Find another programme

Master's Programme

Master Specialisation Developmental Psychology

Faculty of Psychology and Neuroscience

Infancy

Full course description

In no other period during our development do our brain and behaviour change so fundamentally and quickly as they do during infancy. This poses particular methodological constraints on the design of experiments and the selection of participants, whose ages are typically expressed in weeks. An additional challenge in infancy research is the limitation posed on communication. Questioning and instructions are of no use in infancy research and so there is reliance on indirect measurement methods like habituation paradigms or brain imaging methods. Nevertheless, many fascinating findings have emerged in recent years concerning often unexpected cognitive capacities of infants.

The course commences by addressing specific problems in infancy research and covers the methods used to meet or resolve these problems. Next, biological and behavioural aspects of pre- and postnatal development are discussed, in particular concerning their consequences for later cognitive development. The study of object recognition and object permanence is shown to play a fundamental role in cognitive development during infancy. Individual differences and critical periods are illustrated by a number of developmental disorders. Finally, the early development of social cognition and consciousness is addressed.

Course objectives

- understand the biological and psychological development from conception to four years of age;
- understand and being able to apply methods and techniques in infancy research like indirect measures as habituation, facial expression, expectancy violation, sucking activity and heart rate changes, but also direct recordings of brain activity (EEG, ERP, MEG) and their hemodynamic correlates (f-MRI, NIRS);
- understanding the periods in prenatal development and the effect of teratogens;
- understanding the early development of processes like visual illusions, face recognition, cortical inhibition, mental representation, language and social cognition;
- understanding the underlying mechanisms in developmental conditions like Fetal Alcohol Syndrome, prematurity, dyslexia, cerebral palsy, autism.

PSY4143
Period 1
2 Sep 2024
25 Oct 2024
Print course description
ECTS credits:
5.0
Instruction language:

Master Psychology Specialisation Developmental Psychology

English
Coordinator:

- J.E.A. Stauder

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
critical periods, object permanence, face processing, Social cognition, joint attention
Faculty of Psychology and Neuroscience

Perception, Attention and Motor Development

Full course description

Although perception, attention and motor function undergo the most spectacular changes during infancy, development proceeds throughout the course of an individual's entire lifespan. In the course, students will become acquainted with the latest theories and experimental findings related to the development of these functions, with an emphasis on biological and neuropsychological models. Knowledge about the way in which brain development is linked to the development of specific cognitive functions is crucial for determining the constraints of development theories. During the course, it will become evident to students that perception, attention and motor development are closely related to each other. Developmental disorders in perception, attention or motor functions can have divergent consequences, depending on the age at which they start. For instance, being born deaf or of becoming deaf at a later age has different consequences due to taking place in different brain development stages. During the course, a number of common childhood disorders associated with aberrant development of perception, attention or motor functions will be discussed. Also here, the focus is on neuropsychological theories on the origins of these developments. Specific topics are the development of 'bottom-up' versus 'top-down' attention processes and the role of eye-movements, the development of executive functions and frontal cortex, the development of perceptual-motor functions, autism, ADHD, Gilles de la Tourette and possible intervention and rehabilitation methods (both pharmacological as well as cognitive).

Course objectives

Students:

- are able to explain, reproduce and differentiate between different cognitive/neurobiological theories central to the life-span development of visual perception and eye-movements, attention and executive control, motor control and action-perception integration;
- are able to apply this theoretical knowledge to cases of atypical development in perception, attention or motor functioning, such as autism, ADHD and Cerebral Palsy;
- can describe and discuss theories and research on the aetiology of childhood psychological/psychiatric disorders related to deficits in attention, perception and motor skills like autism, ADHD and Cerebral Palsy with a focus on the influence of environmental, personal and biological (genetic/psychopharmacological /brain) factors;
- will be able to describe/explain therapies/interventions (cognitive/behavioural or psychopharmacological) and their effectiveness in ADHD/Cerebral Palsy;

- will be able to better understand, analyse and evaluate research and research methods and paradigms (experimental tasks and neuropsychological/diagnostic instruments) used in the field of the typical and atypical neurocognitive development of perception, attention and motor skills.

PSY4144
Period 1
2 Sep 2024
25 Oct 2024
Print course description
ECTS credits:
5.0
Instruction language:
English
Coordinator:

- J.C. Stapel

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Childhood, adolescence, Attention, visual perception, executive control, motor development, ADHD, Cerebral Palsy
Faculty of Psychology and Neuroscience

Practical Training: Psychological Tests

Full course description

This practical training course is concerned with psychological tests, which are used to assess cognitive development and functioning of children at various ages. More specifically, students will learn basic skills for administering and interpreting mental capacity tests for children and will increase their reflection on these skills. For example, students can gain experience in administering the WISC and SON tests and in interpreting child behaviour using the Bayley Scales of Infant Development (Bayley-III-NL).

Course objectives

- being able to administer mental capacity tests like the Bayley-III, SON and WISC (testing a child);
- being able to understand and interpret the Bayley-III;
- being able to communicate test findings to a lay person (lawyer).

Recommended reading

User’s guides of the mental capacity tests, selected papers.

PSY4037

Master Psychology Specialisation Developmental Psychology

Period 1
2 Sep 2024
25 Oct 2024
Print course description
ECTS credits:
2.0
Instruction language:
English
Coordinator:

- J.E.A. Stauder

Teaching methods:
Assignment(s), Lecture(s), Paper(s), Skills
Assessment methods:
Final paper
Keywords:
Cognitive capacity tests, IQ tests, WISC, WPPSI, SON, Bayley-III
Faculty of Psychology and Neuroscience

Development of Cognition and Language

Full course description

In this course typical and atypical childhood development of higher order cognitive functions such as memory, language and reading, number processing, and arithmetic will be discussed. These higher order cognitive functions are crucial for daily functioning. Two questions will be central in the study of these topics: which changes take place as a child gets older and how do these changes occur? We will approach the how question by studying both neurobiological and environmental factors influencing typical or atypical development. Especially in the case of the development of highly complex skills such as reading and arithmetic many cascaded processes are involved spanning a long period of time. The study of these processes and their basis in the brain is complex and addresses many methodological issues that will also be discussed in the course. Specific topics dealt with are development of working memory, long-term memory, number representation, arithmetic, word learning, reading, and intelligence. Atypical development of these functions, as for instance in dyslexia and dyscalculia will also be studied.

Course objectives

At the end of the course students are able to:

- compare and contrast (advantages and disadvantages) the most used brain imaging methods and research designs in developmental research;
- explain the most important brain structural and functional changes in the domain of: working memory development, long-term explicit memory development, language development, development of reading and bilingualism, development of number sense and arithmetic, and development of general intellectual abilities;
- clarify what goes wrong in developmental disorders such as dyslexia and dyscalculia and explain possible interventions.

PSY4145

Master Psychology Specialisation Developmental Psychology

Period 2
28 Oct 2024
20 Dec 2024
Print course description
ECTS credits:
5.0
Instruction language:
English
Coordinator:

- F.C.L. Donkers

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
developmental research methods, cognitive development, brain development, Memory, word-learning, bilingualism, number knowledge, arithmetic, dyslexia, dyscalculia
Faculty of Psychology and Neuroscience

Social Emotional Development

Full course description

Social-emotional development represents a child's growing ability to interact with others, to form attachments and relationships, to identify and regulate emotions, and to feel confident exploring the environment. Whereas both animals and human newborns display primitive, basic emotions, our ability for complex reasoning, use of language and introspection makes human social-emotional development far more sophisticated and complex. In this course, students will become acquainted with the latest theories and research findings related to human socio-emotional development from infancy to young adulthood, with knowledge derived from psychosocial, clinical, psychiatry and social affective neuroscience fields. All topics will be approached by taking into account the influence of, and interactions between, person-related factors (biological constitution, temperament, cognitive capacity), social context related factors (parenting, peers or broader social-cultural influences), and neurobiological (brain) development.

The course starts with emotion expression/processing in infancy and its importance for the development of parent-child attachment. Subsequent topics are the influence of infant/child temperament on emotional-social development and how, in a later developmental phase, children learn to regulate their emotions and develop mental skills that enable them to process and reflect upon one's own and others' emotions and behaviors. Other topics are the childhood development of empathy, morality, helping behavior and self-concept. Finally, students will be acquainted with adolescence as an especially sensitive period for the development of specific socio-emotional problems. Next to normative social-emotional development students will also learn about the etiology of, and risk factors for the development of socio-emotional problems or disorders in the internalizing spectrum (anxiety and depression), the externalizing spectrum (conduct disorder, callous-unemotional traits), in personality (narcissism, psychopathy), and in autism, also paying attention to intervention/treatment possibilities and their effectivity.

Course objectives

At the end of this course students:

- have acquired knowledge of different psychosocial/cognitive/neurobiological theories central to typical and atypical life-span social emotional development
- will be able to explain the interactive role that environmental (parenting-style/attachment/peer influences), personal (temperament/personality/cognitive capacity) and neurobiological (genes and brain development) factors play in the typical and atypical childhood and adolescent socio-emotional development
- can describe and discuss theories and research on the etiology and risk factors involved in the development of socio-emotional disorders in the internalizing spectrum (anxiety and depression), the externalizing spectrum (conduct disorder, psychopathy), in personality (narcissism), and in autism.
- will be able to describe therapies/interventions and their effectiveness to deal with problems related to atypical/problematic social emotional development.
- will be able to better understand, analyze and evaluate research and research methods and paradigms (experimental tasks and neuropsychological/diagnostic instruments) used in the field of the typical and atypical socio-emotional development.

PSY4146
Period 2
28 Oct 2024
20 Dec 2024
Print course description
ECTS credits:
5.0
Instruction language:
English
Coordinator:

- L.M. Jonkman

Teaching methods:
Lecture(s), PBL
Assessment methods:
Attendance, Written exam
Keywords:
Theory of mind, empathy, moral development, autism, aggression, psychopathy
Faculty of Psychology and Neuroscience

Practical Training: Measuring Attention and Executive Functions in Behavioural Paradigms

Full course description

Students will perform several attention and executive function tasks that are frequently applied in clinical and non-clinical developmental settings. Already gathered data from children will be provided to the students so that they can practice with performing statistical analyses. Each student formulates a research question based on the literature. All research questions will focus on themes within the field of childhood development of attention and executive control and associated

disorders such as Autism Spectrum Disorder or ADHD. During the course, students will present and discuss their research questions and findings in both group meetings and in a written report.

Course objectives

Students:

- can read, interpret and reflect upon papers reviewing theories and experimental studies in the field of typical or atypical development of attention and executive function;
- are able to recognize, understand and differentiate between different experimental paradigms and neuropsychological measures to assess cognitive functions (attention and executive functions) in children and adults;
- can formulate a relevant and innovative research question based upon a review of the relevant literature in the field of study;
- can select the appropriate research design and statistical analyses fitting their research question;
- can apply statistics to developmental data and interpret results;
- can write/report findings in the format of a research paper.

Recommended reading

Journal articles, book chapters.

PSY4033
Period 2
28 Oct 2024
20 Dec 2024
Print course description
ECTS credits:
2.0
Instruction language:
English
Coordinator:

- L.M. Jonkman

Teaching methods:
Assignment(s), Paper(s), Presentation(s), Research, Skills, Work in subgroups
Assessment methods:
Attendance, Final paper
Keywords:
Attention, executive functions, childhood development, experimental psychology, Writing
Faculty of Psychology and Neuroscience

Mentorship DP

Full course description

The Mentor programme is closely connected to PSY4142 (research proposal).

Master Psychology Specialisation Developmental Psychology

This module aims at making our new Master students feel comfortable at FPN. Our mentors share their experience in academia with the students and by doing so broaden the students' horizon. They guide the students in the transfer from a BA to a MA study level and support the students' adjustments to international, multicultural, interdisciplinary, and PBL based education. Also, the mentors provide preparation, orientation and reflection on study progress, internship choices, and post-Master career options.

Voluntary but highly recommended meetings are scheduled for the students. The main themes of those meetings are 1) starting at UM, 2) the research internship and 3) future career, but the meetings are open for other topics based on student needs.

Upon request, the mentor also engages individually with a student.

Course objectives

Intended learning outcomes (ILO's) are tailored to the individual student, but do relate to study and research skills, employability and global citizenship education. Main goals are as described above.

PSY4953
Year
1 Sep 2024
31 Aug 2025
Print course description
ECTS credits:
0.0
Instruction language:
English
Coordinator:

- G.A. ten Hoor

Teaching methods:
Work in subgroups
Keywords:
mentor, personal growth

Research Internship

Faculty of Psychology and Neuroscience

Research Internship Graded

Full course description

During the second part of the one-year master's program (from period 3 onwards), students conduct a research internship that involves 1) writing of a research proposal, and preparing and planning of the research project, 2) conducting the research project, and 3) analyzing the results of the research project. This work will result in an individually written 4) master's thesis.

The internship can be carried out at Maastricht University, at an external research institute or at other, more practically oriented institutions. In all cases, a student's research proposal and master's

thesis will be evaluated by two assessors.

Information about research internships can be found on AskPsy:
https://www.askpsy.nl/internship/home

This module is not applicable for students of the Master Neuropsychology who choose to do an additional clinical internship.

Course objectives

Students are able to:

Conduct a supervised empirical research project and summarize this research in a master's thesis.

Prerequisites

The Research Internship can only be started when at least 8 credits of the compulsory core courses have been obtained of the modules offered in periods 1 and 2. The research proposal must be assessed as sufficient by both assessors and there must be ethical approval for the research project before the start of the data collection. In addition: certain Research Internships may require that practical or skills training(s) have been completed.

PSY4178
Year
1 Sep 2024
31 Aug 2025
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- G.C. Kraag

Teaching methods:
Assignment(s), Paper(s), Research, Skills
Assessment methods:
Attendance, Final paper, Participation, Observation
Keywords:
Academic skills, Internship, Research, research proposal, master's thesis
Faculty of Psychology and Neuroscience

Research Internship Ungraded

Full course description

During the second part of the one-year master's program (from period 3 onwards), students conduct a research internship that involves 1) writing of a research proposal, and preparing and planning of the research project, 2) conducting the research project, and 3) analyzing the results of the

research project. This work will result in an individually written 4) master's thesis. Step 1 will be done in period 3, steps 2 to 4 from period 4 onwards.

The internship can be carried out at Maastricht University, at an external research institute or at other, more practically oriented institutions. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors. At least one of these assessors is a staff member at the Faculty of Psychology and Neuroscience (FPN).

Information about the research internship can be found on AskPsy:
https://www.askpsy.nl/internship/home

This module is not applicable for students of the Master Neuropsychology that attend a clinical internship.

Course objectives

Students are able to :

conduct a supervised empirical research project and summarize this research in a master's thesis.

Prerequisites

The Research Internship can only be started when at least 8 credits of the compulsory courses have been obtained of the modules offered in periods 1 and 2. Furthermore, the research proposal must be assessed as sufficient by both assessors and must be ethically approved before the start of the data collection. In addition: Certain Research Internships may require that practical or skills training(s) have been completed.

PSY4179
Year
1 Sep 2024
31 Aug 2025
Print course description
ECTS credits:
9.0
Instruction language:
English
Coordinator:

- G.C. Kraag

Teaching methods:
Assignment(s), Paper(s), Research, Skills
Assessment methods:
Attendance, Final paper, Participation, Observation
Keywords:
Academic skills, internship, research, Research proposal, master's thesis
Faculty of Psychology and Neuroscience

Research Proposal

Full course description

In this course, the research proposal is drafted in preparation for the research internship. The course serves to provide students with general skills and a source of information about academic research. The course thereby supports the development of the research proposal and subsequent execution of the internship via assignments, workshops, and lectures that allow students to practice and develop their academic skills.

The research proposal describes what you will investigate, why it is important, and how you will do the research. The format of a research proposal varies between (sub)fields, but most proposals should contain at least these elements: Cover page, Introduction, Literature Review (incl background, relevance, and research question), Research design and methods, Reference list, and a Timeline/planning. Students discuss the content of the proposal with their internship supervisors (preferably 2-3 months prior to the official start of the internship).

This module is not applicable for (the subsample of) students of the Master Neuropsychology that complete a clinical internship.

Course objectives

- to produce a scientifically sound research proposal;
- to adequately prepare for a research internship.

Mandatory ILO’s are:

- students know what the criteria/guidelines are for writing a research proposal;
- students know what transparency in science is (including data management and research ethics);
- students recognize ethical aspects of conducting research and are able to complete an ethics application.
- students are familiar with the key concepts of open science including preregistration.

Additional ILO’s (if skills are not yet mastered) are:

- students are able to execute a literature review;
- students are able to use a reference manager;
- students are able to select a research design and corresponding methods for a research project;
- students understand basic statistical techniques;
- students can explain characteristics of academic writing and are able to implement and apply that knowledge to the writing of a research proposal.

(this list is just an example, and will be updated each year, based on student and supervisor needs)

PSY4142
Year
6 Jan 2025
4 Apr 2025
Print course description

Master Psychology Specialisation Developmental Psychology

ECTS credits:
4.5
Instruction language:
English
Coordinator:

- G.A. ten Hoor

Teaching methods:
Assignment(s), Lecture(s)
Assessment methods:
Final paper
Keywords:
Academic skills, Research skills, methods, statistics, writing, Internship
Faculty of Psychology and Neuroscience

Academic Skills

Full course description

The Academic Skills course is closely connected to the research proposal and prepares students for their internship and thesis. This module offers students an opportunity to practice and apply academic writing and research skills and prepares students for their research internship (including the writing of their research proposal and thesis). To achieve this, a series of assignments, workshops, and lectures is offered in the 3rd period (four weeks). In addition, students will be encouraged to consider their future career (inc. what their interests are/what career(s) they would like to pursue).

The Academic Skills course has to be completed within 6 weeks after the start of a students' research internship (so no need to have this finished at the end of period 3). To make sure that students can pass this course when delaying (the start of) their internship this course is open during the entire academic year. For most students, however, the academic skills course is focused on period 3 (January).

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

Course objectives

Intended learning outcomes (ILO's) are tailored to the individual student and depend on the individual motivations and needs for their research internship. ILO's are related to:

1. The (general) mandatory skills that students followed as part of the assessment in PSY4775.
2. The additional academic skills deemed necessary by internship supervisor.
3. Additional (online) skills courses and/or experiences that students may have followed or obtained additionally to point 1 and 2 out of interest/personal growth.

Mandatory ILO's are:

- students know what the criteria/guidelines are for writing a research proposal;
- students know what transparency in science is (including data management and research ethics);

- students recognize ethical aspects of conducting research and are able to complete an ethics application.

Additional ILO’s (if skills are not yet mastered) are:

- students are able to execute a literature review;
- students are able to use a reference manager;
- students are able to select a research design and corresponding methods for a research project;
- students understand basic statistical techniques;
- students can explain characteristics of academic writing and are able to implement and apply that knowledge to the writing of a research proposal.

(this list is just an example, and will be updated each year, based on student and supervisor needs)

PSY4775
Year
6 Jan 2025
4 Apr 2025
Print course description
ECTS credits:
0.5
Instruction language:
English
Coordinator:

- G.A. ten Hoor

Teaching methods:
Skills, Assignment(s), Lecture(s)
Assessment methods:
Assignment, Attendance
Keywords:
Academic skills, research skills, methods, statistics, career skills, writing, peer reviewing, ethics in research
Thesis

Master's Thesis

Faculty of Psychology and Neuroscience

Master's Thesis

Full course description

During the second part of the one-year master’s program (from period 3 onwards), students conduct a research internship that involves 1) writing of a research proposal, and preparing and planning of the research project, 2) conducting the research project, and 3) analyzing the results of the research project. This work will result in an individually written 4) master’s thesis.

The internship can be carried out at Maastricht University, at an external research institute or at

other, more practically oriented institutions. In all cases, a student's research proposal and master's thesis will be evaluated by two assessors.

Information about research internships can be found on AskPsy:
https://www.askpsy.nl/internship/home

This module is not applicable for students of the Master Neuropsychology who choose to do an additional clinical internship.

Course objectives

Students are able to :

- conduct a supervised empirical research project and summarize this research in a master's thesis.

Prerequisites

The Research Internship can only be started when at least 8 credits of the compulsory core courses have been obtained of the modules offered in periods 1 and 2. The research proposal must be assessed as sufficient by both assessors and there must be ethical approval for the research project before the start of the data collection. In addition: certain Research Internships may require that practical or skills training(s) have been completed.

PSY4091
Year
3 Feb 2025
31 Aug 2025
Print course description
ECTS credits:
10.0
Instruction language:
English
Coordinator:

- G.C. Kraag

Teaching methods:
Assignment(s), Paper(s), Research, Skills
Assessment methods:
Attendance, Final paper, Observation, Participation
Keywords:
Academic skills, Internship, Research, Research proposal, master's thesis
Internships
Elective courses

Electives

Faculty of Psychology and Neuroscience

Selection and training

Full course description

In this elective, students will practice with designing an assessment center, with structured interviews and with training design and evaluation. This elective will start with an opening lecture, in which the structure of the elective will be explained and in which they will learn the relevant theoretical background on assessment centers, structured interviews, and trainings. After that, they will read relevant literature on these topics and start to work in small groups on designing an assessment center. In the first group meeting, they will present their assessment centers to each other and receive feedback on it. In the next group meeting, they will practice a structured interview, in which they will do roleplays in which half of them plays the role of the interviewer and the other half the role of the candidates. Halfway through the meeting, they will switch roles. Finally, they will design a training in small groups and conduct this training during the final group meeting. Again, half of them will start as the trainers, and the other half of the group will be the trainees. During this meeting they will also switch roles.

Course objectives

- Students will get acquainted with assessment centers: they will learn about the procedures and validity of this selection tool;
- Students will practice and improve their interview skills by conducting a structured interview;
- Students will learn theories about training design and practice their skills by designing and evaluating a training;
- Students will improve their employability by learning more about and practicing with selection and training methods.

PSY9103
Period 3
6 Jan 2025
9 Feb 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinators:

- A.L.T. Walkowiak
- F.E.R.M. Nievelstein

Teaching methods:
Lecture(s), PBL, Assignment(s), Skills, Work in subgroups
Assessment methods:
Assignment, Attendance, Observation, Presentation
Keywords:
Selection, training, Assessment Center, Role play
Faculty of Psychology and Neuroscience

Systemic Coaching for Psychologists

Full course description

Coaching can be defined as a developmental, tailor-made intervention in which a professional coach utilizes collaborative, reflective, and goal-oriented strategies to facilitate the development and performance of individuals or groups. Coaching puts coachees as learners at the center of the coaching experience, thereby aiming to promote their self-awareness and personal responsibility and unlock their full potential.

In this elective students will learn about the basic principles of systemic coaching (a form of coaching in which the larger system in which we all operate is considered) and will get to know a variety of cognitive, motivational, and behavioral techniques to help coachees achieve a mutually identified goal. In this elective students will form groups of three: Every student will act as a coach, but will also be coached by a peer, and additionally act as an observer who provides meaningful feedback on the coaching process.

Course objectives

After this course students are able to:

- explain the basic principles of systemic coaching;
- differentiate psychological theories on the topic of personal development;
- understand the effects of different coaching techniques;
- independently design a coaching session for a client;
- flexibly and spontaneously apply different coaching tools based on the (changing) needs of a client;
- reflect on their own strengths and weaknesses in their role as a coach;
- reflect on their progress regarding a goal in their role as a coachee;
- provide meaningful feedback to coaches in their role as an observer;

PSY9101
Period 3
6 Jan 2025
9 Feb 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinator:

- A. Nübold

Teaching methods:
Lecture(s), Assignment(s), Work in subgroups, Skills
Assessment methods:
Attendance, Participation, Observation, Oral exam
Keywords:
systemic coaching; psychological theories; cognitive, motivational, behavioral techniques; self-help; flexibility; self-reflection; personal development

Introduction to Programming in Python

Full course description

The work of many high-skilled jobs now requires more advanced computer skills than ever before. Skilled professionals ought to be able to use programming to efficiently process and visualize data, without being limited by the tools conventional programs offer. This elective focuses on understanding and solving problems using programming.

You will learn how to think in terms of algorithms, moving from identifying a problem to creating a step-by-step solution (in the form of code). You will learn how to program in Python, a free, open-source, platform-independent, and continuously maintained programming language. Python is a powerful dynamic programming language that is used in a variety of applications and domains.

Once you know how to program in Python, it will be much easier for you to learn other – more specialised or more general-purpose – languages (such as Matlab, R, or C).

Course objectives

During the elective, students will develop a basic understanding of programming in general and the Python programming language specially.

After this course, students:

- Have a basic understanding of how to program and be able to think in terms of algorithms.
- Have a working knowledge of the Python programming language specifically (data types, variables, operators, control-flow, and loops).
- Are able to write well-commented Python scripts.
- Are able to write functions to automate particular tasks.
- Are able to debug (fix) Python code.
- Are able to understand basics of scientific computing (numpy & matplotlib).

PSY9102
Period 3
6 Jan 2025
9 Feb 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinators:

- M. Enan
- J.J.G. van Haren

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

Master Psychology Specialisation Developmental Psychology

Assignment, Participation
Keywords:
Programming skills, Python, Algorithms
Faculty of Psychology and Neuroscience

The global SDGs: From problem to solution

Full course description

Psychologists are invaluable sources of knowledge and allies for global governments in helping them to achieve the 17 Sustainable Development Goals (SDGs), https://sdgs.un.org/goals. After all, many of the current global challenges require a deep knowledge of human cognition, motivation, emotion, and behaviour – as well as how to change these. Indeed, humans, and human behaviour, are central to achieving many of the (sub-)SDGs, whether it is a reduction of reliance on fossil energy sources, achieving gender equality, or creating optimal health and wellbeing. In this course, you will be introduced to and practice with the PATH model (Problem – Analysis – Test- Help). Using this protocol, you will (a) describe and analyse the psychology behind one of the SDGs, and (b) come up with 'solutions' – interventions – that enable this SDG to be attained. Your final (group) report will take the form of a policy brief.

Course objectives

Students are able:

- to apply psychological principles to global/societal problems (SDGs);
- to acquire basic knowledge of the cognitive, motivational, emotional, social, and behavioural factors are at the core of many societal and global challenges;
- to engage in creative problem solving while designing an intervention;
- to reflect on ethical and moral dimensions of an applied psychological problem;
- to take perspectives of other (sub)disciplines and stakeholders outside academia;
- to present research and recommendations to a non-specialized audience
- to work in teams

PSY9104
Period 3
6 Jan 2025
9 Feb 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinators:

- J.G. Zimmerman
- A. Pawlowska

Teaching methods:
Lecture(s), Work in subgroups, Paper(s), Presentation(s)
Assessment methods:
Final paper, Attendance

Master Psychology Specialisation Developmental Psychology

Keywords:
applied psychology, global citizenship, psychological literacy, creative problem solving, social responsibility, change agency
Faculty of Psychology and Neuroscience

Clinical Assessment

Full course description

To be able to treat a client effectively, mental health professionals first need to perform a clinical assessment of the client. This assessment refers to the collection of information and consequently drawing conclusions about the client's symptoms and disorder(s). For this purpose, the health professional does observations, administers (neuro)psychological tests, and interviews the client. In this course, we will introduce you to such clinical assessment. During the first sessions, we acquaint you with screening tools that are used in the earliest stages. Next, we go more in-depth and you will learn to administer tests that are commonly done as follow-up for a number of disorders. For example, you acquire skills to administer Anxiety and Depression scales, to run neuropsychological tests for the measurement of attention and memory, and you will be acquainted with tools to examine potential problems with sensory integration. In all cases, we discuss which types of tests are used across the life span. At the end of the course, for the materials studied, you are able to develop a basic screening protocol with follow-up testing.

Course objectives

At the end of this course, students are able to:

- Develop an assessment plan for a client based on the initial referral by a general practitioner
- Complete an initial mental screening of a client
- Use and analyse follow-up assessment tools in the field of Anxiety, Depression, Attention, Memory, or Sensory Integration
- Evaluate the outcome of a clinical assessment

PSY9105
Period 3
6 Jan 2025
31 Jan 2025
Period 4
10 Feb 2025
23 Mar 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinators:

- A. Sambeth
- A.L. Smitten

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

Master Psychology Specialisation Developmental Psychology

Assessment methods:
Presentation
Keywords:
Clinical reasoning, Screening (protocol), (neuro)psychological assessment, observation, interviewing
Faculty of Psychology and Neuroscience

Negotiation and Mediation

Full course description

In this elective, students will focus on negotiations and mediation skills. The elective will start with a lecture to explain the structure of the course and to introduce the topic of negotiation to them. In this lecture, they will already learn about the most important theories and strategies that can be used for negotiation and mediation in different contexts. After the lecture, they will read literature to prepare them to practice their negotiation skills. TrainTool will be used to practice these skills. We will use the Harvard principles of negotiation in this elective. In TrainTool, they will first practice the first two principles, after which they will have a group meeting in which we will do a role play focusing on these two principles. Then, they will again practice with Traintool, now focusing on the last two principles, and we will end the course with another role play in the group meeting.

Course objectives

- Students will learn about different theories and strategies for negotiation;
- Students will practice their negotiations skills based on the Harvard principles of negotiation.

PSY9106
Period 3
6 Jan 2025
31 Jan 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinators:

- A.L.T. Walkowiak
- C.J. Zelihsen

Teaching methods:
Lecture(s), Work in subgroups, Skills, Assignment(s), PBL
Assessment methods:
Assignment, Attendance, Observation, Presentation
Keywords:
negotiation, mediation, roleplay
Faculty of Psychology and Neuroscience

Introduction to Programming in Matlab

Full course description

The aim of this elective is twofold:

1. Develop basic and generalizable programming skills in MATLAB;
2. Utilize programming to handle and visualize big data, such as those encountered in Neuroscientific research.

MATLAB is a widely used programming and numeric computing platform. Through this elective, you will familiarize with basic MATLAB programming and will learn how to use it to handle, analyze and visualize multidimensional datasets like those encountered in neuroscience and neuroimaging research, business, marketing, social and natural sciences.

Through the course we will explore examples of how to use programming to speed up computations, construct, analyze and visualize time-series (e.g., EEG data, market and financial trends).

At the end of the course, you will write a report in subgroups about the data analysis approach you adopted to analyze time-series data and on how you interpreted results.

Course objectives

With this course, students will:

1. develop fundamental and generalizable programming skills in MATLAB;
2. learn how to use programming to handle and visualize multidimensional datasets;
3. learn how to summarize, visualize and interpret the results of their analyses.

PSY9107
Period 4
10 Feb 2025
23 Mar 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinators:

- G. Valente
- A. Criscuolo

Teaching methods:
Lecture(s), Skills, Work in subgroups
Assessment methods:
Attendance, Assignment, Final paper
Keywords:
Programming; MATLAB; data analysis.
Faculty of Psychology and Neuroscience

Science Communication

Full course description

In this 5-week course students will practice presenting science to a broad audience in written format and (online) presentations. They will write a blog post (assignment 1) about a scientific topic of choice, to practice how to summarize complex information in a reader-friendly manner. Furthermore, students will make a video about a scientific topic (assignment 2). In the course, the students will learn how to target their presentation to the audience, how to organize their presentation, and how to use visual aids.

This course will provide students the opportunity to hone their written, visual, and verbal presentation skills. The ability to present complex information in written or visual form can help to become and effective communicator in the workplace or to engage more with larger audiences.

The students will have 9 meetings within the course (lectures, workshops and PBL meetings).

Course objectives

After this course, students are able to:

- write about scientific topics for a broad audience
- summarize complex information
- present scientific information in the format of a video
- organize the content of a (digital) presentation
- use visual aids in (digital) presentations

PSY9108
Period 4
10 Feb 2025
23 Mar 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinator:

- A.E.M. Hendriks

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

Individual Elective

Full course description

Students work on an assignment (structured literature review, research project) under the

supervision of a member of the scientific staff of Maastricht University, resulting in a written product (e.g. literature review, research report). Students take the initiative to locate and arrange a FPN supervisor for the elective. The elective topic, content and format will be determined by mutual agreement between student and supervisor. The assignment should be different/clearly separate from the actions that will be taken in the research internship and the written final product should be a separate product from the master thesis. Students are expected to devote 168 hours to the Individual elective. Students aiming to follow an individual elective should hand in an individual elective proposal, signed by the supervisor, to the coordinator of the individual elective for approval.

Course objectives

Students are able to:

- identify gaps in their own knowledge and abilities and develop an individual learning plan accordingly.
- communicate scientific literature and/or report on a research project.

PSY9109
Period 3
6 Jan 2025
31 Jan 2025
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

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

Teaching methods:
Assignment(s), Research
Assessment methods:
Final paper
Keywords:
Elective, paper assignment
Faculty of Psychology and Neuroscience

Internship Elective

Full course description

During the elective internship, psychology master students (can) practice applying theoretical knowledge to practice and gain relevant practical experience, while working in an institution or company. Students are expected to devote 168 hours to the elective internship.

Students can only be enrolled in this elective, if they have found an internship on their own before December 1st. Students can work in a variety of 'settings': e.g., a (mental) health care facility, rehabilitation centers, schools, but also companies, such as HR consultancies. Suitable institutions or companies provide students the opportunity to gain practical experience, relevant for becoming a

psychologist. If the student wants to obtain ECTS for this practical work, the internship (the institution or company and the content of the internship) has to be approved by the elective internship coordinator before the student starts working there. Students can only obtain ECTS for work conducted at one (and not multiple) institute(s). During this practical, students need to work under the supervision of a supervisor with an academic degree in psychology or a related field. At the start of the practical, the student drafts a personal development plan (PDP), defining the learning objectives for the internship. In addition to the work experience, the student must write a report about this experience. As such, the student will get more insight into the work setting(s) of a psychologist and they will gain experience with applying knowledge and skills essential for being a psychologist. Note: this practical experience cannot be used to fulfil the prerequisites regarding the theoretical background and working experience set for the psychodiagnostics registration (i.e., the BAPD) and/or vLOGO. This module is only relevant for FPN students and not available for Exchange students.

Course objectives

The student:

- obtains insight into the work setting(s) of a psychologist;
- gains experience with applying knowledge and skills essential for being a psychologist
- develops the ability to apply scientific insights to reflect upon practices in the field.

PSY9110
Period 3
6 Jan 2025
31 Jan 2025
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinator:

- M.D. Schilbach

Teaching methods:
Assignment(s)
Assessment methods:
Final paper
Keywords:
internship, Practical, Organisation
Faculty of Psychology and Neuroscience

Introduction to Statistics in R

Course objectives

R is a programming language frequently used in data science and related fields for data processing, data visualization, and statistical analysis. Working with data in R requires writing code, which makes the data processing steps and analysis procedure transparent and reproducible. The core functions of R are being continually expanded by a community of users who write and maintain

packages containing more specialist functions, meaning that R is a flexible tool that is adaptable to a very wide range of data types (e.g., questionnaire responses, neurophysiological data), while a broad spectrum of data analysis approaches are catered for.

Designed for users with little or no experience with R, this course will make use of RStudio, an open-source program that facilitates the writing and storage of R code. Students will be introduced to the basic steps of data processing, visualization, and analysis. These procedures will taught and practiced in the context of experimental data. Critically, students will be empowered to troubleshoot their own code, by identifying problems in their code and seeking potential solutions in the documentation or online. Students will thereby be able to begin writing their own code independently.

Prerequisites

After completing this course, students will be able to:

1. Import and handle data in R
2. Create graphs and run basic statistical analyses in R
3. Document data analysis output from R

PSY9114
Period 3
10 Feb 2025
23 Mar 2025
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinator:

- M.D. Hilton

Teaching methods:
Lecture(s), Skills, Work in subgroups
Assessment methods:
Attendance, Assignment
Keywords:
Programming; R; data analysis; statistics