students will write a blog about their thesis targeted at a broader reader audience. Students must start well in advance to prepare the bachelor thesis, ideally at the start of the third year. Students must approach a potential supervisor for their thesis via the bachelor thesis matching system. Students must consult "www.askpsy.nl" 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

Knowledge of: Research report, scientific communication.

### Recommended reading

Handbook writing skills.

## IPN3014

**Year**

1 Sep 2016

31 Aug 2017

[Print course description](#)

**ECTS credits:**

6.0

**Instruction language:**

English

**Coordinator:**

[R.R.A. van Doorn](#)

**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

## Genetics

### HONH011

**Period 2**

31 Oct 2016

23 Dec 2016

[Print course description](#)

**ECTS credits:**

2.0

**Instruction language:**

English

**Coordinator:**

[P. Vermeer](#)

**Teaching methods:**

PBL

Faculty of Psychology and Neuroscience

## Philosophy and Psychology of Consciousness

### HONH015

**Period 3**

9 Jan 2017

3 Feb 2017

[Print course description](#)

**ECTS credits:**

2.0

**Instruction language:**

English

**Coordinator:**

[M.A.J.F. Heins](#)

**Teaching methods:**

PBL

Faculty of Psychology and Neuroscience  
**Behavioural Economics**

**HONH017**

**Period 1**

5 Sep 2016

28 Oct 2016

[Print course description](#)

**ECTS credits:**

2.0

**Coordinators:**

E.M. Wölbart

[M. Strobel](#)

**Teaching methods:**

PBL

Faculty of Psychology and Neuroscience  
**Psychopathy**

**HONH012**

**Period 5**

10 Apr 2017

9 Jun 2017

[Print course description](#)

**ECTS credits:**

2.0

**Coordinator:**

[D.P. Bernstein](#)

**Teaching methods:**

PBL

Faculty of Psychology and Neuroscience

## Computational Models

### HONH016

**Period 5**

10 Apr 2017

9 Jun 2017

[Print course description](#)

**ECTS credits:**

2.0

**Coordinator:**

[M. Capalbo](#)

**Teaching methods:**

PBL

Faculty of Psychology and Neuroscience

## (Historical) Book Review

### HONH019

**Period 4**

6 Feb 2017

7 Apr 2017

[Print course description](#)

**ECTS credits:**

2.0

**Coordinator:**

[A.C. Martijn](#)

**Teaching methods:**

PBL

Faculty of Psychology and Neuroscience

# Introduction to Honour's Programme

## HONH020

### Period 1

5 Sep 2016

28 Oct 2016

[Print course description](#)

### ECTS credits:

1.0

### Instruction language:

English

### Coordinator:

[A.C. Martijn](#)

### Assessment methods:

Written exam

## Faculty of Psychology and Neuroscience

## Honours+

## HONH021

### Period 2

31 Oct 2016

23 Dec 2016

[Print course description](#)

### ECTS credits:

5.0

### Instruction language:

English

### Coordinator:

[A.C. Martijn](#)

### Assessment methods:

Assignment, Attendance, Participation