Faculty of Psychology Bachelors Programme 2006/2007

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Academic Calendar 2006-2007

Semester 1		from	till	Semester 2		from	till
Period 1	8 weeks	04-09-2006	27-10-2006	Period 4	8 (9) weeks	05-02-2007	05-04-2007
Period 2	8 weeks	30-10-2006	22-12-2006	Period 5	8 weeks	10-04-2007	01-06-200
Period 3	4 weeks	08-01-2007	02-02-2007	Period 6	4 weeks	04-06-2007	29-06-200

Semester 1 Period 1

Period 0

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																							Та		Тb		

Period 2

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				Dec	embe	er															Re-si	it					
27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
																Та		Tb									

Christmas break

<mark>25</mark>	<mark>26</mark>	27	28	29	30	31	1	2	<mark>3</mark>	4	5	6	7

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Period 3

Semester 2 Period 4 February Carnival March 10 11 12 13 14 15 16 18 24 25 26 27 28 5 6 7 8 9 17 21 1 2 3 4 19

March

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Ma	у																								June	2	
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Pe	rio	d 6

Jur	e																										
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July Re-sit

July	July Re SR										
2	3	4	5	6	7	8					

December 25 - January 5 February 19 – February 23 April 6 - 9

Christmas break Carnival Easter break April 30 May 17 - 18 May 28 Queen's Birthday Ascension Whit Monday

Psychology at the Universiteit Maastricht

THE MAASTRICHT PSYCHOLOGY CURRICULUM

The Psychology Programme at the Universiteit Maastricht started in 1995. The shape and profile of the programme has been strongly influenced by two turbulent and important developments in psychology. The one concerns the rise of Cognitive Psychology and the other pertains to Biological Psychology. One of the key issues in Cognitive Psychology is the belief that our behaviour is not so much brought about by what happens around us, but rather by the interpretation of it. A person walking alone in a dark forest does not run away at the sound of a branch breaking off but as a result of the individual interpretation of the noise. The inexperienced or frightened person will easily read something sinister into it. A person who is familiar with noises in a forest will interpret the noise differently, resulting in different behaviour. Various types, often unconscious 'thought processes', take place between the stimulus from outside and our reaction to it (response). We call these cognitive processes. The rise of cognitive psychology is linked to the large-scale application of the computer. The way in which computers transform raw data into workable information appeared to be an effective metaphor for the way people think. Because of this association the cognitive approach is also referred to as the 'information processing approach'.

Biological psychology has as its starting point that everything we consciously or unconsciously observe, or do or think, is based on patterns of brain activity. Bearing in mind that our brain contains more neurons than there are stars in the universe, it is no surprise that the human brain is considered to be the most complex structure. Each of these neurons is connected to sometimes up to 10.000 other neurons! Various techniques are used to investigate the relationship between the brain, cognition and behaviour. In particular, the newest 'brain-imaging' techniques allow us to observe the living and working brain and to measure where exactly in the brain the activity changes when one thinks, does or observes something. In addition to this technique, use is also made of techniques involving psychopharmaca. These can influence the precarious balance between various neurotransmitters, that can change one's thinking, acting or observing.

The first two years, as is the case anywhere else, deal with the usual sub-divisions and aspects of psychology, but cognitive and biological psychology will form the basis and serve as the organising principles that give the programme its shape and content.

Bachelor Study Programme

There will be a three-year Bachelor Programme with Dutch as the language instruction. This will consist of a number of courses each of limited duration. The first two years acquaint one with various issues and themes from the field of psychology. Among these, attention will be paid to the social behaviour of people, the biological basis of their behaviour, the way in which people observe, learn, think and reason, how they differ psychologically from one another and how they develop. In short, the programme offers a representative picture of the formation of theories and of research in a number of important areas of psychology. In addition, attention will be paid to Research Methods of psychological research, including statistics.

As well as acquainting oneself with psychology and its methods of research, training will be provided in some important academic and professional skills. Training will be given on writing a scientific article and also on oral presentations (reading a paper). There will also be training on discussion techniques. In addition, attention will be paid to programming, drawing up a questionnaire and administering a test. There will be a practical training given on research at the end of the second year when many of the acquired skills can be applied to designing and conducting a piece of research.

At the end of the second year, students have to choose from two Bachelor Degree programmes: Biological Psychology or Cognitive Psychology. The first semester of the third year will be a fixed programme for each of these Bachelor Degree programmes, whereas students will largely draw up their own programme for the second semester by choosing a number of 'Electives'. The faculty offers a wide range of topics for these electives. A student may also rather choose to draw up his/her own electives programme, and do courses either at other Faculties at the Universiteit Maastricht or other Faculties of Psychology in The Netherlands or even abroad. This allows a student to design his /her programme will be completed by writing a Bachelor Thesis. A period of four weeks has been set aside for this. A number of students do this in the final and sixth period, other students already write their Bachelor thesis in the third period.

The Master Programme

Following the three-year Bachelor Programme there will be a one-year Master Programme with English as language of instruction. The Master Programme consists of two specialisations: Biological Psychology and Applied Cognitive Psychology. In Biological Psychology one of three tracks can be chosen: (1) Neuropsychology, (2) Developmental Psychology and (3) Cognitive Neuroscience. Also in Applied Cognitive Psychology one of three tracks can be chosen: (1) Psychology and Law, (2) Experimental Health Psychology and (3) Work and Organisational Psychology. In addition to a number of content courses, this year will focus on a research apprenticeship and on writing a Master Thesis.

THE EDUCATIONAL APPROACH: PROBLEM-BASED LEARNING (PBL)

In addition to the central role being played by Cognitive and Biological Psychology the Maastricht programme of study is also defined by its specific educational approach: Problem-Based learning (PBL). PBL is generally characterised by the following main features:

1. Student-Centred

In contrast to traditional forms of education, problem-based learning is not centred on the transfer of knowledge from the lecturer to the student but rather based on the student's individual learning process. Not the lecturer, but the student is central.

2. Problems Form the Basis for Learning

Problems form the starting point for the learning process. Students discuss these problems in depth in small groups. The problems are formulated in such a way that students are led to pose all types of explanatory questions. Based on the discussions, students formulate more specific questions about the subject matter that they will try and answer in the ensuing period by way of studying the appropriate literature.

3. Tutorial Groups

Instruction takes place in tutorial groups of roughly ten people that meet once or twice weekly. Individual cases, based on the course manuals, are studied during these meetings. The tutorial groups are led by tutors who guide and monitor the learning process.

4. Self-Motivation

The problem-based approach and the group discussions stimulate students to acquire relevant knowledge, insight and skills relatively independently. The emphasis is on self-motivation.

5. Progress Testing

Courses conclude with an exam or essay. In addition, progress tests that are arranged according to the various disciplines form part of the examination system. A progress test assesses students' knowledge in relation to the final level they have to reach. This enables students to evaluate their progress to reach the final level and compare their results with other students. The results also provide students with insight into the level of knowledge acquired in the various (sub-) disciplines.

Educational Resources

The principles of problem-based learning have numerous consequences for the way learning resources are applied. So it is not absolutely essential that all students in the same tutorial group use the same textbook to acquire the basic knowledge on a particular theme or area from the field of psychology. There are various courses in which not one but different, be it mutually comparable text books are recommended.

In addition to the information to be found in the textbooks which is usually of a general nature, students are also encouraged to consult other relevant sources. These can be found in the so-called "studielandschap" (learning resources centre). From the outset it is important that students learn to deal with different, sometimes conflicting sources of information and learn to draw conclusions independently about the value of various points of view. An essential learning resource, mentioned below, is the Course Manual.

Course Manuals

The Programme of Study at the Universiteit Maastricht is, among other things, made up of a number of courses. Each course uses a Course Manual. This is compiled by a team of lecturers and students under the guidance of the Course Coordinator. The Course Manual contains all the essential information for what is involved in a particular course. For example, who is responsible, what it is about, what the student needs to know by the end of the course, skills for which training will be provided, essential and recommended literature and the lectures that will be given. The Course Manual also contains the problems or tasks which serve as the guiding principle to study the subject. The manual is always made available to students shortly before the beginning of a course. The data which are gathered from the evaluation of the tuition at the end of a course are used to improve it for the following year.

Progress Test

All Bachelor students take a test three times a year; i.e. the Progress Test (in Dutch: VGT). This test consists of items which cover the total scope of the (Maastricht) psychology programme and aims at measuring the extent to which students are capable of applying particular concepts, months or even years after they were learned. The Progress Test is a particularly good testing instrument for a Problem-Based learning environment, also because it assesses students who take a wider interest in the subject field. Moreover, it provides students with feedback on their strengths and weaknesses on the conceptual framework they built up during the course of their studies. Feedback on psychological areas of knowledge in which students only performed moderately, also points to the need for extra work students need to do to comply with the requirements of the Progress Test.

INTERNATIONALISATION

Internationalisation is a feature of the Universiteit Maastricht study profile. Scientific developments and changes in the labour market pay no attention to national borders. A number of graduates will try to find employment in the international labour market. To prepare students for this, a number of courses will be offered in English and the opportunities to study or do an apprenticeship in other countries will increase. Furthermore, renowned guest lecturers from abroad will be invited to see to certain parts of the programme.

The Faculty started various exchange programmes over the last number of years, in which the exchange of students was the primary aim. In time it may be possible to have an exchange programme for lecturers and perhaps have joint research projects as well.

A recent report of exchange programmes can be obtained from the International Relations Office, Drs. L. Mallee, Phone (043) 388 1920, 40 Universiteitssingel, Room 5.749.

ORGANISATION OF THE FACULTY OF PSYCHOLOGY

If one does not know who the various responsible people are in the Faculty of Psychology (FdP), there would be no way of knowing who to go to with one's questions, suggestions, comments or complaints. Hence it is important to have some insight into the way the faculty is organised and run. Below is a broad outline of how the faculty is organised.

Faculty Board

The most important governing structure of the Faculty of Psychology (FdP) is the Faculty Board, or Board. This consists of three members: the Dean who is also the chairperson, the portfolio holder for research and the portfolio holder for education. Two students attend the meetings in an advisory capacity.

Faculty Council

The Faculty Board is advised by and has regular consultation with a democratically elected consultative body: the Faculty Council. This council advises the Faculty Board and consists of ten members. Four are elected from the academic staff, one from the supporting staff and five from students enrolled in the Faculty.

The Faculty Council chooses a chairperson, who may or may not be one of its members. At the time this prospectus went to press this person was not yet known.

Research Institute and Education Institute

The two main tasks of the Faculty of Psychology are the organisation and carrying out of tuition and research. The Board sees that most of the tasks are done by the Research Institute or the Education Institute. Both institutes are headed by an academic director. The academic director of the Education Institute is also referred to as the Director of Studies. The policy for research at the Faculty is supported by the research staff officer.

Departments and Faculty Office

Each staff member at the Faculty of Psychology falls under one of three groups: the Department of Experimental Psychology, the Department of Neurocognition or the Faculty Office. Most people appointed in the two departments, referred to in Dutch as 'capgroepen', are academic personnel who either conduct research or give lectures. The personnel which gives direct secretarial support to the academic personnel also belongs to one of these two departments. Most supporting personnel, however, falls under the Faculty Office. This consists of various sections, each with its own specific area of expertise, such as the Education Office, the study advisors, financial management, computerisation and research support. Roughly 150 people work for the Faculty of Psychology. Each of the two departments has its own chairman, appointed by the Faculty Board.

ORGANISATION OF THE STUDY PROGRAMME

For the purpose of this Prospectus, we will limit ourselves to certain information about the organisation of the education. As mentioned previously, all activities pertaining to education fall under the Education Institute headed by the Director of Studies. Most tasks pertaining to the organisation and carrying out of the study programme are actually seen to by the Education Office.

Education Office

The Education Office supports the Director of Studies and carries out a number of tasks in the area of policy, administration, organisation, logistics and planning of the tuition. In concrete terms, the Education Office takes care of matters such as the division into tutorial groups, processing of study results, reservation of halls, maintaining Eleum, evaluation of the study programme and other matters. The Education Office is the main source of information on all these matters for students. It is important that students direct their queries to the correct department/person. The Education Office is managed by the Head Education Office who sees to the daily coordination of various parts of the curriculum pertaining to both the organisation and shape of the study programme.

Committees Supporting the Study Programme

Various committees and groups have been put in place to support the study programme. Two of these are prescribed by law: the Curriculum Committee (CC) and the Examination Board (EB). In addition, the Faculty of Psychology has the following committees and/or groups: Course Planning Groups, Curriculum Year Groups, Educational Innovation Committee, Colloquium Doctum Committee, Progress Test Committee and Library Committee. Curriculum Committee

The Curriculum Committee (CC) advises the Faculty Board and the Director of Studies on matters relating to education with the aim of maintaining and improving the quality of the study programme as a whole. This implies that the CC concerns itself with the structure and content of the programme of study in keeping with the aims of the programme. It does not deal with details of the programme.

The CC consists of ten people: five members of staff and five students enrolled at the Faculty. The students are nominated by the student representatives of the Faculty Council, in consultation with the Student Council. The members of staff are nominated by the Departments with a coordinator appointed from each of the following five groups: The Basic Programme (first two years); the third year and Master specialisation in Biological Psychology; the third year and Master specialisation in Cognitive Psychology; the group International Relations and the Educational Innovation Committee.

The following is a further description of the tasks of the five coordinators:

The coordinator of the Basic Programme is responsible for the programme content for Years 1 and 2, guiding the education throughout all the phases and ensuring that all educational roles are filled and quality is assured. In addition, he/she is responsible for the coordination and adaptation of course content for both quality and coherence; aligning courses with one another and ensuring that they can be studied effectively.

The coordinator for Biological Psychology is responsible for the programme content of Year 3 of the Bachelor Programme and of the Master specialisation in Biological Psychology; guiding the education throughout all the phases, ensuring that all educational roles are filled and that quality is assured. In addition, this person is responsible for the coordination and adaptation of course content for both quality and coherence, aligning courses with one another and ensuring that they can be studied effectively.

The coordinator for Cognitive Psychology is responsible for the programme content of Year 3 of the Bachelor Programme and of the Master specialisation in Cognitive Psychology; guiding the education throughout all the phases, ensuring that all educational roles are filled and that quality is assured. In addition, this person is responsible for the coordination and adaptation of course content for both quality and coherence, aligning courses with one another and ensuring that they can be studied effectively.

The coordinator for International Relations is responsible for aligning internationalisation, electives and apprenticeships with one another.

The coordinator for Educational Innovation keeps track of innovations in academic education in general and in problembased education in particular; he/she draws up an inventory of bottlenecks in the programme and where necessary, proposes measures for improvement based on actual findings.

Examination Board

The Examination Board (EB) is responsible for seeing that the educational and examination regulations are carried out. The Board also deals with requests for exemptions, as well as with complaints about (the assessment of) a particular examination. However, the Examination Board will only entertain such a complaint once has become clear that the student and the course coordinator cannot agree on the matter at hand. If a student disagrees with an assessment, he or she is supposed to talk first with the coordinator. Individual questions about examinations and testing procedures can be directed to the chairperson of the Examination Board during the consultation hours (Mondays and Thursdays from 13.00 – 13.30 hours).

Course Planning Groups

The programme of study consists of various units referred to as 'courses'. The 'course coordinator' is the person who is primarily responsible for a particular course. The course coordinator plus two members of staff and one student, form the course planning group. This team sees to the actual provision, organisation and execution of a course. Part of a course is the tutorial meeting in small groups. These tutorial groups are run by a tutor who might be a senior student and has undergone a tutor training course, or a member of staff. Members of the course planning groups are often tutors.

Practical training is part of almost all courses. The coordinators of the practical training sessions in a course are also members of the planning group for the course, to ensure that the practical training and the content of the course are properly aligned. The names of the course coordinators with course descriptions can be found in the following sections.

Curriculum Year Groups

All coordinators from a particular year of study consult regularly with one another in the 'Curriculum Year Group'. They discuss how courses can be properly aligned and discuss the results of the programme evaluations and how this could affect the course design for the following year. Plans for new course manuals are also presented to the relevant curriculum year group.

Educational Innovation Committee

The Educational Innovation Committee keeps track of innovations in academic education in general and in problembased education in particular. It draws up an inventory of bottlenecks in the programme and where necessary, proposes measures for improvement on the basis of actual findings.

Progress Test Committee The Progress test contains items that cover the total scope of the Psychology Study Programme. All Bachelor students take the Progress Test three times a year. The coordinator is responsible for drawing up and implementing this test

Library Committee

The Library Committee is responsible for the acquisition of literature for both the library and the Learning Resources Centre.

Bachelor Programme, Year 1

1.1 GENERAL INFORMATION

The main function of the first year of the Bachelor Programme in Psychology is to orient, select and refer. The programme is put together in such a way that a representative picture of theory and research is presented in a number of important areas of psychology. In addition, one becomes acquainted with Research Methods applied in psychological research (including statistics) and training is given in a number of basic academic skills. Whilst the emphasis in the first year is on becoming acquainted with many aspects of psychology, explicit attention, where relevant, is paid to the distinctive Maastricht character of focussing on Biological and Cognitive Psychology as organising principles.

Courses

The first year consists of 11 courses covered over six periods. Strictly speaking there are seven periods, but the first course only takes one week and is referred to as Period 0. Periods 1 and 2 each last seven weeks. In each period two courses are run parallel to one another. Period 3 is reserved for one four-week course. This pattern is repeated in the second half of the academic year: two seven-week periods (Periods 4 and 5), within each period two courses running parallel to one another. This is followed by one four-week period (Period 6), with only one course. Practical training is given in each course in which skills linked to the theme are learned.

The programme begins with Period 0 in which a one-week skills training is given, relevant to Problem-Based Learning (PBL). The first period of seven weeks (Period 1) follows with two courses, running parallel to one another: Course 1.1.a: 'Social Behaviour' and Course 1.1.b. 'Body and Behaviour'. The course on Social Behaviour is an introduction into Social Psychology, a field of study dealing with how people are influenced by the real or imagined presence of others. In 'Body and Behaviour' the question is raised about how biological mechanisms determine and influence behaviour. The two parallel courses in the second period are: Course 1.2.a:'Development and Learning' and Course 1.2.b: 'Perception'. In 'Development and Learning' changes people go through from babyhood to adulthood are covered. In 'Perception' attention is paid to how our senses are constructed and how they operate, including the way information obtained through the senses is processed. Course 1.3.: 'Research Methods' will be given in Period 3 after the Christmas break. This is an intensive course and lasts for four weeks. Here students learn how scientific research is conducted and interpreted. As previously stated, this pattern is repeated in the second half of the academic year. There are two parallel courses of seven weeks in Period 4. They are: Course 1.4.a: 'Academic and Professional Skills: Writing an Article' and Course 1.4.b: 'Statistics 1'. The course on 'Writing an Article' consists of a skills training in written presentations or for writing in general. 'Statistics 1' offers a first introduction to various theories as well as to the application of statistics. The two parallel courses in Period 5 are: Course 1.5.a: 'History and Foundations of Psychology' and Course 1.5.b: 'Complex Cognition'. The course on 'History and Foundations' places psychology in its historical context and the course on 'Complex Cognition' studies the higher cognitive processes. The final course of the year is Course 1.6: 'Academic and Professional Skills: Communication Skills'. This course provides training sessions over four weeks on how to conduct a conversation, participate in a discussion and give a presentation.

Timetable

When two courses run parallel to one another, the timetable is drawn up in such a way that there are three tutorial group meetings each week, two for the one course and one for the other. The courses alternate each week. If there are two tutorial group meetings for course a in week 1 (Monday and Friday) then there will be one tutorial group meeting for Course b (Wednesday). This is reversed in week 2: Course a has one meeting (on Wednesday) whereas Course b has two (on Monday and Friday). This timetable applies for the first six weeks of a period. In week 7 the last tutorial group meeting for Course a is on Monday and for Course b on Tuesday. The examination for Course a is in the same week, but on Wednesday and for Course b it is on Friday. Only the format for Period 4 is different. The skills training course 1.4.a 'Writing an Article' has a limited number of lectures and tutorial meetings and no examination at the end. As of Period 2, after the exam week, there will be a week for re-sits for courses from the previous period.

Admission to (Parts of) the Second Year

To be admitted to Year 2 one has to have obtained at least 30 credits (from a total of 60) from the First Year of Study, which must include either 'Statistics 1' or 'Research Methods'.

Moreover, to be allowed to participate in the Practical Training in Research (Course 2.5.a) one must have passed at least two of the three following courses: Course 1.3: 'Research Methods', Course 1.4.a: 'Writing an Article' and Course 1.4.b: 'Statistics 1'. Please note in planning your study programme that in Year 2 one can only get a proof of having passed Course 1.3 ('Research Methods') before the start of Course 2.5.a. The results of the tests for Courses 1.4.a and 1.4.b are only available after Course 2.5.a has started. Lastly, there is an admission requirement for participation in the practical training of Course 2.2.a: 'Psychopathology'. To be admitted, one must have proof of having complied with the attendance requirements for Course 1.6: Communication Skills'.

Eleum and Blackboard

Eleum stands for 'Electronic Learning Environment University Maastricht'. Amongst other things, it contains 'Blackboard': a (course) management system where all lecturers, tutors and students linked to a course can exchange information with one another. Blackboard provides the Course Manual for each course and when applicable, the e-reader. Some lecturers publish their digital presentations after the lectures and course coordinators provide the opportunity to be asked questions. In addition to gathering information and communicating with the course planning group and/or course coordinator, students can also communicate with each other via Blackboard.

Courses in English

Foreign students are encouraged to participate in first year courses. Course manuals are written in English except for the three skills courses and 'Research Methods', Statistics' and 'History'. The language used for lectures, tutorial group meetings and practical training sessions is Dutch. However, if a foreign exchange student wants to take part in a first year course, one of the tutorial groups will conduct its meetings in English. Dutch students may also apply to take part in the English groups.

Problem-Based Learning

As mentioned previously, education is offered in Maastricht according to the Problem-Based Learning (PBL) method. Here education is guided by problems that have been formulated by the lecturer beforehand. Students discuss these problems in small groups. After the group meeting each student finds literature that will provide answers and/or solutions to the problems. This implies that not all students have to read the same literature (see the next paragraph about 'Basic Textbooks').

Basic Textbooks

There are manuals or basic textbooks which give an introduction into the field of psychology. Although there is no course in the programme of study in which an overview of psychology is presented, one is advised to acquire such a book. It is 'simply practical' to have this to refer to as it will stand you in good stead throughout your study. Below is a list of recommended introductions.

There are also manuals or basic textbooks which offer an introduction in a particular theme or area of psychology. There are introductions in social, biological, developmental psychology and the psychology of perception, etc. This type of book is also recommended for each course. They provide information on the first steps for solving particular problems formulated in a course. To be able to solve these problems more satisfactorily one should also consult more specialised literature.

Some students find this difficult but others appreciate there being not only one basic textbook prescribed for a course. It is not necessary in the problem-based learning approach that all students in a tutorial group use the same basic textbook to acquire the needed knowledge on a particular theme or area in the field of psychology. There are several courses in which not only one but several basic textbooks similar in scope are recommended. The differences in content between these books is a matter of degree. Naturally, the styles also vary and one book is not necessarily better than the other. The book you prefer depends on your own taste. So you have the opportunity to choose!

In addition to the basic information in these textbooks, each course will have references to more detailed and differentiated information. This concerns literature that can be found in the Learning Resources Centre (often several copies of the same item) or made available to students by means of an electronic reader (the 'e-reader'). More extensive information about this can be found in the Course Manual and via 'Blackboard'.

If you are a member of the faculty association, 'Luna-tik' you can buy books at a discount.

E-mail: lunatik@psychology.unimaas.nl

It should be clear by now that not just one general introduction in the whole field of psychology has been selected. You can choose from many "Introductions". However, it is advisable to acquire one of the following:

- Gleitman, H., Fridlund, A.J., & Reisberg, D. (2004). Psychology (6th ed.), New York: Norton;
- Gray, P. (2002), Psychology (4th ed.). New York: Worth Publishers;

• Atkinson, R.L., Atkinson, R.C., Smith, E.E., Bem, D.J., & Nolen Hoeksema, S. (2000). *Introduction to psychology* (13th ed.). Fort Worth: Harcourt College Publishers.

Obligation to act as a Test Subject

Part of the Bachelor Examination requires a student to be a test subject for research in the faculty for 10 hours. This applies to research conducted by either students or members of staff in the faculty. The research may be conducted in the following situations: third year Bachelor students needing to do research for their Bachelor thesis or for electives; Master students doing a research apprenticeship or members of staff in the faculty doing their own research. The complete procedure can be found on Eleum. Registration of having complied with the requirements to be a test subject will take place in Year 3.

Overview of Bachelor Programme for Year 1

Period	Number of Weeks	Course			
Period 0	1	1.0	Academic and Professional Skills Introduction Problem-Based Lea		
Period 1	7	1.1a	Social Behaviour	1.1b	Body and Behaviour
Period 2	7	1.2a	Development and Learning	1.2b	Perception
Period 3	4	1.3	Research Methods		
Period 4	7	1.4a	Academic and Professional: Skills: Writing an Article	1.4b	Statistics I
Period 5	7	1.5a	History and Foundations of Psychology	1.5b	Complex Cognition
Period 6	4	1.6	Academic and Professional Skill	s: Commu	nication Skills

1.2 DESCRIPTION OF THE COURSES

Course 1.0: Academic and Professional Skills: Introduction Problem-Based Learning – 2 Credits

Coordinator: Wladimir van Mansum, Education Office, Phone (043) 388 4541, 40 Universiteitssingel East, Room 5.759, E-mail: whj.vanmansum@psychology.unimaas.nl

Description of the Course

Problem-Based Learning (PBL) is a unique characteristic of the education offered at the Universiteit Maastricht. The aim of this educational system is to form students for becoming independent problem solvers who can take initiative. In order to achieve this, the educational approach goes beyond traditional individual study and attending lectures. Students work together in small groups dealing with concrete problems from the field they are studying. They analyse a particular problem as a team, try and understand the underlying theories and learn to apply the insights thus acquired to known and realistic situations.

To function well in this educational system, some knowledge of the background and key elements is essential. During this course skills are learned and practised which are necessary for the proper running of the tutorial group meetings. The 'Seven Step Method' is practised for 4 meetings as well as the various roles necessary in a tutorial group. Skills for leading a discussion, summarizing information and giving feedback are also practised and taught. Having set personal learning goals, students can continue practising and improving their own skills during the subsequent periods of their study.

Practical training sessions on how to use computers and the library are also organised during this week.

Literature

This will be handed out.

Practical Training 1: Introduction Course on How to use a Computer

Coordinator: Enny Beerden, Education Office, Phone (043) 388 4009, 40 Universiteitssingel East, Room 5.759, E-mail: e.beerden@psychology.unimaas.nl

Students will gain basic knowledge about computer hardware and learn how to work with the Windows XP operating system and other frequently used programs In addition, the training sessions are used to ensure that each student has a basic operating level so that the ICT options provided by the Faculty of Psychology can be used. In this first training session students are introduced to the various ICT features used in the study of psychology.

Practical Training 2: Introduction on How to Use the Library

Coordinator: Vacancy

Explanations on how the University Library (in Dutch: 'UB') is organised and how it operates will be given. Moreover, the various ways of searching for an item in the library will be explained.

Instructional Approach

4 tutorial group meetings, 2 lectures, 2 practical training sessions

Form of Assessment

There is no examination. Proof of having complied with the requirements of the course will be given if 100% attendance has been observed.

Course 1.1.a Social Behaviour – 5 Credits

Coordinator: Harm Hospers, Experimental Psychology, Phone (043) 388 2399, 5 Universiteitssingel, Room 3.020, E-mail: h.hospers@psychology.unimaas.nl

Description of the Course

The study of social behaviour in the context of psychology takes place within the discipline of Social Psychology. Social Psychology does scientific study on the way in which people's behaviour, thoughts and feelings are influenced by others. The concept of social influence is at the heart of Social Psychology. People do not live in isolation but with other people. They influence others within these social structures and in turn are influenced by others themselves. There are plenty of examples of how people mutually influence one another: not taking any notice of others appears to be impossible. Being socially influenced is not limited to one's behaviour only. Our feelings and thoughts are also influenced by others. We will show that just the mere presence of others is sufficient to change one's interpretation of a situation. On the basis of 9 case studies, an introduction will be given in classical themes from the field of Social Psychology, e.g. altruism, conformity, attitudes and cognitive dissonance, and important areas for research, e.g. prejudices and stereotypes, social dilemmas and social cognition.

Explaining social behaviour is the main aim of the course. At the same time it is important that students do not underestimate the significance of the situation over against the characteristic features of the person.

Literature

Students are advised to study the relevant chapters and/or paragraphs from one of the recommended 'Introductions' (see the paragraph on Basic Textbooks above).

An introduction to a specific area of this course can be found in one of the following textbooks: (See also what is said under 'Basic Textbooks' above.)

- Aronson, E., Wilson, T.D., & Akert, R. M. (2005). Social psychology (5th Ed.). Upper Saddle River, NJ: Pearson Education;
- Myers, D.G. (2004). Social Psychology (8th Ed.). Boston: McGraw Hill;
- Gilovich, T., Keltner, D., & Nisbett, R.E. (2006). Social psychology. New York: W.W. Norton Company.
- An e-reader has been compiled with articles from scientific journals.

Practical Training 1: The Electronic Learning Environment

Coordinator: Enny Beerden, Education Office, Phone (043) 388 4009, 40 Universiteitssingel East, Room 5.759, E-mail: e.beerden@psychology.unimaas.nl

Students learn how to work with the electronic learning environment of the Universiteit Maastricht, Eleum: E-mail and the Internet. This is meant to guide students through the world of ICT. By using the information sources students will learn how to apply these for their studies. In addition, attention is paid to the aspect of safeguarding information and how we can contribute to this ourselves. During the training sessions formative tests will be carried out. The following aspects will be dealt with:

• EleUM (Blackboard);

- Internet;
- E-mail;
- Safeguarding Information.

Practical Training 2: Word Processing ('Word')

Coordinator: Enny Beerden, Education Office, Phone (043) 388 4009, 40 Universiteitssingel East, Room 5.759, E-mail: e.beerden@psychology.unimaas.nl

Students learn how to use the Word processing program in one session and do so by means of applying it in practical tasks relevant to their study. Proof of having complied with the requirements of the practical training will be obtained on the basis of sufficient mastery of this program and by having carried out the tasks satisfactorily. Students with experience in this program will finish more quickly.

Instructional Approach

10 tutorial group meetings, 6 lectures, 4 practical training sessions

Form of Assessment

The exam consists of 50 closed questions with an option of 3 answers each, of which 40 questions must be attempted.

Course 1.1.b Body and Behaviour - 5 Credits

Coordinator: Arie van der Lugt, Neurocognition, Phone (043) 388 2347, 40 Universiteitssingel East, Room 2.741, E-mail: arie.vanderlugt@psychology.unimaas.nl

Description of the Course

What are the causes of jetlag? Why do you feel like having a cup of soup? Why do smokers get hooked on cigarettes? These and other questions will be dealt with in the course Body and Behaviour. With the help of themes such as sexuality, eating and drinking, sleeping and being awake, addiction and emotions, explanations of behaviour which are primarily biological, will be studied in this course. Knowledge of the biological basis of behaviour is indispensable for psychologists.

The most important structure for explaining human behaviour is of course the brain. It is not an easy task to link the electrical and neurochemical activity in our brain to behaviour. This requires a thorough knowledge of neuroanatomy (how the various parts of the brain are linked to one another) and neurophysiology (how neurons work). Most of the first weeks of the course will be spent on (further) developing this basic knowledge. The chemical communication across larger distances in the human body with the help of hormones and the role of other parts of the human nervous system will also be dealt with during the various tasks. In addition, it will become clear that the bulk of our knowledge about the biological basis of human behaviour originates from research into lower-order animals. Even the nerves of invertebrates work according to the same basic principles. Much of the research into nerve-cells, for example, has been conducted with the nerves of the octopus as they are thicker and therefore easier to handle for research purposes. Similarly, research on animals provides an important source of information for biological psychology when focussing on simple models of our behaviour and when conducting research into evolutionary aspects.

Literature

Students are advised to study the relevant chapters and/or paragraphs from one of the recommended 'Introductions' (see 'Basic Textbooks' above).

An introduction to the specific area of this course can be found in one of the following textbooks: (See also 'Basic Textbooks' above.)

- Rosenzweig, M.R., Breedlove, S. M. & Watson, N.V. (2004). *Biological Psychology* (4th ed.). Sinauer Associates, Sunderland, MA;
- Wilson, J.F. (2003). Biological foundations of human behavior. Wadsworth/ Thompson Learning, London, UK;
- Kalat J.W. (2000). Biological psychology (9th ed.). Wadsworth/Thompson Learning, London, UK.

Students are encouraged to go and look for relevant (popular-) scientific articles. An e-reader has also been compiled.

Practical Training 1: Brain Anatomy

Coordinator: Jos Prickaerts, Neurocognition, Phone (043) 388 1026, 40 Universiteitsingel East, Room 2.737; or Phone (043) 388 1168, 50 Universiteitssingel, Room 1.110, E-mail: <u>j.prickaerts@psychology.unimaas.nl</u>

The practical training is primarily meant to acquaint the student with the most important anatomical terms and provide insight into the neuroanatomy of the brain and the location of the most important brain structures. This will be done with the help of a workbook and brain models. This practical training consists of two sessions.

Practical Training 2: Psychophysiology

Coordinator: Eric Vuurman, Neuropsychology, Phone (043) 388 1046, 40 Universiteitssingel East, Room 2.747, E-mail: eric.vuurman@psychology.unimaas.nl

By tracing the activity of the brain students will learn more about the relationship between mental effort and biological mechanisms. Introductory information on the psychophysiological methods used for this purpose will be provided. This practical training consists of one session.

Instructional Approach

10 tutorial group meetings, 6 lectures, 3 practical training sessions

Form of Assessment

The exam consists of 50 closed questions with an option of 3 answers each, of which 40 questions must be attempted.

Course 1.2.a Development and Learning - 5 Credits

Coordinator: Hanneke van Mier, Neurocognition, Phone (043) 388 4010, 40 Universiteitssingel East, Room 4.744, E-mail: h.vanmier@psychology.unimaas.nl

Description of the Course

The development and changes in psychological functions from birth to adolescence form the subject matter for this course. Attention will be paid to the most important theories and methods of research in developmental psychology. The aim of this course is to give an introduction into recent research findings in the area of developmental psychology. The ripening and development of the central nervous system is one of the subjects which will be studied (biological development). In addition, attention will be paid to the way in which children learn to observe and think (perceptual and cognitive development), in which context the developmental theory of Piaget will be discussed. The social and emotional development of the child will also be treated with issues such as the attachment to parents/guardians and the development of for example shame and aggression. Other important topics are language acquisition, information

processing and the development of social cognition. Although the main emphasis in this course is on normal development, deviant forms of development will be looked at, albeit to a lesser degree.

Development can be looked at as the changes in behaviour a child has to make resulting from the adjustments to the physical and social environment. These behavioural changes go together with changes in biological structures. Learning is a large contributory factor to this and learning processes such as habituation, operant conditioning and imitation will be discussed. It is simply amazing to see how a child who could barely do anything at birth, develops into an individual that moves, talks, understands and learns things within the space of a few years. If one does not yet realise how complex and manifold the changes are that children go through during their development and while learning things, this course hopes to instil this.

Literature

Students are advised to study the relevant chapters and/or paragraphs from one of the recommended 'Introductions' (see 'Basic Textbooks' above).

An introduction to the specific area of this course can be found in one of the following textbooks: (See also' Basic Textbooks' above.)

- Bee, H. & Boyd, D. (2004). The developing child (10th ed). Boston: Pearson/Allyn and Bacon;
- Bukatko & Daehler (2004). Child development. (5th ed). Boston: Houghton Mifflin Company;

• Siegler, R. S., Deloache, J. S., & Eisenberg, N. (2006). How children develop. (2nd ed). New York: Worth.

An e-reader has been compiled. Students are expected to read the chapters and articles in this reader.

Practical Training: Learning

Coordinator: Remco Havermans, Experimental Psychology, Phone (043) 388 4053, 40 Universiteitssingel East, Room 3.735, E-mail: <u>r.havermans@psychology.unimaas.nl</u>

The practical training consists of a computer task, carried out almost completely independently. The student learns operant conditioning on the computer. By manipulating a number of variables and observing the effects of these, the student will acquire insight into the way operant conditioning takes place. Written questions have to be answered during the practical training.

Practical Training: Observing

Coordinator: Petra Vlamings, Neurocognition, Phone (043) 388 4537, 40 Universiteitssingel East, Room 4.735, E-mail: p.vlamings@psychology.unimaas.nl

With the help of computer tasks the student learns to observe systematically. During the practical training written questions have to be answered

Instructional Approach

10 tutorial group meetings, 7 lectures, 2 practical training sessions

Form of Assessment

The exam consists of 50 closed questions with an option of 3 answers each, of which 40 questions must be attempted.

Course 1.2.b Perception - 5 Credits

Coordinator: Milene Bonte, Neurocognition, Phone (043) 388 4036, 40 Universiteitssingel East, Room. 4.777, E-mail: m.bonte@psychology.unimaas.nl

Description of the Course

How is the great number of sensory stimuli that come at us at any given moment, transformed by our brain into a coherent perception of the world around us? The self-evident manner in which we perceive our daily environment, look at a movie, or recognise a friend's voice on the phone, gives the impression that perception is a simple and effortless process. This efficiency and self-evidence of perception is all the more amazing when trying to form a picture of the complexity and diversity of our senses, and especially of the impressive organisation of millions of neurons in the brain, which process the continuous stream of sensory stimuli.

This course deals with the basic principles and functions of perception. It begins with an introduction about several central characteristics of perception and about methods that can be used to conduct research into perception. After this we will study these characteristics in some detail by looking at the part of our perception studied most, viz. the visual system. By studying visual illusions, the effects of brain damage and recent research into neuroimaging, students learn how our brain processes visual stimuli which fall onto our retina resulting in the perception of colour, contrast, depth and objects. Subsequently, other modalities such as the auditory system and touch will be dealt with and possible explanations will be given for the buzzing in one's ears after going to the disco. At the end of the course we will return to some basic principles that came up during the course.

Literature

Students are advised to study the relevant chapters and/or paragraphs from one of the recommended 'Introductions' (see 'Basic Textbooks' above).

An introduction to the specific area of this course can be found in one of the following textbooks as well as in articles/chapters from the e-reader. (See also 'Basic Textbooks' above.)

- Goldstein, E.B. (2007). Sensation and Perception (7th Ed.). Hartford: Wadsworth Publishing;
- Wolfe, J.M. et al. (2006). Sensation and Perception. Sunderland: Sinauer associates, Inc.

Practical Training: Perception

Coordinator: Bert Jans, Neurocognition, Phone (043) 388 2349, 40 Universiteitssingel East, Room 2.765, E-mail: bert.jans@psychology.unimaas.nl

Students will become acquainted with various perception phenomena that cannot be experienced only via the printed word or computer. More specifically, the perception of smell and of depth and various visual and auditory illusions will be dealt with.

Instructional Approach

10 tutorial group meetings, 7 lectures, 1 practical training session

Form of Assessment

The exam consists of 50 closed questions with an option of 3 answers each, of which 40 questions must be attempted.

Course 1.3 Research Methods – 6 Credits

Coordinator: Chantal Nederkoorn, Experimental Psychology, Phone (043) 388 1925, 40 Universiteitssingel East, Room 3.735, E-mail: c.nederkoorn@psychology.unimaas.nl

Description of the Course

One needs to conduct research in order to gather knowledge. Research therefore occupies an important place in psychology. This research needs to be conducted in the proper manner for it to be informative. First of all, the measuring devices (e.g. questionnaires or observation of behaviour) must be reliable and able to really measure what they are supposed to. Secondly one has to try to exclude alternative explanations for one's findings. This requires a proper research design (e.g. making use of control groups). Finally one must report the results of one's research appropriately. In this course students will become acquainted with some of the most important research methods and with some statistical techniques used to describe the results. This is not only important for the purpose of doing research at a later stage in one's studies, but also for being able to understand and critically assess the literature during one's entire period of study.

The following topics will be dealt with:

- Characteristics of science and the empirical cycle;
- Measures of central tendency and variance;
- Questionnaires and observations, reliability and validity of measurements and selection of test subjects;
- Coherence: cross tabulation and correlations;
- Linear regression;
- The experiment and problems of control;
- Various research designs;
- Ethics and Research.

Literature

- A basic textbook (basic textbooks) on Research Methods still to be specified;
- Moore, D.S., & McCabe, G.P. (2005). *Introduction to the practice of statistics*, 5th ed. New York: W.H.Freeman and Company.

An e-reader and a workbook have been compiled.

Practical Training: Research and Empirical Data

Coordinator: Fren Smulders, Experimental Psychology, Phone (043) 388 1909, 40 Universiteitssingel East, Room 3.744, E-mail: <u>f.smulders@psychology.unimaas.nl</u>

Knowledge of proper methods and correct calculations will be applied in a practical training session where students in small groups will collect empirical data on the basis of the presentation of a particular question. This will be analysed with the help of the statistical techniques dealt with in this course. Finally, each small group of students will write a brief research report, containing an introduction of the topic, methods of research, results and a conclusion.

Instructional Approach

11 tutorial group meetings, 7 lectures, 1 seminar, 2 practical training sessions.

Form of Assessment

The exam consists of 50 closed questions with an option of 3 answers each, of which 40 questions must be attempted.

Please note 1: Successful completion of either Course 1.3 'Research Methods' or Course 1.4.b 'Statistics 1' is an entrance requirement for Year 2.

Please note 2: Successful completion of at least two of the three following courses: 1.3 'Research Methods', 1.4.a 'Writing an Article' and 1.4.b 'Statistics 1', is a requirement for taking part in Course 2.5.a: 'Practical Training in Research'.

Course 1.4a Academic and Professional Skills: Writing an Article - 5 Credits

Coordinator: Nico Metaal, Experimental Psychology, Phone (043) 388 4514, 40 Universiteitssingel East, Room 3.732a, E-mail: n.metaal@psychology.unimaas.nl

Description of the Course

This course makes a start with acquiring one of the most important and common academic skills: to report in writing or simply 'writing'. Training this skill will focus on the writing of an article. The aim of this course is the writing of a scientific article with the main structure consisting of a beginning (posing the question/problem), the main body (answer to the question/problem) and a conclusion (the discussion). The following elements of this skill will be dealt with:

- searching for scientific literature (see also under Practical Training 1);
- writing in keeping with the rules of Dutch orthography (spelling, sentence construction, use of paragraphs, readability);
- compiling a bibliography and including literature references in the text;:
- lay-out of an article (see also under Practical Training 2).

The course starts with a number of writing exercises, followed by each student writing an article in three phases: the design, the first draft and the final version. The final version should be about 2000 words.

Literature

• The syllabus *Academic Writing Skills:* Manual for writing instruction for psychology students. An e-reader has been compiled.

Practical Training 1: The Electronic searching for Literature

Coordinator: vacancy

Practical Training 1 consists of an electronic search for literature. Students learn how to systematically search in literature data banks in the Computer Room. The emphasis will be on PsycINFO and on other search methods, e.g. PubMed. Internet searches will also be dealt with. Attention will be paid to search orders, selection of relevant files, assessing search results, requesting the full texts (e.g. via e-journals) and storing information. This demonstration given to three combined tutorial groups, will be alternated with tasks the students carry out in pairs on the computer. Proof of having complied with the requirements of the course will be given on the basis of attendance registration and the assessment of the exercises that were done.

Practical Training 2: Making Templates in Word

Coordinator: Enny Beerden, Education Office, Phone (043) 388 4009, 40 Universiteitssingel East, Room 5.759, E-mail: <u>e.beerden@psychology.unimaas.nl</u>

Practical Training 2 consists of making Templates in Word. By using some examples, the impact of using certain fonts, the length and distance between lines for readability will be shown. Attention will also be paid to the correct use of punctuation in Dutch texts. Finally the literature conventions of APA will be introduced, according to which a bibliography must be compiled and literature references in the text must be presented. Knowledge of the above will be applied in making various templates in Word, that can be used throughout one's study. Proof of having complied with the requirements of the course will be obtained on the basis of attendance registration and the assessment of the templates which have been submitted.

Instructional Approach

Some lectures are part of the course. In addition there will be 5 tutorial group meetings. The last three meetings will be completely devoted to feedback on the design, the first draft and the final version of the article respectively.

Form of Assessment

The mark awarded by the tutor for the final version of the article, counts as the mark for the course. The final version of the article will be assessed on its content, lay-out and language usage. The quality of the design of the article and the first draft will be taken into account in the assessment, as well as the way in which the student dealt with the feedback from the tutor.

The mandatory attendance will be complied with if one has attended all five tutorial group meetings and has submitted the design and first draft of the article in time. There are also conditions for participating in a re-sit. One can only partake in a re-sit if the final version of the article has been submitted before the deadline. If this is not the case, the course will have to be redone at a future date.

Please note: Successful completion of at least two of the three following courses: 1.3 'Research Methods', 1.4.a 'Writing an Article' and 1.4.b 'Statistics 1', is a requirement for taking part in Course 2.5.a: 'Practical Training in Research'.

Course 1.4.b Statistics I – 7 Credits

Coordinator: Nick Broers, Faculty Office, Phone (043) 388 1929, 40 Universiteitssingel East, Room 5.743; or Phone (043) 388 2274, 1 Debyeplein, Room B2.03, E-mail: <u>nick.broers@stat.unimaas.nl</u>

Description of the Course

The student is familiarised with various forms of psychological research during the first year. On the basis of their research findings, psychologists accept or reject various theories. They justify their decisions by referring to the collected data statistically processed. Therefore a correct understanding of statistics is necessary to be able to appreciate the claims made by psychologists.

The course consists of six modules, each lasting a week. The first three modules provide a theoretical basis for inferential statistics and the last three principally deal with the practical application of this. Each module consists of a combination of a lecture, one or two tutorial group meetings, a SPSS practical training session and a seminar. The programme is made up as follows:

- module 1: Probability Calculations and Variables;
- module 2: Sample Distributions;
- module 3: Testing and Estimating;
- module 4: the T-Test;
- module 5: Variance and Analysis
- module 6: Chi-Square Tests.

Literature

- Moore, D.S. & McCabe, G.P. (2006). *Introduction to the practice of statistics* (5th Ed.). New York: Freeman and Company.
- Syllabus SPSS in practical steps.

Practical Training: SPSS

Coordinator: Nick Broers, Faculty Office, Phone (043) 388 1929, 40 Universiteitssingel East, Room 5.743; or Phone (043) 388 2274, 1 Debyeplein, Room B2.03, E-mail: <u>nick.broers@stat.unimaas.nl</u>

Psychologists working with statistics, seldom calculate something manually, but rather use statistical software to produce the required analyses. The program which is used most often is SPSS (Statistical Package for the Social Sciences). In the first three training sessions, students learn to use the program correctly and familiarise themselves with the numerous possibilities SPSS offers the user. In the last three practical training sessions, students will analyse data from existing research and subsequently explore the underlying theory.

Instructional Approach

There are six modules, each lasting a week. The main outline of each module will initially be presented in lecture form. Then there will be written and computer assignments, which will be discussed in the tutorial group meetings. There will also be SPSS practical training sessions each week. The first three sessions will provide a general introduction to the possibilities of the SPSS program. As of the fourth week, students will use psychological cases and with the use of the SPSS program, compile statistical data to find responses to research questions. Each module will be concluded with a seminar.

Form of Assessment

The exam consists of 18 triple-choice questions.

Please note 1: Successful completion of either Course 1.3 'Research Methods' or Course 1.4.b 'Statistics 1' is an entrance requirement for Year 2.

Please note 2: Successful completion of at least two of the three following courses: 1.3 'Research Methods', 1.4.a 'Writing an Article' and 1.4.b 'Statistics 1', is a requirement for taking part in Course 2.5.a: 'Practical Training in Research'.

Course 1.5.a History and Foundations of Psychology – 5 Credits

Coordinator: Rob de Vries, Neurocognition, Phone (043) 388 1894, 40 Universiteitssingel East, Room 4.767, E-mail: <u>r.devries@psychology.unimaas.nl</u>

Description of the Course

This course consists of two parts: Theory of Science and History of Psychology.

Theory of Science

Why does modern man believe evolutionary biologists and physicists rather than Greek mythology and the great monotheistic religions, when thinking about the origin of the universe and of man? Why do we go to the GP and not to Yomanda? Why do we believe a psychologist and not an astrologist? The reason is that the evolutionary biologist, the physicist, the GP and the psychologist are representatives of a scientific approach to life and as scientists, they command more credibility than others. Is this claim justified? What is so special in science and how does it distinguish itself from non-science? These types of questions are daily fare for the philosophy of science and theoreticians. In order

to provide an answer to these questions, the following theories will be discussed:

- Inductivism
- Critical Rationalism (falsificationism)
- The Paradigm Theory of Thomas Kuhn
- The Theory of Scientific Research Programmes of Imre Lakatos

Reflection on science and on life is always worthwhile. To quote Socrates (who, of course, spoke Greek): "The unexamined life is not worth living."

History of Psychology

A well known saying by Edmund Burke says: "Those who don't know history are destined to repeat it."

Psychologists are a quarrelsome lot. The one will often find it nonsense what the other says. Each time again the discipline of psychology seems to fall apart in schools of thought which are at war with one another. When you think at a particular point in time about one or other idea form the area of psychology: "What nonsense", many have thought the same before you. Others again would contradict that. It would be taking it too far to say that there is nothing new under the sun, but much of what has been said in the past looks very much like what is said now.

- In the historical part of the course the following topics are specifically dealt with:
- the causes of the scientific revolution from the perspective of its content, and its social and institutional aspects;
- the origins of psychology resulting from the rise of the modern natural sciences during the scientific revolution;
- the body-mind problem resulting from the scientific revolution;
- the rise and the role of experiments and of the laboratory in psychology;
- evolution theory and the continuity between man and animal

Literature

- Boon, L. (1998). *Geschiedenis van de psychologie* (7e druk). Meppel: Boom.
- Alan Chalmers. (2004) What is this thing called Science. Open University Press

An e-reader has been compiled. Er is een e-reader samengesteld.

Instructional Approach 10 tutorial group meetings, 7 lectures

Form of Assessment The exam consists of 10 open questions.

Course 1.5.b Complex Cognition – 5 Credits

Coordinator: Herco Fonteijn, Experimental Psychology, Phone (043) 388 1907, 40 Universiteitssingel East, Room 3.742, E-mail: <u>h.fonteijn@psychology.unimaas.nl</u>

Description of the Course

Human cognition can be seen as the 'quick' way in which we adapt ourselves to the changing circumstances in our environment, along with the 'slower' methods of genetic mutation and (operant) learning. This course offers an introduction to higher cognitive processes such as knowledge acquisition and knowledge representation, reasoning, decision making, problem solving and language. Students familiarise themselves with models of the information processing system that may be at the basis of the cognitive processes just mentioned. We start the course with an introduction to the theme of 'attention'. How can attention help us to deal efficiently with the information from our external and internal environment, and what happens when attention fails? Knowledge and language form the second theme. Relevant questions here are: In what way do we use knowledge when interpreting the world around us? How do we store the meaning of words? How do we recognise words when reading a text? How do mistakes in speech occur? How is it possible that we can detect the intention of a speaker, given the incomplete, often ambiguous manner of expressing ourselves (think of somebody telling a joke)? Another topic is thinking, which leads to questions such as: Are there patterns which can be recognised in the way we reason? How rational is the person who takes a decision? What is needed to make proper plans? What influence does culture have on cognitive processes? Finally, meta-cognition will be focussed on: What role does the ability to reflect on oneself, on one's actions and on the environment, play in developing expertise or in accumulating of what is called in positive psychology, wisdom? In passing it will be pointed out where theories about complex cognitive processes contribute to developments in applied psychological disciplines. For instance, attention will be paid to the diagnostics of dyslexia, research on the loss of executive functions during the aging process and the development of leadership.

Literature

• Parts from introductory textbooks in the Learning Resources Centre. An e-reader had been compiled.

Practical Training: Measurement of Complex Cognitions

Coordinator: Petra Hurks, Neurocognition, Phone (043) 388 4269, 40 Universiteitssingel East, Room 2.747, E-mail: <u>p.hurks@psychology.unimaas.nl</u>

The practical training aims at familiarising students with the different experimental designs commonly used in the field of complex cognition, and will support the reading which has to be done for this course. A number of frequently used experimental and clinical paradigms will be reviewed in the two sessions of the practical training. The practical training

covers:

- Timing of processes: mental rotation (Shepard & Metzler), the Stroop colour-word-test and an alternative test for selective
- attention;
- Planning, executive function: Tower of London, Wason selection task.

The information given will explain what the experimental possibilities of these tasks are and what the clinical neuropsychological use entails. Age norms will be provided on the basis of which students can test some fellow-students.

Instructional Approach

10 tutorial group meetings, 7 lectures, 2 practical training sessions

Form of Assessment

The exam consists of 100 true-false questions with the option of putting in a question mark.

Course 1.6 Academic and Professional Skills: Communication Skills - 6 Credits

Coordinator: Rob Markus, Experimental Psychology, Phone (043) 388 2474, 40 Universiteitssingel East, Room 2.777a, E-mail: <u>r.markus@psychology.unimaas.nl</u>

Description of the Course

It is essential to be able to communicate effectively with others, both in private as well as in business situations. The way one conducts oneself professionally and in social settings is largely determined by the way one communicates and presents oneself. Therefore, the general aim of this course is to increase our knowledge and skill for communicating effectively in conversations, discussions and presentations. The training has a theoretical as well as a practical aspect to it, consisting of a basic textbook, various articles and a number of tutorial group meetings.

The theoretical section will increase one's knowledge and insight into the general basic skills required for communication. These are: listening skills (e.g. asking questions, paraphrasing, summarising and reflecting of feelings), managing skills (e.g. starting a discussion and determining goals, clarifying, structuring and closing a discussion) and transmitting skills (e.g. giving information, making requests, assigning tasks, giving and reacting to feedback and criticism). In the practical training students will use role plays to have these basic skills function in models for conversation (e.g. interviews) and group communication situations (e.g. discussions and presentations). The last sessions will be devoted to presentation techniques. The aim of the course is to acquire knowledge and insight into communication skills and how they can best be applied in various conversational settings and presentations.

Literature

• Molen, H.T. van der, Kluytmans, F., & Kramer, M. (1995). *Gespreksvoering, vaardigheden en modellen*. Groningen: Wolters-Noordhoff.

An e-reader has been compiled.

Practical Training 1: Presentation

Coordinator: Rob Markus, Experimental Psychology, Phone (043) 388 2474, 40 Universiteitssingel East, Room 2.777a, E-mail: <u>r.markus@psychology.unimaas.nl</u>

Students have to prepare a presentation for this practical training on the topic they wrote a paper on in Course 1.4.a: Academic and Professional Skills: Writing an Article. During the course students will practise their presentation skills during two sessions. Finally they will have to give a final presentation at the last session.

Practical Training 2: PowerPoint

Coordinator: Enny Beerden, Education Office, Phone (043) 388 4009, 40 Universiteitssingel East, Room 5.759, E-mail: <u>e.beerden@psychology.unimaas.nl</u>

The practical training on Power Point is an introduction into a program for visual support for oral presentations.

Instructional Approach

6 tutorial group meetings (meeting 1-6) in which basic skills for conducting a conversation will be dealt with, 3 practical training sessions on giving presentations, 1 practical training session on Power Point, 3 lectures.

Form of Assessment

The exam consists of 25 multiple choice questions in the exam proper, and 4 individual evaluations on conversation tasks which will take place at various points during the course.

Please note: Proof of having attended Course 1.6 is an admission requirement for taking part in the practical training of Course 2.2.b 'Psychopathology' (see General Information from Chapter 1.).

Bachelor Programme, Year 2

2.1 GENERAL INFORMATION

The first year of the Bachelor Programme in Psychology provided the student with an overview of a number of important parts in the field of psychology and familiarised him/her with Research Methods for research (including statistics). In addition, training was given in some academic and professional skills. When relevant, specific attention was paid to Biological and Cognitive Psychology. The second year will continue with this approach.

Courses

Firstly, there are courses that familiarise students further with important parts and / or themes from the field of psychology. These are the courses 2.1.a: 'Memory', 2.1.b: 'Personality and Differences between People', 2, 2, b: 'Psychopathology', 2.4.a: 'Consciousness' en 2.4.b: 'Cognitive Science'. Secondly, students will be introduced further into statistics in Course 2.5.b: Statistics II'. Thirdly, the second year will make a start with a more competence based approach to education and learning. After completing their studies, students should have developed certain skills. Many of these cannot be translated into marks for a particular course; rather they are gradually developed during the course of various education and learning activities both within and outside their studies. In the first week of the second year (Course 2.0) students look back on the first year and evaluate their progress in a number of academic and professional competencies. This evaluation will be reported on in a Portfolio so that a student can be helped to improve the level of competency where necessary or even excel at these as the study progresses. Course 2.2.a: 'Critical Thinking' has academic core skills such as reasoning, arguing and judging as the central theme. Course 2.3 familiarises students with the mental discipline of programming. Finally, students have to integrate the academic and professional skills acquired during the first two years of study. This will be looked at in the research course, Course 2.5.a where students in small groups go through the complete cycle of designing, conducting, analysing and reporting a piece of research.

Timetable

The structure of the timetable of the second year is basically the same as in the first year (see the text '1.1 General Information', which precedes the overview of the courses of the first year of study).

Admission to the third year of study

In order to be admitted to the third year of study, one must have obtained all the credits (60) for the first year of study.

Courses in English

The courses which can be done by foreign exchange students are 2.1.a: 'Memory', 2.1.b: 'Personality and Differences between People', 2.2.b: 'Psychopathology' and 2.4.a: Consciousness'. The course manuals of these courses have been written in English. The medium of instruction during the lectures, the tutorial group meetings and the practical training sessions is Dutch. Only if a foreign exchange student signs up for a first year course will one tutorial group be conducted in English. If this is the case, Dutch students may also sign up for such a group (or groups).

Basic Textbooks

In the second year less use will be made of basic textbooks. However, if there are good basic textbooks available for a certain course, more than one may be prescribed as was the case in the first year. One might be able to choose from three or four similar books. Make your choice in accordance with your personal judgment.

In addition to the information found in the basic textbooks, each course will have references to more detailed and differentiated information in other material. This refers to literature either can be found in the Learning Resources Centre or made available to students by means of an electronic reader (the 'e-reader'). More extensive information about this can be found in the course manual of each course and via 'Blackboard'.

If you are a member of the faculty association 'Luna-tik', you can buy study books at a discount. E-mail: **lunatik@psychology.unimaas.nl**

Obligation to act as a Test Subject

A part of the Bachelor examination requires that a student serves as a test subject for research in the faculty for 10 hours. This pertains to research conducted by students or members of staff in the faculty. The research may be conducted in the following situations: third year Bachelor students needing to do research for their Bachelor thesis or for electives, Master students doing a research apprenticeship or members of staff in the faculty doing their own research. The complete procedure can be found on Eleum. Registration of having complied with the requirements of the obligation to act as a test subject will take place in Year 3.

Overview of Bachelor Programme for Year 2

Period	Number of Weeks	Course	
Period 0	1		2.0 Academic and Professional Skills: Portfolio Year 2
Period 1	7	2.1a	Memory 2.1b Personality and Differences between People
Period 2	7	2.2a	Academic and Professional: 2.2b Psychopathology Skills: Critical Thinking
Period 3	4		2.3 Academic and Professional Skills: Programming
Period 4	7	2.4a	Consciousness 2.4b Cognitive Science
Period 5	7	2.5a	Practical Training in Research 2.5b Statistics II
Period 6	4		2.5.a Practical Training in Research

2.2 DESCRIPTION OF THE COURSES

Course 2.0 Academic and Professional Skills: Portfolio Year 2 – 2 Credits

Coordinator: Marieke Kools, Experimental Psychology, Phone (043) 388 2475, 5 Universiteitssingel, Room 2.019, E-mail: <u>m.kools@psychology.unimaas.nl</u>

Description of the Course

The aim of the Portfolio is both to offer the student the opportunity to monitor, oversee and steer one's own development throughout the curriculum as well as to acquire the competence for on-going self development. In this course students start to draw up a portfolio, which will have to be updated regularly in the further course of their study. Students work independently on their portfolios. In a practical training session attention will be paid to formulating proper learning objectives. The portfolio will be taken further in course 3.0 in Year 3 of the Programme of Study.

Literature Various articles.

Instructional Approach 1 lecture, 1 practical training session.

Form of Assessment Portfolio.

Course 2.1.a Memory – 5 Credits

Coordinator: Marko Jelicic, Experimental Psychology, Phone (043) 388 1904, 40 Universiteitssingel East, Room 3.736, E-mail: <u>m.jelicic@psychology.unimaas.nl</u>

Description of the Course

This course is meant to give students insight into an integral and indispensable aspect of all information processing systems: How does memory work?

Various and qualitatively different forms of memory are needed to make the wide range of cognitive functions possible, which we perform continuously and without effort. The recollection of an experience from our youth makes different demands on a cognitive system than finding a bicycle in a shelter. Cognitive and neurobiological aspects of learning, remembering and forgetting are all discussed extensively. Attention will also be paid to the cognitive processes that play an important role in a normally functioning memory, i.e. attention, planning and (re)constructing. Firstly, attention is paid to Baddeley's influential Working Memory Model. The tasks that follow emphasize either neurobiological or cognitive models of memory. A number of tasks will deal with theories on the link between the workings of the brain and memory. For the cognitive aspects, views about encoding, storing and recalling memories will be dealt with. In addition to these processes, various kinds of memory are looked at (autobiographical memories or memory without consciousness). Neurobiological insight for remembering and forgetting are closely linked to the cognitive theories in certain instances, but at times recent findings (especially) refute the standard models.

Literature

Students are advised to study the relevant chapters and/or paragraphs from one of the recommended 'Introductions' (see the paragraph on Basic Textbooks above). There is no basic textbook on memory. An e-reader has been compiled.

Furthermore students are advised to read a number of chapters from: *Neath, I. & Suprenant, A.* (2002). *Human memory: An introduction to research, data and theory.* Pacific Grove, CA: Brooks/Cole.

Practical Training: Testing of Memory Functions

Coordinator: Petra Hurks, Neurocognition, Phone (043) 388 4269, 40 Universiteitssingel East, Room 2.747, E-mail: p.hurks@psychology.unimaas.nl

The emphasis placed on the neurobiological and the cognitive aspects of memory is also worked with during the practical training. A lot of attention is paid to the testing of memory functions as it is done in neuropsychological practice. For this purpose students will practise with one another by administering a series of tests (the 15-word learning test, Digit Span, etc.). At the same time they will learn what a number of memory patterns from the cognitive tradition feel like.

Instructional Approach

10 tutorial group meetings, 6 lectures, 2 practical training sessions

Form of Assessment

The exam consists of 50 closed questions with an option of 3 answers each, of which 40 questions must be attempted.

Course 2.1.b Personality and Differences between People - 5 Credits

Coordinator: Nico Metaal, Experimental Psychology. Phone (043) 388 4514; 40 Universiteitssingel East; Room 3.732a; E-mail <u>n.metaal@sychology.unimaas.nl</u>

Description of the Course

Anyone who has completed the first year courses knows that a diversity of causes underlie human behaviour such as 'the brain', 'the situation', 'information processing mechanisms', etc. It is remarkable that the explanation for our behaviour most often used in daily life is missing: 'character'. For example, the behaviour of someone who likes having people around and is able to study hard at the same time is usually attributed to characteristics such as being extravert or ambitious. According to current opinion in Western culture, people's behaviour is steered by suchlike characteristics, dispositions, traits or qualities. The constellation of these characteristics is called personality.

People differ from one another and this aspect of human functioning has received little attention as yet. The first year shows that psychologists appear to be primarily interested in general patterns. They pose questions like: how do people influence each other, how is information processed, etc. This is not about certain individuals, e.g. Floris or Marjoram, but rather about the human species as a whole. However, this course will pay attention to individual differences. The themes of 'personality' and of 'differences between people' are closely linked. When important psychological differences have a supervised in the second part of the provided by the provided

differences between people are mentioned in everyday life, this usually happens in the context of characteristics. People are quiet or noisy, approachable or distant, etc. Personality does not only explain human behaviour in general, but individual differences are also explained by the constellation of personality characteristics.

This course will deal with the 'great' theories about personality as well as with theories about the psychologically speaking most important differences between people. Moreover attention will be paid to how differences in personality are measured. Finally, one of the best-known personality characteristics – intelligence - will be further examined. In this both scientific and social controversies will be gone into.

Literature

Students are advised to study the relevant chapters and/or paragraphs from one of the recommended 'Introductions' (see the paragraph on Basic Textbooks above).

An introduction in the specific area of this course can be found in one of the following textbooks: (See also what is said under the heading Basic Textbooks above.)

- Carver, C.S., & Scheier, M.F. (2004). *Perspectives on personality* (5th ed.). Boston, Mass.: Allyn and Bacon/Pearson Education;
- Funder, D.C. (2004). The personality puzzle (3rd ed.). New York: Norton;
- Larsen, R.J., & Buss, D.M. (2002). *Personality psychology. Domains of knowledge about human nature*. New York: McGraw-Hill;

• Pervin, L.A., Cervone, D., & John, O.P. (2005). *Personality: Theory and research* (9th ed.). New York: John Wiley & Sons. An e-reader has been compiled.

Practical Training: Measurement of Psychological Differences

Coordinator: Anton de Vries, Neurocognition, Phone (043) 388 4043, 40 Universiteitssingel East, Room 4.765, E-mail: <u>a.devries@psychology.unimaas.nl</u>

Description

The aim of this practical training is to give students a first experience in administering, processing and interpreting questionnaires and tests. Students will become acquainted with certain methods for psychological 'assessment'. They will complete and interpret themselves (parts of) a test and a questionnaire which are discussed during the course. Use

will be made of an intelligence test and a personality questionnaire. The reliability and validity of measurements will also be looked at. Finally, students will be familiarised with the various modalities used for conducting psychological research into people's characteristics.

Instructional Approach

10 tutorial group meetings, 5 or 6 lectures, 2 practical training sessions.

Form of Assessment

The exam consists of 50 closed, triple-choice questions, of which 40 must be attempted.

Course 2.2.a Academic and Professional Skills: Critical Thinking – 5 Credits

Coordinator: Arie van der Lugt, Neurocognition, Phone (043) 388 2347, 40 Universiteitssingel East, Room 2.741, E-mail: <u>a.vanderlugt@psychology.unimaas.nl</u>

Description of the Course

Socratic testing! Recommended by philosophers and educationalists! Critical thinking is more than a critical attitude: it is a collection of complex cognitive skills. Some of these skill-components are: interpreting and clarifying meaning, analysing ideas and arguments, evaluating statements and arguments, drawing conclusions, questioning evidence and thinking of alternative conclusions and presenting arguments.

The emphasis in this course will be on further developing two skills. Firstly, we will practise extensively with analysing ways of reasoning, training in informal logic or language mastery if you like. These analyses of arguments lead to a better understanding of implicit and explicit ways of reasoning in pieces of text, discussions, public debates and scientific articles. Secondly, we will familiarise ourselves with the basic principles from classical and modern logic. These more formal logical tools will also be practised extensively, both in tutorial group meetings and independently at home. This basic knowledge of logic will stand us in good stead when exposing false logic. Fallacies such as the well-known: "I fit into my coat, my coat fits into my bag, hence I fit into my bag" also occur often in scientific articles. An example of this is the argument in which certain skills of crows (counting) are, via a middle term (calculating), promoted to being a proof that animals possess complex skills (animals are able to do maths). As one can see: also the products of science have to be sold!

During and at the end of the course we will practise in a more informal manner the two basic skills of analysing arguments and reasoning logically. We will do this in two debates, a practical training with the help of a poster, a number of puzzles and an analysis of scientific texts. This will give an opportunity to practise many of the practical skills which are important for critical thinking.

Literature

• Hurley, P. J. (2006). *A concise introduction to logic* (9th ed.). London, UK: Wadsworth/Thompson. An e-reader has been compiled.

Practical Training: (Pseudo-)Scientific Debate

Coordinator: Herco Fonteijn, Experimental Psychology, Phone (043) 388 1907, 40 Universiteitssingel East, Room 3.742, E-mail: <u>h.fonteijn@psychology.unimaas.nl</u>

Within an electronic working environment, the members of the group collect arguments for and against a central proposition taken beforehand from a (pseudo) scientific debate. They determine the strength and credibility of these arguments and order all this in a visual scheme (an argument 'map'). This visual representation of the state of the debate is presented by means of a poster to one's fellow students and is explained in short. Fellow students will assess the poster and the presentation. On condition that this assessment does not deviate much from the assessment by a lecturer, this assessment from fellow students will hold for each member of the group, except for those who have not contributed significantly to the realization of what has been done.

Instructional Approach

10 tutorial group meetings, 5 or 6 lectures, 2 practical training sessions.

Form of Assessment

The exam consists of 30 multiple choice questions.

Course 2.2.b Psychopathology – 5 Credits

Coordinator: Sandra Mulkens, Experimental Psychology, Phone (043) 388 4052, 40 Universiteitssingel East, Room 3.755, E-mail: <u>s.mulkens@psychology.unimaas.nl</u>

Description of the Course

The course on Psychopathology is about disturbed, strange, maladjusted, abnormal behaviour. On the basis of case descriptions and results from current experimental research, important clinical notions are studied, such as e.g. various anxiety disorders, eating disorders, addictions, mood disturbances and psychotic disorders.

Questions which will be posed time and again during the course are: What does the clinical picture look like, where does the boundary lie between normal and abnormal, how often does this disorder occur, how does a disorder come about and what can be done about it? It is important in this respect to find out why one person gets the disorder and another does not. When these matters are discussed, students will be familiarised with all kinds of psychotherapy and pharmacotherapy. What happens in such a therapy and how effective is it?

Students will hopefully see that there is not only a large gap between theory and practice, between clinical treatment and scientific thought, but there are also different theoretical 'schools' of thought. These schools explain / treat psychological disorders according to their specific theory. Here, they base themselves not on empirical findings, but on ideology. The (rhetorical) question is whether this is a desirable situation.

When the course is finished the student will know the following about the most common psychological disorders: the clinical picture and the diagnostic criteria, the theories about their aetiology, the empirical findings which either support or refute the theory, the common treatments and the effectiveness of these therapies.

Literature

Students are advised to study the relevant chapters and/or paragraphs from one of the recommended 'Introductions' (see the paragraph in Chapter 1 on Basic Textbooks above). In addition students will make use of various scientific articles which partly have been provided in an e-reader and partly are looked for by the students themselves.

Practical Training:Complaint Anamnesis

Coordinator: Sandra Mulkens, Experimental Psychology, Phone (043) 388 4052, 40 Universiteitssingel East, Room 3.755, E-mail: <u>s.mulkens@psychology.unimaas.nl</u>

During the training, the student is acquainted with conducting a complaints anamnesis. Interviewing techniques are practised during role-plays. For example, conducting an anamnesis and establishing a DSM-IV diagnosis are worked with. Students are able to apply the techniques by working with people who simulate patients with various disorders. The requirements for the practical training will be fulfilled by sufficient attendance and a satisfactory assessment of the report. The practical training can only be attended if one has sufficient command of the Dutch language in word and in writing.

Instructional Approach

10 tutorial group meetings, 6 or 7 lectures, 4 practical training sessions.

Form of Assessment

The exam consists of 7 open questions. .

Please note: In order to be admitted to the practical training of course 2.2.b proof of attendance of Course 1.6: 'Academic and Professional Skills: Communication Skills' must be submitted (see 2.1 General Information from Chapter 1).

Course 2.3 Academic and Professional Skills: Programming – 6 Credits

Coordinator: Michael Capalbo, Neurocognition, Phone (043) 388 4037, 40 Universiteitssingel East, Room 4.741f, E-mail: m.capalbo@psychology.unimaas.nl

Description of the Course

The introduction of the computer in every place of work has provided every psychologist with a powerful tool. The computer and the computer metaphor have become very important in the daily professional and research practice of a psychologist. In addition psychology is in content closely interwoven with informatica. By learning to program you not only learn to impose your will upon the computer, you also learn a new way of thinking.

Programming is not difficult; it is a way of thinking. One of the skills you will learn is to disentangle problems that seem difficult and translate them into simple problems for the computer. Therefore it is necessary that you talk to the computer in its own (i.e. programming) language. Even this is not difficult; this course will deal with only a few (roughly 15) concepts you need to master. The rest you will learn later.

First of all we are going to familiarise ourselves with the most important basic principles of programming. Next we learn how to disentangle complex problems we mentioned just now, into simple sub problems: algorithmic thinking. We also learn how to write down these algorithms in a formal non-technical manner. With this knowledge in the back of our minds we will write increasingly complex computer programs, which will solve various problems which are relevant for psychology.

This course will teach you how to write programs with the help of an integrated programming environment. We will use Delphi to learn to write computer programs in a modern and efficient way by using visual programming. This means that you will be spared a lot of trouble as a large number of components (buttons, text windows, etc.) are provided by Delphi. This allows us to concentrate on the most important principles.

Literature

A Pearson Custom Publication, Programmeren, (ISBN 101846581761), including the best chapters from:

- Kerman, M. C. (2004). *Programmeren in Delphi*. Amsterdam, Pearson Education Benelux.
- Binzinger, T. (2003). Snel leren programmeren Delphi 7. Amsterdam, Pearson Education Benelux.
- Walmsley, S., Williams, S. (2002). Discover Pascal in Delphi. Edingburgh, Pearson Education Limited.

Instructional Approach

11 tutorial group meetings of 3 hours each of which 2 hours are practical training; in addition there will be lectures, and a seminar.

Form of Assessment

The exam consists of submitting tasks during the group meetings and an open book final exam on the computer in the form of debugging and programming tasks.

Course 2.4.a Consciousness – 5 Credits

Coordinator: Rob de Vries, Neurocognition, Phone (043) 388 1894, 40 Universiteitssingel East, Room 4.767, E-mail: r.devries@psychology.unimaas.nl

Description of the Course

This course will provide further insight into the latest cognitive neuropsychological theories in the field of consciousness and the philosophical reflection on problems linked to the notion of consciousness.

Consciousness, conscious experiences and perceptions were the most important themes of nineteenth Century psychology. When behaviourism made its appearance, consciousness disappeared as a theme from the psychological agenda. In the last few decades, consciousness is back again in the cognitive and neurosciences. Consciousness is once again seen as one of the most important aspects of mental life. This course will deal with both the material basis as well as the role of consciousness in mental life, and also the philosophical problems concerning the relationship between conscious experiences and the processes that are the material carriers of these conscious experiences. Important questions and topics that arise are: what is consciousness; what are the philosophical problems; which ones relate to consciousness; are there neurophysiological correlates of consciousness; is consciousness a single entity or do 'splitbrain' patients have two separate minds or 'consciousnesses'? Are there any criteria to establish whether somebody else is conscious or not. This is a problem of practical importance when asking ourselves whether we will disconnect patients or family members, who are in coma or in a vegetative state, from the apparatuses which keep them alive. Also more technical problems will be discussed. What is the problem with binding? Does binding take place during the synchronic oscillations in the gamma band? Do these synchronic oscillations explain the unity of consciousness? Can we access the content and processes of our consciousness by means of introspection? Are there important forms of mental processes like thinking and reasoning which proceed unconsciously? What do dissociation phenomena tell us about consciousness? Special states of consciousness like dreams and various theories about dreams will be dealt with, as well as Libet's research into the neurophysiological correlates of free will and the criticism on this.

Literature

• Papineau, D. *Introducing Consciousness*, 2nd Edition Icon Books (Paperback). An e-reader has been compiled.

Instructional Approach

10 tutorial group meetings, 6 lectures.

Form of Assessment

The exam consists of 10 open questions.

Course 2.4.b Cognitive Science – 5 Credits

Coordinator: Herco Fonteijn, Experimental Psychology, Phone (043) 388 1907, 40 Universiteitssingel East, Room 3.742, E-mail: <u>h.fonteijn@psychology.unimaas.nl</u>

Description of the Course

This course offers an introduction to Cognitive Science, and is a first acquaintance with the use of computational models in Cognitive and Biological Psychology. Psychological hypotheses are increasingly specified in the form of computational models. Precision, transparency and heuristic value of these models on the one hand, and the availability of sufficient computational capacity on the other, contribute to their popularity. Cognitive psychological theories have been leaning more towards symbolic architectures for solving problems, reasoning and knowledge acquisition. These theories have also a tendency towards connectionist models to clarify aspects of human learning, categorising, perception, memory and attention. Theories are developed and tested in Biopsychology with the aid of models to explain the behaviour of the networks of neurons. Some influential architectures and algorithms will be discussed in this course, in connection with various (bio-) psychological phenomena that have shaped them.

After we have reflected on the nature of cognitive science and on the historical contributions of Turing and Marr, we will deal with models of creativity and learning. The question: "Can computers be creative?" is an invitation to think about human creativity. Learning is at the centre in connectionist models. The value of these models is e.g. illustrated on the basis of the anxiety conditioning theory of LeDoux and a simple model of the hippocampus. Next, ACT-R will be studied, one of the most influential architectures, in which both classical symbolic as well as connectionist principles are integrated.

The last part of the course will deal with some topics which have caused problems for classical cognition science. The role of emotions and the importance of so-called hot cognition will be clarified with the help of a task around the theme

of self-control. The of old neglected factor of time will be focused on in a task which is geared towards the application of the dynamic system theory in psychological research (e.g. into motor development and attitude polarisation). A third point of criticism of cognition science concerns the neglect of the physical and social environment of the subject and is the focus in a final task about distributed cognition and swarm intelligence.

Literature

An e-reader has been compiled. .

Practical Training: Connectionistic Models

Coordinator: Michael Capalbo, Neurocognition, Phone (0434) 388 4037, 40 Universiteitssingel East, Room 4.741f, E-mail: <u>m.capalbo@psychology.unimaas.nl</u>

Some practical exercises provide further insight into the nature and application of connectionist models. A first exercise must give students elementary knowledge of matrix algebra and differential equations. A second exercise requires students to calculate activation and weight changes in a simple network which instructs on the basis of the delta rule. Finally, students will get to know a network simulator, which will be used to illustrate a connectionist explanation of the development of accomplishments on the Balance Task of Piaget. Most exercises can be done in the computer room at a time which suits one. A written version of the second exercise must be submitted to the practical training coordinator.

Instructional Approach

10 tutorial group meetings, 7 lectures, 3 practical training sessions.

Form of Assessment

The exam consists of a combination of open questions and 25 triple-choice questions of which 20 questions must be attempted.

Course 2.5.a Practical Training in Research - 11 Credits

Coordinator: Remco Havermans, Experimental Psychology. Phone (043) 388 4053; 40 Universiteitssingel East; Room 3.735; E-mail <u>r.havermans@psychology.unimaas.nl</u>

Description of the Course

The aim of this course is to offer an intensive training in empirical research skills. All phases of empirical research are dealt with: Translating a general research question into a workable hypothesis, making this hypothesis operational, establishing the design for the study, collecting research data, analysing the data, interpreting the results, writing the research report and presenting the research. The latter will be done in the form of a scientific article and as a lecture or poster during the final symposium.

This practical training in research covers a period of 11 weeks (a total of 12 calendar weeks), in which students go through the various steps of empirical research in small groups under the supervision of a researcher. The training ends with a symposium when the research is presented in the form of a lecture or poster.

The general structure of this period is as follows:

Week 1 to 4:

Studying literature, formulating the research question and hypothesis, establishing the design of the research and the statistical analysis. The research protocol is written and presented for approval to the Ethical Commission Psychology ((ECP). After obtaining approval from the ECP, test subjects are recruited. A beginning is made with writing the research report (introduction and method).

Week 5 to 8:

Obtaining of data and continuing to write the research report.

Week 7 and 8:

Data analysis, referring back to the research question and interpretation of the data.

Week 9:

Writing an English research report (consisting of introduction, method, results and discussion, in keeping with the APA-format of a scientific article).

Week 10 and 11:

Assessment of the research report by the tutor and the English lecturer. In addition to this, students review each other. Week 12:

Feedback on the report given by the English lecturer and fellow students. Presenting the findings during the final symposium, in the form of a poster or a lecture.

Attention will be paid to relevant themes during lectures such as impressive experiments within the field of psychology, what different designs and research methods are available, the ethics of research and how articles can be read, written and discussed. Literature on these themes will be available.

Literature

An e-reader has been compiled.

Practical Training

Scientific Symposium. Proof of having complied with the requirements of the Practical Training will be provided after full attendance at the Symposium.

Instructional Approach

Tutorial group meetings in consultation with the tutor, 4 lectures.

Form of Assessment

Proof of having complied with the requirements will be given on the basis of one's contribution to and participation in the meetings, the research report and one's individual contribution to it.

Please note: In order to be admitted to Course 2.5.a one must have successfully completed two of the three courses 1.3 'Research Methods', 1.4.a 'Writing an Article' and 1.4.b 'Statistics I'.

Course 2.5.b Statistics II – 7 Credits

Coordinators: Nick Broers, Faculty Office, Phone (043) 388 1929, 40 Universiteitssingel East, Room 5.743, or Phone (043) 388 2274, 1 Debyeplein, Room B2.03, E-mail: nick.broers@stat.unimaas.nl; Gerard van Breukelen, Faculty Office, Phone (043) 388 4001, 40 Universiteitssingel East, Room 5.743 or Phone (043) 388 2274, 1 Debyeplein, Room B2.03, E-mail: gerard.vbreukelen@stat.unimaas.nl

Description of the Course

There is a strong orientation towards experimental research in psychology, although quasi-experimental and correlational research is also regularly conducted. The data to be analysed are often quantitative, like test scores and reaction times. The most common statistical method to analyse quantitative data from experimental research is the analysis of variance (ANOVA), and the most common one for correlational research is regression analysis. The student is familiarised in this course with the logics and the possibilities of applying the analysis of variance and to a lesser degree regression analysis, continuing to build on the one-way ANOVA and regression analysis, done in the first year. The guidelines for this are the distinction between 'between-subject (BS)' and 'within-subject (WS)' experiments, and the distinction between experimental, quasi-experimental and correlational research.

The course consists of six modules each lasting one week. Nick Broers will see to the first four modules and Gerard van Breukelen will be responsible for the last two. Each module will deal with a design and the accompanying method of analysis by way of a lecture, tutorial group meeting, seminar and SPSS practical training. *Module 1:*

Repetition of one-way BS design, introduction of the orthogonal ('balanced') two-way BS design, two-way ANOVA, interaction, main effects, simple effects, relation to the unpaired t-test.

Module 2:

The non-orthogonal ('unbalanced') two-way BS design, two-way ANOVA, confounding and adjustment. *Module 3:*

BS experiment and quasi-experiment with a covariate like age or a pre-test, analysis of covariance (ANCOVA), the two functions of a covariate (power increase, correction for confounding).

Module 4:

Correlational research, regression analysis with various predictors.

Module 5:

The one-way within-subject (WS) design, repeated measuring of ANOVA according to the univariate, epsilon-adjusted univariate, and multi-variate method, relation to the paired t-test.

Module 6:

The two-way WS design, the split-plot (BS*WS) design for BS experiments with repeated measuring and WS experiments with a non-experimental BS factor, repeated measuring ANOVA for these designs.

Literature

- Howell, D.C. (2002). Statistical methods for psychology (5th Ed.). Pacific Grove: Duxbury;
- Van Breukelen, G. en Broers, N.J. (2004). Variantie-analyse en covariantie-analyse. File to be distzributed during the first
- tutorial group meeting;
- Van Breukelen, G. (2000). Onderzoeksopzet en rapportage. Hoofdstuk 18 in: Jansen, M., Imbos, Tj., & Berger, M. (Eds),
- *Methodologie & Statistiek* deel 2, paragraaf 18.4. A copy of this will be distributed during the first tutorial group meeting.

Practical Training : SPSS

Coordinators: Nick Broers, Faculty Office, Phone (043) 388 1929, 40 Universiteitssingel East, Room 5.743, or Phone (043) 388 2274, 1 Debyeplein, Room B2.03, E-mail: nick.broers@stat.unimaas.nl; Gerard van Breukelen, Faculty Office, Phone (043) 388 4001, 40 Universiteitssingel East, Room 5.743 or Phone (043) 388 2274, 1 Debyeplein, Room B2.03, E-mail: gerard.vbreukelen@stat.unimaas.nl

Each module contains a practical training in SPSS in which the content of the module is exercised with the help of realistic data- sets. Independently one has to answer questions about what one has produced. This will be discussed and worked on further in the corresponding seminars and tutorial group meetings.

Instructional Approach

There are six modules each lasting one week. There will be a lecture for each module when the design and method of analysis will be explained and demonstrated by using a case study. This is followed by pen-and-paper and computer exercises during a tutorial group meeting, a SPSS practical training and a seminar. The course ends in the seventh week, with a seminar and the examination.

Form of Assessment

The test will consist of 18 triple-choice questions (the same number for each module), open book exam.

Bachelor Programme, Year 3

3.1 GENERAL INFORMATION

Before the start of the third year, students will have made a choice from the two Bachelor specialisations which are offered: Biological Psychology or Cognitive Psychology. The year starts with a week in which students work on their portfolio. The first two periods (Period 1 and 2) will be taken up by three basic courses from the chosen Bachelor specialisation and a course in Statistics. In the third period – in January – students must choose between taking a course in Psycho Diagnostics and writing the Bachelor thesis. This does not mean that one is obliged to write the Bachelor thesis during these four weeks. One is even advised to start earlier. It is also possible to start with taking some electives elsewhere. In the fourth and fifth period the Faculty itself will offer a number of Electives. One can take a total of four Electives. Students are advised not to take all the Electives 'at home'. It would be a good learning experience to have a look somewhere else, in this case at other Faculties in Maastricht and/or at other universities. In the sixth period students can take the course on Psycho Diagnostics or they can start writing their Bachelor thesis or finish it. Also then it is possible to take Electives elsewhere.

Timetable

The structure of the timetable in the third year of study is basically the same as in the first year (see the passage on 'general information' preceding the description of the courses for the first year). Only the arrangement for the electives is different. See the description on this in the part about your programme of study.

Admission to the Third Year of Study

In order to be admitted to the third year of study one must have obtained all the credits for the first year (60 credits).

Regulation about English Courses

As was the case in the previous years of study, participation of foreign 'exchange students' is encouraged in the third year as well. For this reason the courses of both Bachelor Degree programmes which are offered, have been written in English. The language of instruction during lectures, tutorial group meetings and practical training sessions is Dutch. If, however, a foreign exchange student enrols for a course, one tutorial group will conduct its meetings in English. If this is the case, Dutch students can apply to attend such a group (or groups). Courses 3.1.b.B and 3.2.a.B are exceptions to this as they will be conducted completely in English.

Basic Textbooks

Less use will be made of basic textbooks in the third year than in the first and second year. If a basic textbook is used in one or other course, further information about it can be found in the course manual. It is possible, if one is a member, to obtain study books at a discount via the Faculty Association Luna-tik, E-mail: <u>lunatik@psychology.unimaas.nl</u>

Obligation to act as a Test Subject

Part of the Bachelor Examination requires a student to be a test subject for research in the faculty for 10 hours. This pertains to research conducted by either students or members of staff in the faculty. The research may be conducted in the following situations: third year Bachelor students needing to do research for their Bachelor thesis or for Electives, Master students doing a research apprenticeship or members of staff in the faculty doing their own research. The complete procedure can be found on Eleum. Registration of having complied with the requirements of the obligation to act as a test subject will take place in Year 3.

Overview of Bachelor Programme for Year 3

Period	Number of Weeks	Course			
Period 0	1		A	cademic a	nd Professional Skills: Portfolio Year 3
		Cognitive		Biological	
Period 1	7		Decision Making Paradigms in the Lab	3.1a.B 3.1.b.B	Neuroscience of Action Biological Psychology Research Methods
Period 2	7	3.2.a.C 3.2.b	Learning Statistics III	3.2.a.B	Biological Psychology: Theoretical Perspectives
Period 3	4	3.3.a 3.3.b	Psycho Diagnostics Bachelor Thesis		
Period 4/5	14	3.4/3.5	Electives		
Period 6	4	3.6.a 3.6.b	Psycho Diagnostics Bachelor Thesis		

3.2 DESCRIPTION OF THE COURSES

Course 3.0 Academic and Professional Skills: Portfolio Year 3 - 2 Credits

Coordinator: Marieke Kools, Experimental Psychology, Phone (043) 388 2475, 5 Universiteitssingel, Room 2.019, E-mail: m.kools@psychology.unimaas.nl

Description of the Course

The general objective is to give students the opportunity to follow, guard and steer one's own development throughout the curriculum. In addition, students learn the competence of developing a life-long learning attitude. The Portfolio Course 3.0 continues with the work done during for Portfolio Course 2.0. It consists of two separate parts: a portfolio week and an individual final meeting with a member of the staff at the end of the bachelor phase. Students work independently on their portfolio during this week. During a meeting they do a test on critical thinking and an evaluation will be carried out of the SMARTe learning goals that students formulated during the Portfolio Course 2.0. At the end of the week students will evaluate the portfolio of a fellow-student.

The individual meeting with a member of staff at the end of the Bachelor phase will be spent on individual discussions about the content of one's portfolio: the development and the results of one's study career and further ambitions of the student.

Literature None.

Instructional Approach

1 tutorial group meeting, 1 profile meeting, 1 final meeting.

Form of Assessment

The requirements for obtaining credits for this course will be fulfilled if a student submits a portfolio, a report of the profile meeting and takes part in the final meeting with a member of staff at the end of the Bachelor phase.

3.2.1 THE BACHELOR DEGREE PROGRAMME IN COGNITIVE PSYCHOLOGY

Basic Programme Cognitive Psychology

A large number of courses in the first two years of the Psychology Programme have made students familiar with Cognitive Science in general and with Cognitive Psychology in particular. The knowledge acquired about the central themes of Cognitive Psychology will be deepened and applied in Year 3 of the Bachelor Degree Programme in Cognitive Psychology.

The first period of the Bachelor Programme in Cognitive Psychology offers two basic courses which rum parallel to one another: Course 3.1.a. C 'Decision Making' and Course 3.1.b. C 'Paradigms in the Lab'. The third course – Course 3.2.a. C 'Learning' – is taught in the second period, parallel to Course 3.2.b 'Statistics III'. The central theme of the course on Decision Making is how people make decisions and what factors can influence the decision making process. Many people think that they make largely rational decisions, but is that really the case? In Course 3.1.b. C 'Paradigms in the Lab' students look at much used cognitive psychological research paradigms. How do these paradigms work precisely and what are they used for? The course is both practical and theoretical. Students learn in the practical part how to apply and use these paradigms. The course on Learning will explain that people learn in al kinds of ways. This course (on Paradigms) concentrates on what happens when people learn, what processes influence learning and how one can measure the results of learning. The three courses (3.1.a. C, 3.1.b. C and 3.2.a. C) elaborate on the various themes pertaining to the three tracks of the Master specialisation in 'Applied Cognitive Psychology'. This allows students to get

an impression of the subject matter and prepare themselves for choosing a particular track. After the three basic courses in cognitive psychology are finished there will be a period of six months in which students must take the course on Psycho Diagnostics and take Electives. In addition students will write their Bachelor Thesis in this period. Once the entire Bachelor Programme in Cognitive Psychology has been completed, students can enrol for one of the three tracks of the Master specialisation in 'Applied Cognitive Psychology', i.e.: 'Experimental Health Psychology', 'Psychology and Law' or 'Work and Organisational Psychology'.

Overview of Bachelor Degree Programme in Cognitive Psychology for Year 3

Period	Number of Weeks	Course			
Period 0	1	3.0	Academic and Professional Skill	s: Portfolio	Year 3
Period 1	7	3.1.a.C	Decision Making	3.1.b.C	Paradigms in the Lab
Period 2	7	3.2.a.C	Learning	3.2.b	Statistics III
Period 3	4	3.3.a	Psycho Diagnostics	3.3.b	Bachelor Thesis
Period 4/5	7	3.4/3.5	Electives		
Period 6	4	3.6.a	Psycho Diagnostics	3.6.b	Bachelor Thesis

Course 3.1.a.C Decision Making – 5 Credits

Coordinator: Reinout Wiers, Experimental Psychology. Phone (043) 388 1935; 40 Universiteitssingel East; Room 3.732; E-mail: <u>*R.Wiers@psychology.unimaas.nl</u>*</u>

Description of the Course

This course focuses on research in the areas of reasoning and decision making. Why did you decide to study in Maastricht and not elsewhere? How does this work when we order a pizza, or buy a house, or choose a partner? What role do emotions play when one makes a decision? Do they obstruct a rational weighing up of pros and cons or do they provide one with important information? And to what extent do we make decisions unconsciously? Is it actually possible to make a decision unconsciously? And what about human development? Do children reason and make decisions differently to adults? And what about psychopathology; are the decision making processes of mentally deranged persons the cause of psychopathology or vice versa? Do gamblers not understand anything about the calculation of probability, or is something else going on? And what about weighing up the pros and cons in a selection procedure? Do rational factors or a first impression result in the choice of the best candidate? How does reasoning and decision making work in the case of criminals ... and for the person who must establish whether they can be held responsible for their actions? These and many related questions will be dealt with in this course. On the one hand, essential literature in the area of reasoning and decision making will be discussed, and on the other hand we will look at various applications in the area of the three degree courses: Experimental Health Psychology, Work and Organisational Psychology and Psychology and Law.

Literature

An e-reader has been compiled. Furthermore, there are a number of basic books for background information.

Instructional Approach 10 tutorial group meetings, 2-5 lectures.

Form of Assessment The exam consists of 9 open questions.

Course 3.1.b.C Paradigms in the Lab – 5 Credits

Coordinator: Fren Smulders, Experimental Psychology. Phone (043) 388 1909, 40 Universiteitssingel East; Room 3.744; E-mail <u>f.smulders@psychology.unimaas.nl</u>

Description of the Course

Experimental Psychology makes extensive use of paradigms that focus on or measure mental functions like attention, emotion, inhibition, memory, and unconscious processes. These paradigms are typically implemented on a computer in a laboratory setting. Some fields of application are Experimental Health Psychology, Work and Organisational Psychology, Ergonomics and Psychology and Law. The course offers an introduction into several paradigms that are currently at the centre of scientific attention. On a theoretical level, you will learn about their background, and the underlying mental processes. In addition, you will receive literature on their typical use in one of the fields of application. On a practical level, you will learn how to implement them on a computer, with the help of special software (a 'task generator'), and how to measure and further process the quantitative data that are generated. The measurement of reaction times is common in these paradigms, so the assumptions, problems and pitfalls of these measurements are highlighted. Some psychophysiological variables will receive similar treatment. In this way, the course intends to provide a solid basis for an apprenticeship and a possible further career in scientific research.

Literature

An e-reader has been compiled.

Practical Training: Measurement in the Lab

Coordinator: Robert van Doorn, Experimental Psychology, Phone (043) 388 1926, 40 Universiteitssingel East, Room 2.014, E-mail: r.vandoorn@psychology.unimaas.nl

The nature of the course requires a relatively high number of practical training sessions, i.e. one per week. Several sessions will be devoted to handling the task generator ERTS; the gathering of psychophysiological data will be done during one session, and subsequent data processing in a final practical session. Papers are based on the practical training sessions.

Instructional Approach

7 tutorial group meetings, 7 lectures, 7 practical training sessions.

Form of Assessment

The exam consists of 7 open questions.

Course 3.2.a.C Learning – 5 Credits

Coordinator: Margje van de Wiel, Experimental Psychology, Phone (043) 388 2171, 5 Universiteitssingel, Room 2.002, E-mail: <u>m.vandewiel@psychology.unimaas.nl</u>

Description of the Course

Learning is not something you only do at school, but throughout your entire life. From the moment you are born you process impressions to try and make sense of your environment. You learn from your experiences and in this way develop knowledge of the world around you. Learning happens consciously and unconsciously, intentionally and unintentionally. Schools, sports clubs and other learning programmes create an environment that promote learning of specific knowledge and skills. The way a learning environment is fitted out depends on how one thinks about learning and about what has to be learned. The recent discussion about "new learning" and the 'studiehuis' (more emphasis on students' projects than on 'teacher tell' in the senior years of Dutch High Schools) shows that opinions are divided. Theories about learning will be discussed in this course. From the perspective of Cognitive Psychology we direct our attention to what happens in your head when you learn something. How do you represent knowledge, how do these representations change and what are the learning mechanisms? In addition we will look at the individual differences that influence the learning process, such as foreknowledge, motivation and the way in which people themselves control their learning and interpret the outcome. An important point for discussion remains the question whether talent is needed in order to excel in something, or whether determined and repeated exercise is sufficient Theories are discussed with the help of topics such as learning a text, learning to calculate and program, learning of word meanings, (un)learning the causal relationship in a therapy, the approach to writing a thesis, learning in problembased education, the danger of clinical intuition and the importance of feedback when developing expertise.

Literature

An e-reader has been compiled. Relevant textbooks can be consulted in the Learning Resources Centre.

Practical Training: Measuring Learning Outcomes

Coordinators: Ramona Guerrieri, Experimental Psychology, Phone (043) 388 4049, 40 Universiteitssingel East, Room 3.741. E-mail: <u>r.guerrieri@psychology.unimaas.nl</u>; Margje van de Wiel, Experimental Psychology, Phone (043) 388 2171, 5 Universiteitssingel, Room 2.002. E-mail : <u>m.vandewiel@psychology.unimaas.nl</u>

Measuring learning outcomes is the focus of the practical training. It is important both for teaching and for research to be able to measure what the results of learning processes are, the learning outcomes. How else would you be able to determine whether your intervention (teaching, instructional approach or experimental manipulation) has been effective and whether students have reached the required level of knowledge? In the practical training sessions, students draw up exam questions and the corresponding scoring models about the subject matter by way of concept maps and/or specification tables in which, for each problem, the most important concepts and their mutual relationship as well as the intended cognitive level are specified. The students evaluate how effective their way of testing is on the basis of relevant criteria. Lastly, students write a report in which they indicate how they view the role of testing in education.

Instructional Approach

10 tutorial groups meetings, 3-6 lectures, 1-2 practical training sessions.

Form of Assessment The exam consists of 5 open questions.

3.2.2 THE BACHELOR DEGREE PROGRAMME IN BIOLOGICAL PSYCHOLOGY

Basic Programme Biological Psychology

The current biological revolution in psychology determines the present-day 'face' of psychology considerably. Man as an 'information processing system' is central within Biological Psychology and it is important to take account of biological factors when studying man's cognitive functioning. The manner in which we perceive, remember, speak, calculate and move is, amongst other things, determined by the development and workings of the nervous system and the brain. Taking this as starting point, this means that toddlers partially have other cognitive skills than do older children or adults or the elderly. Children who have a congenital disorder in cognitive functioning display different problems to adults who acquired a disorder in cognitive functioning at a later age. The building blocks for understanding the relationship between biological factors and cognitive functioning will be provided in three courses. The Bachelor Programme in Biological Psychology starts with three basic courses in Biological Psychology. They build on the basic knowledge acquired in the first and second year courses and prepare for a specialisation in Biological Psychology in the Master programme. The basic courses 3.1.a.B 'Neuroscience of Action' and 3.1.b.B 'Biological Psychology: Research Methods' are offered in the first period. The course on 'Neuroscience of Action' deepens the knowledge of functional anatomy, physiology and the plasticity of the nervous system. The course on 'Biological Psychology: Research Methods' deals with the most important research methods within the cognitive neurosciences and their connection with the formation of theory within this discipline. The third basic course 3.2.a.B 'Biological Psychology: Theoretical Perspectives' will be offered in the second period. This course gives an extensive presentation of the theoretical approaches to cognitive functions from the perspective of Biological Psychology. Course 3.2.b 'Statistics III' runs parallel to it.

Once the three basic courses in Biological Psychology have been done, there will be a period of six months in which students have to take the courses 3.3.a and 3.6.a on Psycho Diagnostics and Electives. In addition students will write their Bachelor thesis in this period. When the entire Bachelor Programme in Biological Psychology has been completed, students can enrol for one of the three tracks of the Master specialisation in Biological Psychology, viz. 'Neuropsychology', 'Developmental Psychology' or 'Cognitive Neuroscience'.

		0			· · · · · · ·
Period	Number of Weeks	Course			
Period 0	1	3.0	Academic and Professional Skills	s: Portfolio	Year 3
Period 1	7	3.1.a.B	Neuroscience of Action	3.1.b.B	Biological Psychology: Research Methods
Period 2	7	3.2.a.B	Biological Psychology: Theoretical Perspectives	3.2b	Statistics III
Period 3	4	3.3.a	Psycho Diagnostics	3.3.b	Bachelor Thesis
Period 4/5	7	3.4/3.5	Electives		
Period 6	4	3.6.a	Psycho Diagnostics	3.6.b	Bachelor Thesis

Overview of Bachelor Degree Programme in Biological Psychology for Year 3

Course 3.1a.B Neuroscience of Action - 5 Credits

Coordinator: Wijnand Raaijmakers, Neurocognition; Phone (043) 388 1880; 40 Universiteitssingel East; Room 4.777a; E-mail w.raaijmakers@psychology.unimaas.nl

Description of the Course

The most important function of the nervous system is to generate action adequately and efficiently. Perception and other information processing activities only make sense in the light of what is being done with them. The 'output' of the nervous system, the organisation of motor activity, cognitive action, emotions and social cognition are the main themes of the course. The central issue of the course is the planning, programming and execution of behaviour. General principles of organisation will be discussed in the light of the development of the nervous system and the visual system will receive special attention here. In addition to the neural organisation of motor activity, the underlying structure for social-emotional activity will be discussed as well, and the connection between limbic structures and prefrontal and temporal cortex areas. Similarities between motor activity and cognitive action will be clarified with the aid of research amongst patients with Parkinson disease. The last theme to be discussed is the neural plasticity both during the ontogeny and adulthood.

At the end of the course students ought to have gained knowledge and insight into:

- Structure and workings of the nervous system, especially of the brain;
- Organisation of the most important functional systems, which are the basis of perception, action (motor and executive functions), motivation and emotions, and social cognition;
- Mechanisms for and function of neural plasticity.

Literature

An e-reader has been compiled.

- It is recommended to buy one of the following books:
- Gazzaniga, M.S., Ivry, R.B., & Mangun, G.R. (2002). Cognitive neuroscience. The biology of the mind (2nd Ed.). New York: Norton.
- Bear, M.F., Connors, B.W., & Paradiso, M.A. (2006). *Neuroscience. Exploring the brain* (3rd Ed.). Philadelphia: Lippincott, Williams & Wilkins.

Practical Training: Neuro Anatomy

Coordinators: Wijnand Raaijmakers, Neurocognition. Phone (043) 388 1880; 40 Universiteitssingel East; Room 4.777a; E-mail <u>w.raaijmakers@psychology.unimaas.nl</u>; Hellen Steinbusch, Psychiatry and Neuropsychology (Faculty of Medicine). Phone (043) 388 1037; 50 Universiteitssingel; Room 1.118a; E-mail he.steinbusch@np.unimaas.nl Description

The most important objectives of this practical training are to become acquainted with neuroanatomical terminology and to acquire insight into the spatial and functional organisation of the brain. The four practical training sessions are highly suited for this purpose as one will be busy preparing structures in a sheep's brain (practical session 1 and 2), studying brain cuts of rats through the microscope (practical session 3) and a demonstration with more or less prepared human brain material. By starting with the three-dimensional, macroscopic (visible with the naked eye) organisation of the brain and by subsequently passing to the two-dimensional, microscopic organisation, students learn how to interpret sections and MRI-scans of the human brain. Tasks will be set that can be done with the help of brain models and textbooks. At the same time, use will be made of the Brain Voyager Tutorial, which will be introduced in the parallel course 3.1.b.B.

Instructional Approach

10 tutorial group meetings, 5 lectures, 4 practical training sessions.

Form of Assessment

The exam consists of 7-8 open questions.

Course 3.1.b.B Biological Psychology: Research Methods – 5 Credits

Coordinator: Rainer Goebel, Neurocognition. Phone (043) 388 4014, 40 Universiteitssingel East; Room 4.753; E-mail: <u>r.goebel@psychology.unimaas.nl</u>

Description of the Course

Biological Psychology is the branch of psychology that studies the various biological foundations of behaviour. This field has led to major advances in understanding brain processes underlying cognitive functions, such as perception, attention, language, memory and motor control. These advances were only possible through the application of a range of different research methods. This course aims to provide basic knowledge about all major methods used in Biological Psychology including animal studies, Electroencephalography and Magneto encephalography (EEG/MEG), Positron Emission Topography (PET), functional Magnetic Resonance Imaging (fMRI), neuropsychological investigations of patients with brain lesions, Transcranial Magnetic Stimulation (TMS) and psychopharmacological research. Each of these methods gives a different view of the biological basis of behaviour and has unique strengths and weaknesses. Each week, you will learn about the principles and selected applications of one or two research methods. In the last week, we will compare the different methods and discuss ways to integrate complementary information obtained from different spatio-temporal levels of investigation. The methodological knowledge acquired is relevant to both fundamental psychological research as well as for clinical applications.

Literature

- Gazzaniga, M.S., Ivry, R.B., & Mangun, G.R. (2002). *Cognitive neuroscience*. *The biology of the mind* (2nd Ed.). New York: Norton.
- Rains, G.D. (2002). Principles of human neuropsychology. Boston: McGraw Hill.

Practical Training: Brain Voyager

Coordinator: Elia Formisano, Neurocognition; Phone (043) 388 4040; 40 Universiteitssingel; Room 4.738; E-mail: <u>e.formisano@psychology.unimaas.nl</u>

A standard analysis will be done of a sensory/cognitive experiment, using a special software package (BrainVoyager). After a joint demonstration of the program in the Computer Resources Center, you will start working immediately with a data set. The practical training will be concluded with a report about the steps you have taken during the data analysis.

Instructional Approach

10 tutorial group meetings, 6 lectures, 2 practical training sessions.

Form of Assessment The exam consists of 9 open questions.

Course 3.2.a.2 Biological Psychology: Theoretical Perspectives - 5 Credits

Coordinator: Leo Blomert, Neurocognition. Phone (043) 388 1949; 40 Universiteitssingel East; Room 4.748; E-mail I.blomert@psychology.unimaas.nl

Description of the Course

The first two basic courses focus on the anatomy and functionality of the nervous system and on research methods in the area of the cognitive neurosciences. This course will concentrate on theories of cognitive functions from a neurobiological perspective with the explicit intention of making it clear how brain functions lead to cognition. This research area is by definition interdisciplinary and uses concepts from the Neuro-, Cognitive and Computer Sciences. Developing theories in the domain of cognitive neuroscience is therefore best described as a dynamic interplay between different knowledge sources. In this way a bridge can be built between the neural and functional architecture of cognition. The revolutionary development of new neuroimaging methods in the last decade of the previous century has contributed enormously to this. These methods are now indispensable for testing and constraining new models of brain and cognitive functions.

Special attention will be paid to the 'what and how' of the information processing as conceptualised in different models and theories. This theoretical evaluation will be illustrated by discussing the dominant and often conflicting theoretical perspectives for various cognitive functions like language and attention, consciousness, but also cross-modal information processing. Knowledge of these theoretical perspectives forms the basis for the approaches taken in the different Master tracks: the study of the development of cognitive functions (Biological Developmental Psychology); the study of cognitive dysfunctions (Neuropsychology) and the study of the fundamental nature of the relationship between the brain and cognition (Cognitive Neuroscience).

Literature

An e-reader has been compiled.

Practical Training: Theory Presentation

Coordinator: Leo Blomert, Neurocognition. Phone (043) 388 1949; 40 Universiteitssingel East; Room 4.748; E-mail <u>I.blomert@psychology.unimaas.nl</u>

An evaluation of theoretical perspectives from a meta-theoretical point of view.

Two competing theories for five cognitive themes are compared. Students are divided into pairs. Each pair chooses a theme and one student defends theory 1 and the other defends theory 2 in a short presentation. Literature will be provided for each theme, but students are expected to add other literature to it. The practical training will be concluded with an oral presentation of 10-15 minutes, followed by a discussion in the group.

Instructional Approach

10 tutorial group meetings, 4 lectures, 1 practical training session of half a day.

Form of Assessment

The exam consists of 10 open questions.

Course 3.2.b Statistics III - 7 Credits

Coordinator: Gerard van Breukelen, Faculty Office, Phone (043) 388 4001. 40 Universiteitssingel East; Room 5.743; or: Phone (043) 388 2274; 1 Debyeplein; Room B2.03; E-mail <u>gerard.vbreukelen@stat.unimaas.nl</u>

Description of the Course

The aim of this course is twofold. First, it is meant to be an extension of the material of the course in Year 2 on statistical methods for experimental and correlational research. Second, it centres on the statistical methods for the analysis of measuring instruments, particularly tests and questionnaires. In this respect the course provides the student with statistical information for the course in Psycho Diagnostics and for apprenticeships. In more concrete terms, the course deals with three techniques that take about two course weeks each: logistic regression, reliability analysis and factor analysis.

Logistic regression is the analogue of the variance and regression analysis where the dependent variable is dichotomous rather than continuous. Examples are: cured or not cured from an illness, or passing or failing an exam. Logistic regression enables one to correct the effects of several independent variables on the dichotomous dependent variable in relation to one another (confounding) and also to examine interactions. This results in it becoming the extension of the cross table analysis from Statistics I into several independent variables.

Reliability analysis is a classical psychometric method for the analysis of tests and questionnaires. The answers from people to a number of multiple-choice questions (items) are then often scored logically and added up to a total score for the personality characteristic which is to be measured, e.g. intelligence or attitude. One assumes that those items measure the same characteristic. The reliability analysis allows one to check how well each item fits on the scale and how reliable the total score is. The course is made up of training in classical reliability analysis and an opportunity to get acquainted with modern psychometrics (the Rasch Model). Furthermore, attention will be paid to the relationship between reliability and validity, and to the difference between reliability and congruence.

Factor analysis is a method to reduce a multitude of variables to a small number of underlying factors. This was applied often at the beginning of the Twentieth Century to reduce the scores of various tests to a small number of dimensions,

like verbal and spatial intelligence, or extraversion and neuroticism. Factor analysis is used often nowadays to divide the items in one questionnaire into sub-scales. Factor analysis is therefore closely linked to psychometrics. The course offers training in exploratory factor analysis with SPSS. Furthermore one gets acquainted with confirmative factor analysis (LISREL).

Literature

- For cross tables and logistic regression: the chapters about these topics in the basic textbooks for Statistics I and II, and a text written by the course coordinator about logistic regression (1 copy for each tutorial group).
- For classical psychometrics: Van Breukelen, G., & Candel, M. (2000). *Betrouwbaarheid, validiteit en overeenstemming.* In: Berger, M., Imbos, Tj., & Janssen, M. (Eds.). Methodologie en Statistiek deel II. Universitaire Pers Maastricht. cf. Chapter 16 and Appendices 2 and 4 (Learning Resources Centre).
- For modern psychometrics: Crocker, L., & Algina, J. (1986). *Introduction to classical and modern test theory*. Orlando: Harcourt Brace Javonovich College Publishers. cf. Chapter 15 plus tasks (Learning Resources Centre).
- For factor analysis: Van Breukelen, G. (2000). Factoranalyse. In Berger, M., Imbos, Tj., & Janssen, M. (Eds.). Methodologie en Statistiek deel II (hoofdstuk 17). Universitaire Pers Maastricht (Learning Resources Centre).

Practical Training: SPSS

Coordinator: Gerard van Breukelen, Faculty Office, Phone (043) 388 4001, 40 Universiteitssingel East, Room 5.743, or Phone (043) 388 2274, 1 Debyeplein, Room b2.03, E-mail: <u>gerard.vbreukelen@stat.unimaas.nl</u>

There are four practical training sessions, viz. one for each of the parts: cross tables, logistic regression, classical psychometrics, factor analysis. The relevant statistical technique will be practised on real life or realistic data during these sessions. The tasks for the SPSS analysis can be found in the course manual. The carrying out of SPSS will be discussed in the tutorial group. In order to prepare oneself for the practical training session, one has to study the relevant theory (see lecture and literature). In order to prepare oneself for the tutorial group meeting where SPSS is discussed, one has to answer questions about carrying out SPSS which has been included in the course manual.

Instructional Approach

The course consists of 6 lectures, 10 tutorial group meetings, 4 SPSS practical training sessions and 4 seminars. PDF files of the lectures as well as formative tests can be found on Blackboard. The lecturer will answer questions via the Discussion Board once a week.

Form of Assessment

The exam consists of 18 triple-choice questions, evenly divided over the tasks and takes the form of an open book exam.

Course 3.3.a / 3.6.a Psycho Diagnostics - 5 Credits

Coordinator: Anton de Vries, Neurocognition. Phone (043) 388 4043. 40 Universiteitssingel East; Room 4.765; E-mail <u>a.devries@psychology.unimaas.nl</u>

Description of the Course

This course aims to give the student insight into the theoretical principles of psycho diagnostic research. The following will be dealt with: The meaning of instrumental qualities for the interpretation of diagnostic data, the theory behind the deciding aspects of psycho diagnostics and the ethical conditions as they have been formulated in the professional code of the NIP (Netherlands Institute of Psychologists).

The first tasks will present some practical problems by way of examples. These will help us to understand the meaning of qualities such as reliability and validity. It will also help to understand the setting of norms, the application of different tools (interviews, survey, appraisal scheme, questionnaires and tests), and sources of distortion of the interpretation of diagnostic results. Next, diagnostics as a process for decision-making will be looked at. Shortcomings in decision-making, as a result of the use of cognitive heuristics, will be highlighted in the light of the old controversy between clinical and statistical predictions. Various models for the diagnostic cycle will be presented and placed in relation to the empirical cycle. In addition, the application of the Bayesian statistics to diagnostics will be dealt with. Finally, students will familiarize themselves with the ethical professional code of the NIP. Although the subject matter will be clarified on the basis of examples from clinical practice, this course aims to deepen the insight into the principles of measurement in psychology.

Practical Training: Assessing Tests

Coordinator: Anton de Vries, Neurocognition. Phone (043) 388 4043. 40 Universiteitssingel East; Room 4.765; E-mail <u>a.devries@psychology.unimaas.nl</u>

Description

This practical training aims at teaching the students to assess the quality of a measuring instrument in Psychology. Students are lent a questionnaire or test to examine on the basis of the appraisal scheme applied by COTAN.

Literature

An e-reader has been compiled.

Instructional Approach

11 tutorial group meetings, lectures and 1 practical training session.

Form of Assessment

The exam consists of 10 open questions.

Please Note: Having passed this course does not mean that one is automatically registered for Psycho Diagnostics with the NIP. To obtain this, supplementary requirements have to be fulfilled.

Course 3.3.b / 3.6.b Bachelor Thesis - 6 Credits

Coordinator: Rob Markus, Experimental Psychology. Phone (043) 388 2474; 40 Universiteitssingel East; Room 2.777a; E-mail <u>r.markus@psychology.unimaas.nl</u>

Description of the Course

At the end of the Bachelor phase students must write a Bachelor thesis. This is a thorough study of literature or a report on a research internship. First the student must present a clear background of the chosen subject based on relevant and recent literature. This has to lead to a motivated and concrete question. Next, the student writes various parts or chapters with the answer to the question as the main thread running through it.

A compulsory course, 'Endnote', is given as a support for writing the thesis.

In principle, all relevant scientific themes in the field of psychology are permitted. In order to facilitate the choice of a theme Registers of Bachelor Theses can be found in the Education Office or with the course coordinator. These can be consulted to find various subjects from which to choose. These registers also include the names of staff members who can guide the student while writing the thesis. If a student wishes to write a thesis on a subject not mentioned in the register, he/she will have to find a supervisor.

Practical Training : Endnote

Coordinator: Marie-Louise Knols, University Library, Phone (043) 388 5172, 50 Universiteitssingel, Flexi place, E-mail: <u>m.knols@ub.unimaas.nl</u>

The practical Training Endnote deals with the use of the database programme 'Endnote' to compile one's own literature file and to add quotations and a bibliography to a thesis / piece of work / document (in Word or WP) according to the desired layout.

Literature

Manual on Academic Writing Skills 2004 for Psychology students.

Form of Assessment

The Bachelor thesis will be assessed on both content and form and must be written alone. Directives for writing (and assessing) the Bachelor thesis can be found in the Manual on Writing Skills, 2004. This manual and its checklist is indispensable for writing the thesis.

Submitting the Bachelor Thesis

Once the Bachelor thesis has been approved by the supervisor one copy goes to the supervisor and one copy has to be submitted to the Education Office (Myrthe Brongers, Room 5.773). Furthermore, one copy has to be sent as an electronic attachment to a specially designated e-mail address. This procedure is also clearly described in the Manual on Writing Skills.

3.2.3 ELECTIVES

Electives will be offered in periods 4 and 5 of the third year (3.4 and 3.5). Students can broaden their programme of study, but also do further specialisation. Electives can be arranged according to the wishes of a student, either at their own faculty or at other faculties of the Universiteit Maastricht or other universities and research institutes in the Netherlands or abroad. If one wishes to take certain electives outside one's own faculty, permission has to be obtained from the Examination Board. This permission can be applied for by completing the form 'Application for Electives' and obtained from the education desk at the Education Office (level 0). Questions about bursaries for studying abroad can be directed to the International Relations Office (Phone (043) 388 1920, 40 Universiteitssingel East, Room 5.753, E-mail: international@psychology.unimaas.nl)

Programme of Electives at the Faculty of Psychology

Coordinator Electives: Rob Ruiter, Experimental Psychology, Phone (043) 388 2413, 5 Universiteitssingel, Room 3.023, E-mail: r.ruiter@psychology.unimaas.nl

Staff members of the Faculty of Psychology will offer electives during periods 4 and 5 of the third year. Enrolment takes place at the beginning of the third year of study. Electives, for which there is insufficient interest, may be replaced in a subsequent year. Students may also suggest their own subject matter as a topic for an individual elective, if a lecturer can be found to guide them and if permission is obtained from the Examination Board. (See Electives Guide.) The instructional approach for the electives differs from the usual problem-based learning. The way electives are run can take various forms, e.g. a bi-weekly seminar in which students report on their work progress on the topic, reading groups in which students jointly study an important work about the elective topic, or a joint excursion or workshop. Lecturers propose the subject matter for the electives. A short description of each elective is provided in the Manual for the Electives: 'Electives Year 3, 2006/2007'. In addition information is given about the instructional approach. In contrast to the organisation of other course periods, electives in the Faculty of Psychology are not run as parallel courses within one period and each elective takes 3½ weeks. This means that two electives will be offered in one course period but will run sequentially. Below one can find the provisional scheme of the electives are offered in the first half or second half of a course period.

Each elective will only be offered once. In principle, all electives are offered in English. If no foreign students have enrolled for one of these courses, the coordinator can decide whether these courses will be given in Dutch or in English. If fewer than 6 students enrol for an elective, it will be up to the course coordinator to drop the course or offer it on an individual basis.

Students are requested to think carefully about how they arrange their electives. In particular, this refers to the organisation of one's elective programme should one wish to take one or more courses at other faculties or institutes. Periods of education elsewhere do not always coincide with course periods at Maastricht University. Students must obtain information about this themselves, as well as about related matters such as enrolment, number of ECTS credits, and other relevant matters.

Programme of Electives for 2006/2007

The Manual 'Electives Year 3, 2006/2007', in which the final offer of courses is published, will be available in September.